

E 5161.01.3.4.8

ESTES LANDFILL RI/FS
REMEDIAL INVESTIGATION
REPORT

Volume III of V
Appendix K

Prepared for
Arizona Department of Environmental Quality



By



**Environmental Science &
Engineering, Inc.**

A MACTEC COMPANY

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Report Number: PIE00585

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12-24, 1999
 Analyzed: May 13-25, 1999
 Reported: May 27, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE00585	QST-B20(GW/80) (5-11-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00586	QST-B31(GW/80) (5-11-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00587	QST-B30(GW/80) (5-11-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00588	QST-B20(S/76) (5-11-99)	Soil	Walkley Black Method
PIE00589	QST-B20(S/64) (5-11-99)	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE00590	QST-B20(S/25) (5-11-99)	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. The TOC analysis was performed at Columbia Analytical Services. Results are attached.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

TRR
 Robyn Rice
 Project Manager

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Report Number: PIE00591

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 12-24, 1999
Analyzed: May 13-25, 1999
Reported: May 27, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE00591	Trip Blank/B20	Water	8260B
PIE00592	QST-B40(GW/80) (5-11-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00593	QST-B21(S/20) 5-11-99	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE00594	QST-B21(S/80) 5-11-99	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE00595	QST-B21(GW/80) 5-11-99	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00596	Trip Blank/B31	Water	8260B
PIE00597	Trip Blank/B30	Water	8260B
PIE00598	Trip Blank/B40	Water	8260B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B20(GW/80)(5-11-99)
 Lab Number: PIE00585

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)		
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits)	
Tetrachloro-m-xylene (30-130).....	71%
Decachlorobiphenyl (30-130).....	52%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <3 of 61>

QST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B31(GW/80)(5-11-99)
 Lab Number: PIE00586

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L	(ppb)	
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	64%
Decachlorobiphenyl (30-130).....	47%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <4 of 61>

QST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B30(GW/80)(5-11-99)
 Lab Number: PIE00587

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L	(ppb)	
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	75%
Decachlorobiphenyl (30-130).....	33%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

ST Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B20(S/64)(5-11-99)
Lab Number: PIE00589

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 18, 1999
Analyzed: May 18, 1999
Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit	Sample Result
	µg/Kg (ppb)		µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	66%
Decachlorobiphenyl (30-130).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B20(S/25)(5-11-99)
 Lab Number: PIE00590

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit	Sample Result
	µg/Kg (ppb)		µg/Kg (ppb)
Aldrin.....	25	N.D.
alpha-BHC.....	25	N.D.
beta-BHC.....	25	N.D.
delta-BHC.....	50	N.D.
gamma-BHC (Lindane).....	25	N.D.
Chlordane.....	500	N.D.
4,4'-DDD.....	25	N.D.
4,4'-DDE.....	25	57
4,4'-DDT.....	25	N.D.
Dieldrin.....	25	N.D.
Endosulfan I.....	25	N.D.
Endosulfan II.....	25	N.D.
Endosulfan sulfate.....	100	N.D.
Endrin.....	25	N.D.
Endrin aldehyde.....	25	N.D.
Heptachlor.....	25	N.D.
Heptachlor epoxide.....	25	N.D.
Methoxychlor.....	25	N.D.
Toxaphene.....	1,000	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits)	
Tetrachloro-m-xylene (30-130).....	Diluted out
Decachlorobiphenyl (30-130).....	Diluted out

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 166 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B40(GW/80)(5-11-99)
 Lab Number: PIE00592

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	79%
Decachlorobiphenyl (30-130).....	40%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/20)-5-11-99
 Lab Number: PIE00593

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	25	.....	N.D.
alpha-BHC.....	25	.....	N.D.
beta-BHC.....	25	.....	N.D.
delta-BHC.....	50	.....	N.D.
gamma-BHC (Lindane).....	25	.....	N.D.
Chlordane.....	500	.....	N.D.
4,4'-DDD.....	25	.....	N.D.
4,4'-DDE.....	25	.....	N.D.
4,4'-DDT.....	25	.....	N.D.
Dieldrin.....	25	.....	N.D.
Endosulfan I.....	25	.....	N.D.
Endosulfan II.....	25	.....	N.D.
Endosulfan sulfate.....	100	.....	N.D.
Endrin.....	25	.....	N.D.
Endrin aldehyde.....	25	.....	N.D.
heptachlor.....	25	.....	N.D.
Heptachlor epoxide.....	25	.....	N.D.
Methoxychlor.....	25	.....	N.D.
Toxaphene.....	1,000	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	Diluted out
Decachlorobiphenyl (30-130).....	Diluted out

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/80)-5-11-99
 Lab Number: PIE00594

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit	Sample Result
	µg/Kg (ppb)		µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	66%
Decachlorobiphenyl (30-130).....	84%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr. Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr. Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B21-(GW/80)-5-11-99
 Lab Number: PIE00595

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)		
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	64%
Decachlorobiphenyl (30-130).....	58%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0051

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B20(GW/80)(5-11-99)
 Lab Number: PIE00585

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	55%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <12 of 61>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B31(GW/80)(5-11-99)
 Lab Number: PIE00586

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit	Sample Result
	µg/L (ppb)	
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	49%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B30(GW/80)(5-11-99)
 Lab Number: PIE00587

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	33%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <14 of 61>



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B20(S/64)(5-11-99)
 Lab Number: PIE00589

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		$\mu\text{g/Kg}$ (ppb)
Aroclor 1016.....	50	.....	N.D.
Aroclor 1221.....	50	.....	N.D.
Aroclor 1232.....	50	.....	N.D.
Aroclor 1242.....	50	.....	N.D.
Aroclor 1248.....	50	.....	N.D.
Aroclor 1254.....	50	.....	N.D.
Aroclor 1260.....	50	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	100%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B20(S/25)(5-11-99)
 Lab Number: PIE00590

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	500	N.D.
Aroclor 1221.....	500	N.D.
Aroclor 1232.....	500	N.D.
Aroclor 1242.....	500	N.D.
Aroclor 1248.....	500	N.D.
Aroclor 1254.....	500	N.D.
Aroclor 1260.....	500	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	Diluted out

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B40(GW/80)(5-11-99)
Lab Number: PIE00592

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 14, 1999
Analyzed: May 15, 1999
Reported: May 27, 1999

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	40%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B21-(S/20)-5-11-99
Lab Number: PIE00593

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 18, 1999
Analyzed: May 18, 1999
Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
19830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	500	N.D.
Aroclor 1221.....	500	N.D.
Aroclor 1232.....	500	N.D.
Aroclor 1242.....	500	N.D.
Aroclor 1248.....	500	N.D.
Aroclor 1254.....	500	N.D.
Aroclor 1260.....	500	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept Limits):
Decachlorobiphenyl (30-130)..... Diluted out

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/80)-5-11-99
 Lab Number: PIE00594

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	86%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <19 of 61>



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1328
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 7830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B21-(GW/80)-5-11-99
 Lab Number: PIE00595

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recovers (Accept Limits):	
Decachlorobiphenyl (30-130).....	60%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical



Del Mar Analytical

QST Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
Sample Descript: Water, QST-B20(GW/80)(5-11-99)
Lab Number: PIE00585

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 13, 1999
Analyzed: May 13, 1999
Revised: Jun 22, 1999

3852 Altan Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
1825 Sherman Way, Suite C-11 Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	50	57	1,3-Dichloropropane.....	5.0	N.D.
Benzene.....	5.0	N.D.	2,2-Dichloropropane.....	5.0	N.D.
Bromobenzene.....	13	N.D.	1,1-Dichloropropane.....	5.0	N.D.
Bromochloromethane.....	13	N.D.	cis-1,3-Dichloropropane.....	5.0	N.D.
Bromodichloromethane.....	5.0	N.D.	trans-1,3-Dichloropropane...	5.0	N.D.
Bromoform.....	13	N.D.	Ethylbenzene.....	5.0	N.D.
Bromomethane.....	13	N.D.	Hexachlorobutadiene.....	13	N.D.
2-Butanone (MEK).....	25	N.D.	2-Hexanone.....	25	N.D.
n-Butylbenzene.....	13	N.D.	Iodomethane.....	5.0	N.D.
sec-Butylbenzene.....	13	N.D.	Isopropylbenzene.....	5.0	N.D.
tert-Butylbenzene.....	13	N.D.	p-Isopropyltoluene.....	5.0	N.D.
Carbon Disulfide.....	13	N.D.	Methylene chloride.....	25	N.D.
Carbon tetrachloride.....	13	N.D.	4-Methyl-2-pentanone (MIBK).....	25	N.D.
Chlorobenzene.....	5.0	20	Methyl-tert-butyl ether (MTBE).....	13	N.D.
Chloroethane.....	13	N.D.	Naphthalene.....	13	N.D.
2-Chloroethyl vinyl ether.....	13	N.D.	n-Propylbenzene.....	5.0	N.D.
Chloroform.....	5.0	N.D.	Styrene.....	5.0	N.D.
Chloromethane.....	13	N.D.	1,1,1,2-Tetrachloroethane....	13	N.D.
2-Chlorotoluene.....	13	N.D.	1,1,2,2-Tetrachloroethane....	5.0	N.D.
4-Chlorotoluene.....	13	N.D.	Tetrachloroethene.....	5.0	N.D.
Dibromochloromethane.....	5.0	N.D.	Toluene.....	5.0	N.D.
1,2-Dibromo-3-chloropropane....	13	N.D.	1,2,3-Trichlorobenzene.....	13	N.D.
1,2-Dibromoethane (EDB).....	5.0	N.D.	1,2,4-Trichlorobenzene.....	13	N.D.
Dibromomethane.....	5.0	N.D.	1,1,1-Trichloroethane.....	5.0	N.D.
1,2-Dichlorobenzene.....	5.0	N.D.	1,1,2-Trichloroethane.....	5.0	N.D.
1,3-Dichlorobenzene.....	5.0	N.D.	Trichloroethene.....	5.0	N.D.
1,4-Dichlorobenzene.....	5.0	N.D.	Trichlorofluoromethane.....	13	N.D.
Dichlorodifluoromethane.....	13	N.D.	1,2,3-Trichloropropane.....	25	N.D.
1,1-Dichloroethane.....	5.0	N.D.	1,2,4-Trimethylbenzene.....	5.0	N.D.
1,2-Dichloroethane.....	5.0	N.D.	1,3,5-Trimethylbenzene.....	5.0	N.D.
1,1-Dichloroethene.....	13	N.D.	Vinyl acetate.....	13	N.D.
cis-1,2-Dichloroethene.....	5.0	N.D.	Vinyl chloride.....	5.0	N.D.
trans-1,2-Dichloroethene.....	5.0	N.D.	Xylenes (Total).....	25	N.D.
1,2-Dichloropropane.....	5.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.5.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	91%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	92%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <21 of 61>



2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 1625 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 31st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B31(GW/80)(5-11-99)
 Lab Number: PIE00586

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	41	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	18	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	90%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

1851 N. Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
Sample Descript: Water, QST-B30(GW/80)(5-11-99)
Lab Number: PIE00587

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 13, 1999
Analyzed: May 13, 1999
Revised: Jun 29, 1999

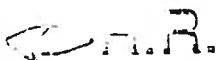
352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1114 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
525 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
184 Chesapeake Dr., Suite #05, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 795-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	3.8	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	3.1	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	2.8	Toluene.....	2.0	9.3
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B20(S/64)(5-11-99)
 Lab Number: PIE00589

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12, 1999
 Analyzed: May 17, 1999
 Reported: May 27, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	83%
Toluene-d8 (50-135).....	91%
4-Bromofluorobenzene (70-130).....	83%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B20(S/25)(5-11-99)
 Lab Number: PIE00590

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	260
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	150	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	82%
Toluene-d8 (50-135).....	86%
4-Bromofluorobenzene (70-130).....	78%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

7ST Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank/B20
Lab Number: PIE00591

352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 13, 1999
Analyzed: May 13, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	94%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B40(GW/80)(5-11-99)
 Lab Number: PIE00592

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	4.3	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	3.7	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	3.5	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	96%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <27 of 61>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/20)-5-11-99
 Lab Number: PIE00593

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12, 1999
 Analyzed: May 17, 1999
 Reported: May 27, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	1,200
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	79%
Toluene-d8 (50-135).....	81%
4-Bromofluorobenzene (70-130).....	74%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/80)-5-11-99
 Lab Number: PIE00594

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12, 1999
 Analyzed: May 17, 1999
 Reported: May 27, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	82%
Toluene-d8 (50-135).....	84%
4-Bromofluorobenzene (70-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B21-(GW/80)-5-11-99
 Lab Number: PIE00595

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	4.9	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Cotton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 1484 Chesapeake Dr., Suite 105, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 31st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, Trip Blank/B31
 Lab Number: PIE00596

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	93%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, Trip Blank/B30
 Lab Number: PIE00597

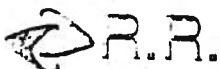
Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	94%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <32 of 61>

QST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, Trip Blank/B40
 Lab Number: PIE00598

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	91%
Toluene-d8 (75-140).....	94%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B20(GW/80)(5-11-99)
 Lab Number: PIE00585

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 17, 1999
 Analyzed: May 20, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzydine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
...s(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	19
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine
 Analytes reported as N.D. were not present at or above the reporting limit.
 Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

2-Fluorophenol (40-110).....	72%
Phenol-d6 (40-115).....	69%
2,4,6-Tribromophenol (40-140).....	92%
Nitrobenzene-d5 (35-120).....	76%
2-Fluorobiphenyl (30-150).....	83%
Terphenyl-d14 (45-150).....	94%

Robyn Rice
 Project Manager

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B31(GW/80)(5-11-99)
 Lab Number: PIE00586

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 17, 1999
 Analyzed: May 20, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	18
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine
 Analytes reported as N.D. were not present at or above the reporting limit.
 Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	68%
Phenol-d6 (40-115).....	70%
2,4,6-Tribromophenol (40-140).....	82%
Nitrobenzene-d5 (35-120).....	72%
2-Fluorobiphenyl (30-150).....	75%
Terphenyl-d14 (45-150).....	93%

Robyn Rice
 Project Manager

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B30(GW/80)(5-11-99)
 Lab Number: PIE00587

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 17, 1999
 Analyzed: May 20, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	76%
Phenol-d6 (40-115).....	74%
2,4,6-Tribromophenol (40-140).....	85%
Nitrobenzene-d5 (35-120).....	75%
2-Fluorobiphenyl (30-150).....	83%
Terphenyl-d14 (45-150).....	95%

Robyn Rice
 Project Manager

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B20(S/64)(5-11-99)
 Lab Number: PIE00589

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 23, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benz(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	85%
Phenol-d6 (35-110).....	88%
2,4,6-Tribromophenol (40-110).....	105%
Nitrobenzene-d5 (30-110).....	77%
2-Fluorobiphenyl (40-110).....	96%
Terphenyl-d14 (45-110).....	96%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B20(S/25)(5-11-99)
 Lab Number: PIE00590

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 23, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	8,000	N.D.	Dimethyl phthalate.....	8,000	N.D.
Acenaphthylene.....	8,000	N.D.	4,6-Dinitro-2-methylphenol.....	20,000	N.D.
Aniline.....	12,000	N.D.	2,4-Dinitrophenol.....	20,000	N.D.
Anthracene.....	8,000	N.D.	2,4-Dinitrotoluene.....	8,000	N.D.
Azobenzene.....	12,000	N.D.	2,6-Dinitrotoluene.....	8,000	N.D.
Benzidine.....	80,000	N.D.	Di-N-octyl phthalate.....	40,000	N.D.
Benzoic Acid.....	40,000	N.D.	Fluoranthene.....	8,000	N.D.
Benz(a)anthracene.....	8,000	N.D.	Fluorene.....	8,000	N.D.
Benzo(b)fluoranthene.....	16,000	N.D.	Hexachlorobenzene.....	8,000	N.D.
Benzo(k)fluoranthene.....	16,000	N.D.	Hexachlorobutadiene.....	8,000	N.D.
Benzo(g,h,i)perylene.....	12,000	N.D.	Hexachlorocyclopentadiene.....	40,000	N.D.
Benzo(a)pyrene.....	12,000	N.D.	Hexachloroethane.....	16,000	N.D.
Benzyl alcohol.....	16,000	N.D.	Indeno(1,2,3-cd)pyrene.....	16,000	N.D.
Bis(2-chloroethoxy)methane.....	8,000	N.D.	Isophorone.....	8,000	N.D.
Bis(2-chloroethyl)ether.....	8,000	N.D.	2-Methylnaphthalene.....	8,000	N.D.
Bis(2-chloroisopropyl)ether.....	8,000	N.D.	2-Methylphenol.....	12,000	N.D.
Bis(2-ethylhexyl)phthalate.....	80,000	N.D.	4-Methylphenol.....	12,000	N.D.
4-Bromophenyl phenyl ether.....	12,000	N.D.	Naphthalene.....	12,000	N.D.
Butyl benzyl phthalate.....	40,000	N.D.	2-Nitroaniline.....	16,000	N.D.
4-Chloroaniline.....	8,000	N.D.	3-Nitroaniline.....	16,000	N.D.
2-Chloronaphthalene.....	8,000	N.D.	4-Nitroaniline.....	40,000	N.D.
4-Chloro-3-methylphenol.....	8,000	N.D.	Nitrobenzene.....	40,000	N.D.
2-Chlorophenol.....	20,000	N.D.	2-Nitrophenol.....	8,000	N.D.
4-Chlorophenyl phenyl ether.....	8,000	N.D.	4-Nitrophenol.....	40,000	N.D.
Chrysene.....	8,000	N.D.	N-Nitrosodiphenylamine.....	16,000	N.D.
Dibenz(a,h)anthracene.....	8,000	N.D.	N-Nitroso-di-N-propylamine.....	12,000	N.D.
Dibenzofuran.....	8,000	N.D.	Pentachlorophenol.....	40,000	N.D.
Di-N-butyl phthalate.....	20,000	N.D.	Phenanthrene.....	8,000	N.D.
1,3-Dichlorobenzene.....	8,000	N.D.	Phenol.....	12,000	N.D.
1,4-Dichlorobenzene.....	8,000	N.D.	Pyrene.....	12,000	N.D.
1,2-Dichlorobenzene.....	8,000	N.D.	1,2,4-Trichlorobenzene.....	8,000	N.D.
3,3-Dichlorobenzidine.....	40,000	N.D.	2,4,5-Trichlorophenol.....	12,000	N.D.
2,4-Dichlorophenol.....	8,000	N.D.	2,4,6-Trichlorophenol.....	12,000	N.D.
Diethyl phthalate.....	8,000	N.D.			
2,4-Dimethylphenol.....	20,000	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 80.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	Diluted out
Phenol-d6 (35-110).....	Diluted out
2,4,6-Tribromophenol (40-110).....	Diluted out
Nitrobenzene-d5 (30-110).....	Diluted out
2-Fluorobiphenyl (40-110).....	Diluted out
Terphenyl-d14 (45-110).....	Diluted out

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <38 of 61>



Del Mar Analytical

QST Environmental
 .26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B40(GW/80)(5-11-99)
 Lab Number: PIE00592

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 17, 1999
 Analyzed: May 23, 1999
 Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	70%
Phenol-d6 (40-115).....	77%
2,4,6-Tribromophenol (40-140).....	85%
Nitrobenzene-d5 (35-120).....	71%
2-Fluorobiphenyl (30-150).....	82%
Terphenyl-d14 (45-150).....	95%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <39 of 61>



Del Mar Analytical

QST Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B21-(S/20)-5-11-99
Lab Number: PIE00593

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 18, 1999
Analyzed: May 23, 1999
Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0251

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	4,000	N.D.	Dimethyl phthalate.....	4,000	N.D.
Acenaphthylene.....	4,000	N.D.	4,6-Dinitro-2-methylphenol.....	10,000	N.D.
Aniline.....	6,000	N.D.	2,4-Dinitrophenol.....	10,000	N.D.
Anthracene.....	4,000	N.D.	2,4-Dinitrotoluene.....	4,000	N.D.
Azobenzene.....	6,000	N.D.	2,6-Dinitrotoluene.....	4,000	N.D.
Benidine.....	40,000	N.D.	Di-N-octyl phthalate.....	20,000	N.D.
Benzoic Acid.....	20,000	N.D.	Fluoranthene.....	4,000	N.D.
Benz(a)anthracene.....	4,000	N.D.	Fluorene.....	4,000	N.D.
Benzo(b)fluoranthene.....	8,000	N.D.	Hexachlorobenzene.....	4,000	N.D.
Benzo(k)fluoranthene.....	8,000	N.D.	Hexachlorobutadiene.....	4,000	N.D.
Benzo(g,h,i)perylene.....	6,000	N.D.	Hexachlorocyclopentadiene.....	20,000	N.D.
Benzo(a)pyrene.....	6,000	N.D.	Hexachloroethane.....	8,000	N.D.
Benzyl alcohol.....	8,000	N.D.	Indeno(1,2,3-cd)pyrene.....	8,000	N.D.
Bis(2-chloroethoxy)methane.....	4,000	N.D.	Isophorone.....	4,000	N.D.
Bis(2-chloroethyl)ether.....	4,000	N.D.	2-Methylnaphthalene.....	4,000	N.D.
Bis(2-chloroisopropyl)ether.....	4,000	N.D.	2-Methylphenol.....	6,000	N.D.
Bis(2-ethylhexyl)phthalate.....	40,000	N.D.	4-Methylphenol.....	6,000	N.D.
4-Bromophenyl phenyl ether.....	6,000	N.D.	Naphthalene.....	6,000	N.D.
Butyl benzyl phthalate.....	20,000	N.D.	2-Nitroaniline.....	8,000	N.D.
4-Chloroaniline.....	4,000	N.D.	3-Nitroaniline.....	8,000	N.D.
2-Chloronaphthalene.....	4,000	N.D.	4-Nitroaniline.....	20,000	N.D.
4-Chloro-3-methylphenol.....	4,000	N.D.	Nitrobenzene.....	20,000	N.D.
2-Chlorophenol.....	10,000	N.D.	2-Nitrophenol.....	4,000	N.D.
4-Chlorophenyl phenyl ether.....	4,000	N.D.	4-Nitrophenol.....	20,000	N.D.
Chrysene.....	4,000	N.D.	N-Nitrosodiphenylamine.....	8,000	N.D.
Dibenz(a,h)anthracene.....	4,000	N.D.	N-Nitroso-di-N-propylamine.....	6,000	N.D.
Dibenzofuran.....	4,000	N.D.	Pentachlorophenol.....	20,000	N.D.
Di-N-butyl phthalate.....	10,000	N.D.	Phenanthrene.....	4,000	N.D.
1,3-Dichlorobenzene.....	4,000	N.D.	Phenol.....	6,000	N.D.
1,4-Dichlorobenzene.....	4,000	N.D.	Pyrene.....	6,000	N.D.
1,2-Dichlorobenzene.....	4,000	N.D.	1,2,4-Trichlorobenzene.....	4,000	N.D.
3,3-Dichlorobenzidine.....	20,000	N.D.	2,4,5-Trichlorophenol.....	6,000	N.D.
2,4-Dichlorophenol.....	4,000	N.D.	2,4,6-Trichlorophenol.....	6,000	N.D.
Diethyl phthalate.....	4,000	N.D.			
2,4-Dimethylphenol.....	10,000	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 40.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	Diluted out
Phenol-d6 (35-110).....	Diluted out
2,4,6-Tribromophenol (40-110).....	Diluted out
Nitrobenzene-d5 (30-110).....	Diluted out
2-Fluorobiphenyl (40-110).....	Diluted out
Terphenyl-d14 (45-110).....	Diluted out

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <40 of 61>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B21-(S/80)-5-11-99
 Lab Number: PIE00594

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 18, 1999
 Analyzed: May 23, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benz(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	87%
Phenol-d6 (35-110).....	89%
2,4,6-Tribromophenol (40-110).....	102%
Nitrobenzene-d5 (30-110).....	80%
2-Fluorobiphenyl (40-110).....	92%
Terphenyl-d14 (45-110).....	98%

Robyn Rice
 Project Manager

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B21-(GW/80)-5-11-99
 Lab Number: PIE00595

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 17, 1999
 Analyzed: May 23, 1999
 Reported: May 27, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	11	N.D.	Dimethyl phthalate.....	11	N.D.
Acenaphthylene.....	11	N.D.	4,6-Dinitro-2-methylphenol...	42	N.D.
Aniline.....	11	N.D.	2,4-Dinitrophenol.....	110	N.D.
Anthracene.....	11	N.D.	2,4-Dinitrotoluene.....	11	N.D.
Azobenzene*.....	21	N.D.	2,6-Dinitrotoluene.....	11	N.D.
Benzidine.....	110	N.D.	Di-N-octyl phthalate.....	42	N.D.
Benzoic Acid.....	110	N.D.	Fluoranthene.....	11	N.D.
Benz(a)anthracene.....	11	N.D.	Fluorene.....	11	N.D.
Benzo(b)fluoranthene.....	11	N.D.	Hexachlorobenzene.....	11	N.D.
Benzo(k)fluoranthene.....	11	N.D.	Hexachlorobutadiene.....	11	N.D.
Benzo(g,h,i)perylene.....	11	N.D.	Hexachlorocyclopentadiene.....	42	N.D.
Benzo(a)pyrene.....	11	N.D.	Hexachloroethane.....	11	N.D.
Benzyl alcohol.....	21	N.D.	Indeno(1,2,3-cd)pyrene.....	21	N.D.
Bis(2-chloroethoxy)methane.....	11	N.D.	Isophorone.....	11	N.D.
Bis(2-chloroethyl)ether.....	11	N.D.	2-Methylnaphthalene.....	11	N.D.
Bis(2-chloroisopropyl)ether.....	11	N.D.	2-Methylphenol.....	11	N.D.
Bis(2-ethylhexyl)phthalate.....	110	N.D.	4-Methylphenol.....	11	N.D.
4-Bromophenyl phenyl ether.....	11	N.D.	Naphthalene.....	11	N.D.
Butyl benzyl phthalate.....	21	N.D.	2-Nitroaniline.....	21	N.D.
4-Chloroaniline.....	11	N.D.	3-Nitroaniline.....	21	N.D.
2-Chloronaphthalene.....	11	N.D.	4-Nitroaniline.....	110	N.D.
4-Chloro-3-methylphenol.....	21	N.D.	Nitrobenzene.....	42	N.D.
2-Chlorophenol.....	11	N.D.	2-Nitrophenol.....	11	N.D.
4-Chlorophenyl phenyl ether.....	11	N.D.	4-Nitrophenol.....	110	N.D.
Chrysene.....	11	N.D.	N-Nitrosodiphenylamine.....	11	N.D.
Dibenz(a,h)anthracene.....	21	N.D.	N-Nitroso-di-N-propylamine.....	11	N.D.
Dibenzofuran.....	11	N.D.	Pentachlorophenol.....	42	N.D.
Di-N-butyl phthalate.....	21	N.D.	Phenanthrene.....	11	N.D.
1,3-Dichlorobenzene.....	11	N.D.	Phenol.....	11	N.D.
1,4-Dichlorobenzene.....	11	N.D.	Pyrene.....	11	N.D.
1,2-Dichlorobenzene.....	11	N.D.	1,2,4-Trichlorobenzene.....	11	N.D.
3,3-Dichlorobenzidine.....	42	N.D.	2,4,5-Trichlorophenol.....	21	N.D.
2,4-Dichlorophenol.....	11	N.D.	2,4,6-Trichlorophenol.....	21	N.D.
Diethyl phthalate.....	11	N.D.			
2,4-Dimethylphenol.....	21	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.06.

*Due to sample matrix effects, the surrogate recovery was outside acceptance limits.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	48%
Phenol-d6 (40-115).....	0%*
2,4,6-Tribromophenol (40-140).....	67%
Nitrobenzene-d5 (35-120).....	59%
2-Fluorobiphenyl (30-150).....	68%
Terphenyl-d14 (45-150).....	79%



QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B20(GW/80)(5-11-99)
 Lab Number: PIE00585

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13-19, 1999
 Analyzed: May 14-21, 1999
 Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX 949) 261 1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX 909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX 818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX 619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/13/99	05/19/99
Arsenic.....	EPA 200.7	0.050	0.20	05/13/99	05/21/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/14/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/21/99
Chromium.....	EPA 200.7	0.010	0.18	05/13/99	05/14/99
Copper.....	EPA 200.7	0.020	0.83	05/13/99	05/14/99
Lead.....	EPA 200.7	0.050	0.097	05/13/99	05/14/99
Mercury.....	EPA 245.1	0.00020	0.00031	05/19/99	05/19/99
Nickel.....	EPA 200.7	0.050	0.46	05/13/99	05/14/99
Selenium.....	EPA 200.7	0.060	N.D.	05/13/99	05/14/99
Silver.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Thallium.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Zinc.....	EPA 200.7	0.050	0.19	05/13/99	05/14/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical



QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B31(GW/80)(5-11-99)
 Lab Number: PIE00586

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13-19, 1999
 Analyzed: May 14-21, 1999
 Reported: May 27, 1999

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/13/99	05/19/99
Arsenic.....	EPA 200.7	0.050	0.20	05/13/99	05/21/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/14/99
Cadmium.....	EPA 200.7	0.0050	0.0093	05/13/99	05/21/99
Chromium.....	EPA 200.7	0.010	0.19	05/13/99	05/14/99
Copper.....	EPA 200.7	0.020	1.1	05/13/99	05/14/99
Lead.....	EPA 200.7	0.050	0.14	05/13/99	05/14/99
Mercury.....	EPA 245.1	0.00020	0.00048	05/19/99	05/19/99
Nickel.....	EPA 200.7	0.050	0.60	05/13/99	05/14/99
Selenium.....	EPA 200.7	0.060	N.D.	05/13/99	05/14/99
Silver.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Thallium.....	EPA 200.7	0.050	0.073	05/13/99	05/14/99
Zinc.....	EPA 200.7	0.050	0.23	05/13/99	05/14/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B30(GW/80)(5-11-99)
 Lab Number: PIE00587

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13-24, 1999
 Analyzed: May 14-24, 1999
 Reported: May 27, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/13/99	05/19/99
Arsenic.....	EPA 200.7	0.050	N.D.(C)(L)	05/13/99	05/14/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/14/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/19/99
Chromium.....	EPA 200.7	0.010	N.D.	05/13/99	05/14/99
Copper.....	EPA 200.7	0.020	N.D.(C)	05/13/99	05/14/99
Lead.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Selenium.....	EPA 200.7	0.060	N.D.	05/13/99	05/14/99
Silver.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Thallium.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Zinc.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99

C = Continuing Calibration Verification recovery was above the method control limits; Data not impacted.

L = Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B20(S/64)(5-11-99)
 Lab Number: PIE00589

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12-21, 1999
 Analyzed: May 13-25, 1999
 Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/12/99	05/13/99
Arsenic.....	EPA 6010B	5.0	5.4	05/21/99	05/25/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/12/99	05/13/99
Cadmium.....	EPA 6010B	0.50	1.6	05/12/99	05/13/99
Chromium.....	EPA 6010B	2.0	40	05/12/99	05/13/99
Copper.....	EPA 6010B	2.5	31	05/12/99	05/13/99
Lead.....	EPA 6010B	2.5	8.3	05/12/99	05/13/99
Mercury.....	EPA 7471A	0.020	0.030	05/14/99	05/14/99
Nickel.....	EPA 6010B	2.5	15	05/12/99	05/13/99
Selenium.....	EPA 6010B	10	N.D.	05/12/99	05/13/99
Silver.....	EPA 6010B	2.5	N.D.	05/14/99	05/18/99
Thallium.....	EPA 6010B	5.0	N.D.	05/12/99	05/13/99
Zinc.....	EPA 6010B	2.5	26	05/12/99	05/13/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <46 of 61>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B20(S/25)(5-11-99)
 Lab Number: PIE00590

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 12-14, 1999
 Analyzed: May 13-18, 1999
 Reported: May 27, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/12/99	05/13/99
Arsenic.....	EPA 6010B	5.0	N.D.(C)	05/12/99	05/13/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/12/99	05/13/99
Cadmium.....	EPA 6010B	0.50	3.0	05/12/99	05/13/99
Chromium.....	EPA 6010B	2.0	23	05/12/99	05/13/99
Copper.....	EPA 6010B	2.5	73	05/12/99	05/13/99
Lead.....	EPA 6010B	2.5	80	05/12/99	05/13/99
Mercury.....	EPA 7471A	0.020	0.24	05/14/99	05/14/99
Nickel.....	EPA 6010B	2.5	25	05/12/99	05/13/99
Selenium.....	EPA 6010B	10	N.D.	05/12/99	05/13/99
Silver.....	EPA 6010B	2.5	N.D.	05/14/99	05/18/99
Thallium.....	EPA 6010B	5.0	N.D.	05/12/99	05/13/99
Zinc.....	EPA 6010B	2.5	220	05/12/99	05/13/99

C = Continuing Calibration Verification recovery was above the method control limits; Data not impacted.

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

QST Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B40(GW/80)(5-11-99)
Lab Number: PIE00592

Sampled: May 11, 1999
Received: May 11, 1999
Extracted: May 13-24, 1999
Analyzed: May 14-24, 1999
Reported: May 27, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/13/99	05/19/99
Arsenic.....	EPA 200.7	0.050	N.D.(C)(L)	05/13/99	05/14/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/14/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/19/99
Chromium.....	EPA 200.7	0.010	N.D.	05/13/99	05/14/99
Copper.....	EPA 200.7	0.020	0.021	05/13/99	05/19/99
Lead.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Selenium.....	EPA 200.7	0.060	N.D.	05/13/99	05/14/99
Silver.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Thallium.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Zinc.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99

C = Continuing Calibration Verification recovery was above the method control limits; Data not impacted.

L= Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

PIE00585.QST <48 of 61>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/20)-5-11-99
 Lab Number: PIE00593

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14-21, 1999
 Analyzed: May 14-25, 1999
 Reported: May 27, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	6.8	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/25/99
Cadmium.....	EPA 6010B	0.50	2.1	05/21/99	05/23/99
Chromium.....	EPA 6010B	2.0	25	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	140	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	27	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	0.12	05/14/99	05/14/99
Nickel.....	EPA 6010B	2.5	20	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	140	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00585.QST <49 of 61>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B21-(S/80)-5-11-99
 Lab Number: PIE00594

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 14-21, 1999
 Analyzed: May 14-25, 1999
 Reported: May 27, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	8.4	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/25/99
Cadmium.....	EPA 6010B	0.50	0.94	05/21/99	05/23/99
Chromium.....	EPA 6010B	2.0	25	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	25	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	3.5	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/14/99	05/14/99
Nickel.....	EPA 6010B	2.5	12	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	74	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B21-(GW/80)-5-11-99
 Lab Number: PIE00595

Sampled: May 11, 1999
 Received: May 11, 1999
 Extracted: May 13-19, 1999
 Analyzed: May 14-21, 1999
 Reported: May 27, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.25*	N.D.	05/13/99	05/21/99
Arsenic.....	EPA 200.7	0.25*	0.41	05/13/99	05/21/99
Beryllium.....	EPA 200.7	0.0050	0.0084	05/13/99	05/14/99
Cadmium.....	EPA 200.7	0.025*	N.D.	05/13/99	05/21/99
Chromium.....	EPA 200.7	0.010	0.50	05/13/99	05/14/99
Copper.....	EPA 200.7	0.10*	0.94	05/13/99	05/21/99
Lead.....	EPA 200.7	0.050	0.29	05/13/99	05/14/99
Mercury.....	EPA 245.1	0.00020	0.0022	05/19/99	05/19/99
Nickel.....	EPA 200.7	0.050	0.65	05/13/99	05/14/99
Selenium.....	EPA 200.7	0.060	N.D.	05/13/99	05/14/99
Silver.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Thallium.....	EPA 200.7	0.050	0.060	05/13/99	05/14/99
Zinc.....	EPA 200.7	0.050	0.42	05/13/99	05/14/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

PIE00585.QST <51 of 61>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	87%
Decachlorobiphenyl (30-130).....	83%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit	Sample Result
	µg/Kg (ppb)		µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
eptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analyis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	74%
Decachlorobiphenyl (30-130).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 14, 1999
 Analyzed: May 15, 1999
 Reported: May 27, 1999
 Matrix: Water

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Tetrachloro-m-xylene (30-130)....	93%
Decachlorobiphenyl (30-130).....	92%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 27, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	86%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	93%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 12, 1999
 Analyzed: May 17, 1999
 Reported: May 27, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits)	
Dibromofluoromethane (70-125).....	87%
Toluene-d8 (50-135).....	97%
4-Bromofluorobenzene (70-130).....	90%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 17, 1999
 Analyzed: May 19, 1999
 Reported: May 27, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	73%
Phenol-d6 (40-115).....	76%
2,4,6-Tribromophenol (40-140).....	84%
Nitrobenzene-d5 (35-120).....	73%
2-Fluorobiphenyl (30-150).....	83%
Terphenyl-d14 (45-150).....	97%

Robyn Rice
 Project Manager

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 27, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Ris(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
.....s(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	83%
Phenol-d6 (35-110).....	84%
2,4,6-Tribromophenol (40-110).....	92%
Nitrobenzene-d5 (30-110).....	89%
2-Fluorobiphenyl (40-110).....	96%
Terphenyl-d14 (45-110).....	101%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 13-24, 1999
 Analyzed: May 14-24, 1999
 Reported: May 27, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/13/99	May 19-21, 1999
Arsenic.....	EPA 200.7	0.050	N.D.	05/13/99	May 14-21, 1999
Beryllium.....	EPA 200.7	0.0050	N.D.	05/13/99	05/14/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/13/99	May 19-21, 1999
Chromium.....	EPA 200.7	0.010	N.D.	05/13/99	May 14-19, 1999
Copper.....	EPA 200.7	0.020	N.D.	05/13/99	May 14-21, 1999
Lead.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Mercury.....	EPA 245.1	0.00020	N.D.	May 19-24, 1999	May 19-24, 1999
Nickel.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Selenium.....	EPA 200.7	0.060	N.D.	05/13/99	05/14/99
Silver.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Thallium.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99
Zinc.....	EPA 200.7	0.050	N.D.	05/13/99	05/14/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 12-21, 1999
 Analyzed: May 13-25, 1999
 Reported: May 27, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	May 12-21, 1999	May 13-23, 1999
Arsenic.....	EPA 6010B	5.0	N.D.	May 12-21, 1999	May 13-25, 1999
Beryllium.....	EPA 6010B	0.50	N.D.	May 12-21, 1999	May 13-25, 1999
Cadmium.....	EPA 6010B	0.50	N.D.	May 12-21, 1999	May 13-25, 1999
Chromium.....	EPA 6010B	2.0	N.D.	May 12-21, 1999	May 13-23, 1999
Copper.....	EPA 6010B	2.5	N.D.	May 12-21, 1999	May 13-23, 1999
Lead.....	EPA 6010B	2.5	N.D.	May 12-21, 1999	May 13-23, 1999
Mercury.....	EPA 7471A	0.020	N.D.	05/14/99	05/14/99
Nickel.....	EPA 6010B	2.5	N.D.	May 12-21, 1999	May 13-23, 1999
Selenium.....	EPA 6010B	10	N.D.	May 12-21, 1999	May 13-23, 1999
Silver.....	EPA 6010B	2.5	N.D.	May 12-21, 1999	May 18-23, 1999
Thallium.....	EPA 6010B	5.0	N.D.	May 12-21, 1999	May 13-23, 1999
Zinc.....	EPA 6010B	2.5	N.D.	May 12-21, 1999	May 13-23, 1999

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8081
 Matrix: Water
 Instrument: GC

Date: 05/15/99
 Sample #: LCS/LCSD*
 Batch #: IE14PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	0.5	0.391	0.409	78%	82%	4%	40	55-125
DDD	0	0.5	0.379	0.400	76%	80%	5%	20	60-130
DDT	0	0.5	0.388	0.408	78%	82%	5%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provide

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) Note: This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD 8081

DATE: 5/18/99
 BATCH: IE18PE1S

Analyte	St	LCS	PR
	ppb	ppb	%
DDE	20	18.4	92%
DDD	20	19.3	97%
DDT	20	19.6	98%

Definition of Terms:

- St. Standard Concentration
- LCS. Laboratory Control Sample Result
- PR. Percent Recovery of LCS; $(LCS/St) \times 100$

QA/QC CRITERIA: QA/QC is within acceptance limits.

Del Mar Analytical



GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E18 #33

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
DDD	1	118
Endosulfan Sulfate	1	119

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result. All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result. An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.

GC CALIBRATION CHECK CRITERIA

Method: 8081A
QC Batch: E18 #6

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
D-BHC	2	81

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Method: 8081A
QC Batch: E18 #20

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
DDD	1	116
Endosulfan Sulfate	1	126
Methoxychlor	1	117
Endrin Ketone	1	123

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1314 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785 0851

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E15 #20

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
B-BHC	2	70
D-BHC	1	130
Endosulfan Sulfate	1	117
Methoxychlor	1	117
Endrin Ketone	1	126

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

GC CALIBRATION CHECK CRITERIA

Method: 8081A
QC Batch: E19 #6

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
B-BHC	2	80

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 7484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Method: 8081A
 QC Batch: E19 #19

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
B-BHC	2	74
Endrin Ketone	1	117

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result. All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result. An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E19 #37

Associated Samples: PIE00585

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
B-BHC	2	79
DDD	1	118
DDT	2	81

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 5/15/99
 Sample #: LCS/LCSD*
 Batch #: IE14PE1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
AR 1016	0	4.0	3.52	3.74	88%	94%	6%	≤ 50	60-140%
AR 1260	0	4.0	3.41	3.65	85%	91%	7%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 5/18/99
 Sample #: IE01745
 Batch #: IE18PE1S

Acceptance Limits

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
PCB 1016 (Arochlor)	0	160	121	121	76%	76%	0%	50	60-140
PCB 1260 (Arochlor)	0	160	127	130	79%	81%	2%	50	60-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/13/99
 Sample #: PIE00587
 Batch #: IE13011W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	32.3	33.2	129%	133%	3%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	29.5	28.5	118%	114%	3.4%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	27.3	26.9	109%	108%	1.5%	≤ 20	80-135%
Chloroform	3.1	25	30.6	30.4	110%	109%	0.7%	≤ 20	80-135%
1,2-Dichloroethane	0.0	25	25.4	24.9	102%	100%	2.0%	≤ 20	80-130%
Benzene	0.0	25	30.1	29.4	120%	118%	2.4%	≤ 20	75-135%
1,1-Dichloroethene	0.0	25	26.3	25.9	105%	104%	1.5%	≤ 20	75-130%
Toluene	9.3	25	35.1	34.9	103%	102%	0.6%	≤ 20	75-135%
Tetrachloroethene	0.0	25	25.1	24.5	100%	98%	2.4%	≤ 20	70-135%
Chlorobenzene	0.0	25	26.1	25.3	104%	101%	3.1%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.

BS/BSD DATA REPORT

EPA Method: 8260B
 Bench: Soil
 Instrument: GCMS

Date: 05/18/99
 Sample #: PIE00589
 Batch #: IE18021S

Acceptance Limits

Analyte	R1	Sp	BS	BSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	500	491	507	98%	101%	3.2%	≤ 112	0-100%
1,1-Dichloroethene	0.0	500	493	510	99%	102%	3.4%	≤ 20	70-125%
1,1-Dichloroethane	0.0	500	489	501	98%	100%	2.4%	≤ 20	75-115%
Chloroform	0.0	500	507	525	101%	105%	3.5%	≤ 26	75-120%
1,2-Dichloroethane	0.0	500	496	487	99%	97%	1.8%	≤ 20	70-115%
Benzene	0.0	500	517	522	103%	104%	1.0%	≤ 20	80-120%
Trichloroethene	0.0	500	518	510	104%	102%	1.6%	≤ 20	75-120%
Toluene	0.0	500	540	532	108%	106%	1.5%	≤ 20	80-125%
Tetrachloroethene	0.0	500	514	526	103%	105%	2.3%	≤ 20	75-120%
Chlorobenzene	0.0	500	540	525	108%	105%	3%	≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- BS..... Bench Spike Result
- BSD..... Bench Spike Duplicate Result
- PR1..... Percent Recovery of BS; $((BS-R1)/SP) \times 100$
- PR2..... Percent Recovery of BSD; $((BSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((BS-BSD)/(BS+BSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

QA/QC Criteria..... All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/19/99
 Sample #: LCS/LCSD*
 Batch #: IE17SE1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.2	50	34	35	68%	70%	3%	15	40-110
2-Chlorophenol	0.0	50	36	37	72%	74%	3%	15	40-110
1,4-Dichlorobenzene	0.0	50	32	31	64%	62%	3%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50	35	36	70%	72%	3%	20	45-120
1,2,4-Trichlorobenzene	0.0	50	33	35	66%	70%	6%	15	44-110
4-Chloro-3-methylphenol	0.0	50	40	44	80%	88%	10%	20	50-115
acenaphthene	0.0	50	38	40	76%	80%	5%	15	50-115
2,4-Dinitrotoluene	0.0	50	43	40	86%	80%	7%	15	55-120
4-Nitrophenol	0.0	50	42	39	84%	78%	7%	15	45-120
Pentachlorophenol	0.0	50	52	46	104%	92%	12%	20	50-125
Pyrene	0.0	50	45	46	90%	92%	2%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... One or more

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/19/99
 Sample #: IE01600
 Batch #: IE18SE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.1	50.0	45.0	45.0	90%	90%	0%	20	30-110
2-Chlorophenol	0.0	50.0	46.0	46.0	92%	92%	0%	25	30-110
1,4-Dichlorobenzene	0.0	50.0	43.0	42.0	86%	84%	2%	30	25-110
N-Nitroso-di-n-propylamine	0.0	50.0	44.0	44.0	88%	88%	0%	20	35-110
1,2,4-Trichlorobenzene	0.0	50.0	45.0	44.0	90%	88%	2%	25	30-110
4-Chloro-3-methylphenol	0.0	50.0	50.0	48.0	100%	96%	4%	25	40-110
acenaphthene	0.0	50.0	49.0	47.0	98%	94%	4%	15	35-110
2,4-Dinitrotoluene	0.0	50.0	50.0	49.0	100%	98%	2%	20	35-110
4-Nitrophenol	0.0	50.0	49.0	47.0	98%	94%	4%	25	15-135
Pentachlorophenol	0.0	50.0	54.0	54.0	108%	108%	0%	30	30-115
Pyrene	0.0	50.0	51.0	52.0	102%	104%	2%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC is within acceptance limits.



MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/21/99
 Sample #: PIE00678

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.11	1.14	111%	114%	2.7%	113%
Arsenic	0.0362	1.0	1.11	1.12	107%	108%	0.9%	108%
Cadmium	0	1.0	0.957	0.976	96%	98%	2.0%	97%
Copper	0.0508	1.0	1.11	1.13	106%	108%	1.8%	107%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2)) \times 100$
- Acceptance Limits RPD: $< \text{ or } = 20\%$
 MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/18/99
 Sample #: PIE00678

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.10	1.11	110%	111%	0.9%	111%
Cadmium	0	1.0	0.927	0.935	93%	94%	0.9%	93%
Copper	0.0501	1.0	1.10	1.11	105%	106%	0.9%	105%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/14/99
 Sample #: PIE00678

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Arsenic	0	1.0	1.22	1.26	122%	126%	3.2%	124%
Beryllium	0	1.0	1.05	1.06	105%	106%	0.9%	106%
Chromium	0	1.0	0.998	1.02	100%	102%	2.2%	101%
Copper	0.0505	1.0	1.07	1.09	102%	104%	1.9%	103%
Lead	0	1.0	0.975	1.00	98%	100%	2.5%	99%
Nickel	0	1.0	0.996	1.02	100%	102%	2.4%	101%
Selenium	0	1.0	1.01	1.03	101%	103%	2.0%	102%
Silver	0	0.05	0.0505	0.0513	101%	103%	1.6%	102%
Thallium	0	1.0	1.00	1.03	100%	103%	3.0%	102%
Zinc	0.0889	1.0	1.10	1.12	101%	103%	1.8%	102%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD/2)) X 100
- Acceptance Limits RPD: < or = 20%
 MS/MSD: 70-130%
- QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)

MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/19/99
 Sample #: PIE00836
 Batch #: IE19HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00429	0.00439	86%	88%	2.3%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limit.



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/24/99
 Sample #: PIE00587
 Batch #: IE24HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00491	0.00623	98%	125%	23.7%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limit.

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/24/99
 Sample #: PIE00455

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN
	ppm	ppm	ppm	ppm	%	%	%	PR
Arsenic	0	50.0	50.2	49.2	100%	98%	2.0%	99%
Beryllium	0	50.0	48.1	47.7	96%	95%	0.8%	96%
Cadmium	0.507	50.0	46.2	46.3	91%	92%	0.2%	91%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: All QA/QC was within acceptance limits.

MS/MSD DATA REPORTMETHOD: 6010B
INSTRUMENT: ICP
MATRIX: SoilDate: 5/18/99
Sample #: PIE00450

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN
	ppm	ppm	ppm	ppm	%	%	%	PR
Silver	39.6	50.0	32.1	95.9	0%	113%	99.7%	56%

Definition or Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
Acceptance Limits..... RPD: $< \text{ or } = 20\%$
MS/MSD: 75-125%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

LABORATORY CONTROL SAMPLE

**EPA METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil**

DATE: 5/18/99

Analyte	St	R1	PR
<hr/>	<hr/>	<hr/>	<hr/>
	ppm	ppm	%
Silver	50.0	49.2	98%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits** LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/13/99
 Sample #: PIE00395

Analyte	MEAN							
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	50.0	23.2	22.9	46%	46%	1.3%	46%
Arsenic	2.08	50.0	62.0	57.4	120%	111%	7.7%	115%
Beryllium	0	50.0	52.7	53.4	105%	107%	1.3%	106%
Cadmium	1.99	50.0	51.6	52.6	99%	101%	1.9%	100%
Chromium	23	50.0	74.9	74.0	104%	102%	1.2%	103%
Copper	16.9	50.0	72.0	73.6	110%	113%	2.2%	112%
Lead	8.55	50.0	59.0	59.2	101%	101%	0.3%	101%
Nickel	20.7	50.0	75.2	74.6	109%	108%	0.8%	108%
Selenium	0	50.0	40.9	40.3	82%	81%	1.5%	81%
Thallium	2.57	50.0	52.5	48.4	100%	92%	8.1%	96%
Zinc	32.1	50.0	90.7	91.9	117%	120%	1.3%	118%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/13/99

<u>Analyte</u>	<u>St</u> ppm	<u>R1</u> ppm	<u>PR</u> %
Antimony	50.0	48.4	97%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits** LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/23/99
 Sample #: PIE00455

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN
	ppm	ppm	ppm	ppm	%	%	%	PR
Antimony	0	50.0	48.7	47.2	97%	94%	3.1%	96%
Arsenic	0	50.0	53.7	54.8	107%	110%	2.0%	109%
Chromium	2.68	50.0	51.4	51.1	97%	97%	0.6%	97%
Copper	0	50.0	53.5	65.3	107%	131%	19.9%	119%
Lead	0	50.0	49.9	49.6	100%	99%	0.6%	100%
Nickel	3.31	50.0	48.8	49.4	91%	92%	1.2%	92%
Selenium	0	50.0	46.1	46.2	92%	92%	0.2%	92%
Mercury	0	50.0	50.9	49.1	102%	98%	3.6%	100%
Thallium	0	50.0	50.3	51.6	101%	103%	2.6%	102%
Zinc	5.5	50.0	57.0	87.0	103%	163%	41.7%	133%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: All QA/QC was within acceptance limits.

MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 05/14/99
 Sample #: PIE00421
 Batch #: IE14HG2S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
Mercury	0	0.333	0.339	0.335	102%	101%	1%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
 Sp..... Spike Concentration added to sample
 MS..... Matrix Spike Result
 MSD..... Matrix Spike Duplicate Result
 PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
 PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
 RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
 Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limits.



May 25, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30265

Dear Ms. Rice:

Five water and four soil samples for Project Number 'PIE00585.QST' were received May 13, 1999, in good condition. Written results are being provided on this May 25, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Water	PIE00585	78905w	05/11/99
Water	PIE00586	78906w	05/11/99
Water	PIE00587	78907w	05/11/99
Soil	PIE00589	78908s	05/11/99
Soil	PIE00590	78909s	05/11/99
Water	PIE00592	78910w	05/11/99
Soil	PIE00593	78911s	05/11/99
Soil	PIE00594	78912s	05/11/99
Water	PIE00595	78913w	05/11/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

EPA 8141

Jl Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00585

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78905

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	79.1	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	72.3 #	76-140	%	5/17/99	5/19/99

= Recovery is outside QC limits.

Run #: 517083
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141

al Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00586

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78906

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	91.2	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	82.4	76-140	%	5/17/99	5/19/99

Run #: 517084
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141

Jel Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00587

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78907

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
PA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	86.4	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	84.4	76-140	%	5/17/99	5/19/99

Run #: 517085
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Jel Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

ARF: 30265

Sample ID: PIE00589

APPL ID AP78908

Sample Collection Date: 5/11/99

QCG: \$8141S-990518AS-16712

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/18/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/18/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	56.8	51-154	%	5/18/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	54.0 #	63-151	%	5/18/99	5/22/99

= Recovery is outside QC limits.

Run #: 520055
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

L. J. Mar Analytical
 9830 South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00590

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78909

QCG: \$8141S-990518AS-16712

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/18/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/18/99	5/22/99
A 8141	Ethoprop	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/18/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	98.0	51-154	%	5/18/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	62.7 #	63-151	%	5/18/99	5/22/99

= Recovery is outside QC limits.

Run #: 520056
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141

al Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00592

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78910

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	86.1	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	81.7	76-140	%	5/17/99	5/19/99

Run #: 517086
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00593

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78911

QCG: S8141S-990518AS-16712

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/18/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/18/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	134	51-154	%	5/18/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	97.6	63-151	%	5/18/99	5/22/99

Run #: 520057
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Lel Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00594

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78912

QCG: \$8141S-990518AS-16712

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/18/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/18/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/18/99	5/22/99
PA 8141	Ethoprop	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/18/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/18/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	85.1	51-154	%	5/18/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	82.5	63-151	%	5/18/99	5/22/99

Run #: 520058
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00595

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78913

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	90.4	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	79.4	76-140	%	5/17/99	5/19/99

Run #: 517087
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8151 Herbicides

J. Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00585 *QST-B20 (GW/80) (5-11-99)*

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78905

QCG: S8151-990514WA-16641

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	2.4 Y	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/14/99	5/19/99
EPA 8151	MCPA	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	MCPP	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Surrogate Recovery	89.2	51-120	%	5/14/99	5/19/99

= Percent D > 25%.

Run #: 84
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

el Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00586

Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30265

APPL ID AP78906

QCG: S8151-990514WA-16641

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/14/99	5/19/99
EPA 8151	MCPA	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	MCPP	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Surrogate Recovery	88.9	61-120	%	5/14/99	5/19/99

Run #: 85
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

el Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00585.QST

Sample ID: PIE00587

Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30265

APPL ID AP78907

QCG: \$8151-990514WA-16641

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/14/99	5/19/99
EPA 8151	MCPA	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	MCPPP	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	2,4 5-TP	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Surrogate Recovery	87.4	61-120	%	5/14/99	5/19/99

Run #: 86
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

el Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00585.QST
Sample ID: PIE00589
Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30265
APPL ID AP78908
QCG: \$8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/20/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/20/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/20/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/20/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/20/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/20/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/20/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/20/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/20/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/20/99
EPA 8151	Surrogate recovery	127	93-141	%	5/17/99	5/20/99

Run #: 115
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

al Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00585.QST

Sample ID: PIE00590

Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30265

APPL ID AP78909

QCG: S8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/20/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/20/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/20/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/20/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/20/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/20/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/20/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/20/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/20/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/20/99
EPA 8151	Surrogate recovery	96.6	93-141	%	5/17/99	5/20/99

Run #: 116
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

J Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00585.QST
Sample ID: PIE00592
Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30265
APPL ID AP78910
QCG: \$8151-990514WA-16641

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/14/99	5/19/99
EPA 8151	MCPA	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	MCPP	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Surrogate Recovery	68.7	61-120	%	5/14/99	5/19/99

Run #: 87
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Al Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00585.QST

Sample ID: PIE00593

Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30265

APPL ID AP78911

QCG: \$8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Surrogate recovery	118	93-141	%	5/17/99	5/21/99

Run #: 120
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

al Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00594

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78912

QCG: S8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Surrogate recovery	123	93-141	%	5/17/99	5/21/99

Run #: 121
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Jl Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00585.QST

Sample ID: PIE00595

Sample Collection Date: 5/11/99

ARF: 30265

APPL ID AP78913

QCG: S8151-990514WA-16641

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Galapon	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/14/99	5/19/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/14/99	5/19/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/14/99	5/19/99
EPA 8151	MCPA	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	MCPP	Not detected	100	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/14/99	5/19/99
EPA 8151	Surrogate Recovery	81.7	31-120	%	5/14/99	5/19/99

Run #: 88
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

Method Blank

EPA 8141

Blank Name/QCG: 990517W - 16623
 Batch ID: \$8141W-990517AW

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
BLANK	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
BLANK	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
BLANK	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Surrogate: Tributylphosphate	77.9	60-150	%	5/17/99	5/19/99
BLANK	Surrogate: Triphenylphosphate	82.6	76-140	%	5/17/99	5/19/99

Run #: 517073
Instrument: NPD03
Sequence: 990517
Initials: FML

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: **990517AW LCS/LCSD**
Date/Initials: 5/18/99 FML
Extraction Date: 5/17/99
Matrix Type: WATER
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	2.50	0.00	1.66	66.6	1.69	67.8	1.8
Diazinon	2.50	0.00	2.47	98.6	2.45	98.1	0.5
Disulfoton	2.50	0.00	1.83	73.1	1.82	72.9	0.3
Methyl parathion	2.50	0.00	2.11	84.3	2.14	85.6	1.5
Stirophos	2.50	0.00	2.25	89.9	2.26	90.4	0.6
Ethion	2.50	0.00	1.91	76.5	1.86	74.2	3.1

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.07	81.4	4.19	83.9
Triphenyl phosphate	5.00	*****	4.38	87.6	4.21	84.2

	Primary Column		Secondary Column	
	Spike	Spk Dup	Spike	Spk Dup
Analysis Date:	5/19/99	5/19/99		
Analysis Time:	8:13 AM	10:43 AM		
Instrument:	NPD03B	NPD03B		
Column:	DB-5	DB-5		
Sample/Vial #:	74	78		
Extraction Ratio:	10/1000	10/1000		
Dilution Factor:	1	1		

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

MATIRX SPIKE

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 78845 MS
Date/Initials: 5/19/99 FML
Extraction Date: 5/17/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	2.50	*****	1.55	61.9
Diazinon	2.50	*****	2.13	85.4
Disulfoton	2.50	*****	1.86	74.4
Methyl parathion	2.50	*****	1.92	76.9
Stirophos	2.50	*****	2.01	80.4
Ethion *	2.50	*****	1.44	57.4

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	5.00	*****	3.79	75.8
Triphenyl phosphat	5.00	*****	3.63	72.5

	Prim Col	Sec Col
	Spike	Spike
Analysis Date:	5/19/99	
Analysis Time:	11:20 AM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	79	
Extraction Ratio:	10/1000	
Dilution Factor:	1	

Comments:	* Ethion out of QC limits.

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Method Blank

EPA 8141 OP Pesticides

Blank Name/QCG: 990518S - 16712
 Batch ID: S8141S-990518AS

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	5/18/99	5/21/99
BLANK	Bolstar	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Coumaphos	Not detected	100	ug/kg	5/18/99	5/21/99
BLANK	Def	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Demeton-s	Not detected	100	ug/kg	5/18/99	5/21/99
BLANK	Diazinon	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Dichlorvos	Not detected	100	ug/kg	5/18/99	5/21/99
BLANK	Dimethoate	Not detected	100	ug/kg	5/18/99	5/21/99
BLANK	Disulfoton	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	EPN	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Ethion	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Ethoprop	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Fensulfothion	Not detected	250	ug/kg	5/18/99	5/21/99
BLANK	Fenthion	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Malathion	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Merphos	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Mevinphos	Not detected	350	ug/kg	5/18/99	5/21/99
BLANK	Naled	Not detected	250	ug/kg	5/18/99	5/21/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Phorate	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Prowl	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Ronnel	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Stirophos	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Sulfotep	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	TEPP	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Tokuthion	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Trichloronate	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Trifluralin	Not detected	50	ug/kg	5/18/99	5/21/99
BLANK	Surrogate: Tributylphosphate	83.7	51-154	%	5/18/99	5/21/99
BLANK	Surrogate: Triphenylphosphate	85.5	63-151	%	5/18/99	5/21/99

Run #: 520043
Instrument: NPD03
Sequence: 990520
Initials: FML

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: **990518AS LCS/LCSD**
Date/Initials: 5/24/99 FML
Extraction Date: 5/18/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrx Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	52.9	63.5	55.2	66.3	4.3
Diazinon	83.3	0.000	97.6	117	96.6	116	1.0
Disulfoton	83.3	0.000	66.3	79.6	62.0	74.5	6.6
Methyl parathion	83.3	0.000	81.9	98.2	80.9	97.0	1.2
Stirophos	83.3	0.000	90.8	109	91.1	109	0.4
Ethion	83.3	0.000	75.9	91.0	74.9	89.9	1.3

Surrogate (see below)	Spike Level	Matrx Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	170	102	168	101
Triphenyl phosphatate	167	*****	178	107	174	104

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/21/99	5/21/99
Analysis Time:	5:59 PM	6:36 PM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	44	45
Extraction Ratio:	10/30	10/30
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 78897S MS/MSD
Date/Initials: 5/24/99 FML
Extraction Date: 5/18/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	67.8	81.3	69.7	83.6	2.8
Diazinon	83.3	0.000	104	124	105	126	0.9
Disulfoton	83.3	0.000	61.7	74.1	64.4	77.3	4.3
Methyl parathion	83.3	0.000	88.0	106	85.9	103	2.3
Stirophos	83.3	0.000	95.7	115	93.4	112	2.4
Ethion	83.3	0.000	67.0	80.4	71.5	85.8	6.5

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	175	105	170	102
Triphenyl phosphatate	167	*****	168	101	166	99.4

	Primary Column		Secondary Column	
	Spike	Spk Dup	Spike	Spk Dup
Analysis Date:	5/21/99	5/21/99		
Analysis Time:	7:13 PM	7:51 PM		
Instrument:	NPD03B	NPD03B		
Column:	DB-5	DB-5		
Sample/Vial #:	46	47		
Extraction Ratio:	10/30	10/30		
Dilution Factor:	1	1		

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990514W - 16641
Batch ID: S8151-990514WA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/14/99	5/19/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/14/99	5/19/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/14/99	5/19/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/14/99	5/19/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/14/99	5/19/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/14/99	5/19/99
BLANK	MCPA	Not detected	100	ug/L	5/14/99	5/19/99
BLANK	MCPP	Not detected	100	ug/L	5/14/99	5/19/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/14/99	5/19/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/14/99	5/19/99
BLANK	Surrogate recovery	98.2	51-120	%	5/14/99	5/19/99

Run #: 79
Instrument: ECD01
Sequence: 990517
Initials: KW

Laboratory Control Spike Recoveries
EPA 8151 Herbicides

APPL ID 990514W-78845 LCS/LCSD - 16641
Batch ID: \$8151-990514WA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.847	0.873	84.7	87.3	53-134	3.0	32
2,4,5-TP	1.00	0.807	0.833	80.7	83.3	60-118	3.2	24
2,4-D	1.00	1.02	1.05	102	105	44-155	2.9	15
Dicamba	1.00	0.904	0.924	90.4	92.4	48-102	2.2	24
Diclorprop (2,4-DP)	1.00	0.860	0.870	86.0	87.0	37-146	1.2	18
Dinoseb (DNBP)	1.00	0.839	0.842	83.9	84.2	73-173	0.36	31
Surrogate: 2,4-DCAA	3.00	2.83	2.86	94.3	95.3	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/14/99	5/14/99
Analysis Date :	5/19/99	5/19/99
Instrument :	ECD01	ECD01
Run :	80	81
Analyst :	KW	

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: 990517S - 16689
Batch ID: S8151S-990517SA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	5/17/99	5/20/99
BLANK	Dalapon	Not detected	2000	ug/kg	5/17/99	5/20/99
BLANK	2,4-DB	Not detected	400	ug/kg	5/17/99	5/20/99
BLANK	Dicamba	Not detected	40	ug/kg	5/17/99	5/20/99
BLANK	Diclorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/20/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/20/99
BLANK	MCPA	Not detected	40000	ug/kg	5/17/99	5/20/99
BLANK	MCPP	Not detected	40000	ug/kg	5/17/99	5/20/99
BLANK	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/20/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/20/99
BLANK	Surrogate recovery	109	93-141	%	5/17/99	5/20/99

Run #: 95
Instrument: ECD01
Sequence: 990517
Initials: KW

Laboratory Control Spike Recoveries
EPA 8151 HERBICIDE SOIL

APPL ID 990517S-78897 LCS/LCSD - 16689
 Batch ID: S8151S-990517SA

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/kg	SPK Result ug/kg	DUP Result ug/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	200	204	211	102	106	77-148	3.4	27
2,4,5-TP	200	194	198	97.0	99.0	87-149	2.0	27
2,4-D	200	234	243	117	122	90-181	3.8	27
Dicamba	200	204	207	102	104	63-149	1.5	31
Dichlorprop (2,4-DP)	200	206	210	103	105	91-183	1.9	37
Dinoseb (DNBP)	200	204	209	102	105	71-167	2.4	NE
Surrogate recovery	600	663	661	111	110	93-141		

NE = Not established.

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/17/99	5/17/99
Analysis Date :	5/20/99	5/20/99
Instrument :	ECD01	ECD01
Run :	96	97
Analyst :	KW	

Matrix Spike Recoveries

EPA 8151 HERBICIDE SOIL

APPL ID 990517S-78897 MS/MSD - 16689
 Batch ID: S8151S-990517SA

APPL Inc.
 4203 West Swift Avenue
 Fresno. CA 93722

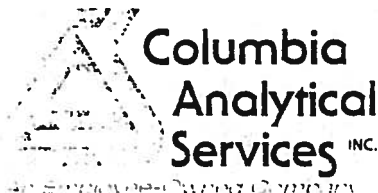
Compound Name	Spike Level ug/kg	Matrix Result ug/kg	SPK Result ug/kg	DUP Result ug/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	200	ND	205	183	103	91.5	77-148	11.3	27
2,4,5-TP	200	ND	187	167	93.5	83.5 #	87-149	11.3	27
2,4-D	200	ND	252	231	126	116	90-181	8.7	27
Dicamba	200	ND	233	216	117	108	63-149	7.6	31
Dichlorprop (2,4-DP)	200	ND	213	194	107	97.0	91-183	9.3	37
Dinoseb (DNBP)	200	ND	196	174	98.0	87.0	71-167	11.9	NE
Surrogate recovery	600	NA	714	660	119	110	93-141		

= Recovery is outside QC limits.

NE = Not established.

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/17/99	5/17/99
Analysis Date :	5/20/99	5/20/99
Instrument :	ECD01	ECD01
Run :	101	102
Analyst :	KW	



June 7, 1999

Service Request No: K9902987

Robyn Rice
Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Re: PIE00585.QST

Dear Robyn:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 1999. For your reference, these analyses have been assigned our service request number K9902987.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 280.

Respectfully submitted,

Columbia Analytical Services, Inc.

Les Kennedy
Project Chemist

LK/td

Page 1 of 12

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11-25/99
Date Received: 5/13-28/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Result
PIE00588	K9902987-001	0.05	0.19
PIE00765	K9902987-002	0.05	0.21
PIE01311	K9902987-004	0.05	ND
PIE01312	K9902987-005	0.05	0.28
PIE01492	K9902987-006	0.05	0.12
PIE01493	K9902987-007	0.05	0.09
PIE01670	K9902987-008	0.05	0.09
Method Blank	K9902987-MB	0.05	ND

Approved By: _____

Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

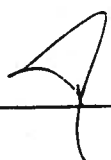
Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Sample Name	Lab Code	MRL	Result
PIE01220	K9902987-003	0.05	ND
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11/99
Date Received: 5/13/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE00588	K9902987-001DUP	0.05	0.19	0.22	0.20	15

Approved By: _____



Date: _____

6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
LCS Matrix: Soil

Service Request: K9902987
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 5/26/99

Laboratory Control Sample Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Carbon, Total Organic	0.62	0.68	110	85-115

Approved By: _____



Date: _____

6/4/99

LCS/102194

02987WET.LJ1 - LCS 6/4/99

00016
Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE01220	K9902987-003DUP	0.05	ND	ND	ND	-

Approved By: _____



Date: 6/4/99

CHAIN OF CUSTODY FORM

Quote # _____ Page 1 of _____

Client Name/Address: DEL MAR ANALYTICAL 26 N. GARDNER, SUITE 100 PICO CA, CA		Project/PO Number: L1005-100001 L1005-100001				Analysis Required																												
Project Manager: JOHN D. HARRIS		Phone Number: (619) 505-9596				<table border="1"> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																		
Sampler: JULIE HARRIS DEL MAR ANALYTICAL		Fax Number: (619) 505-9688																																
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives														Special Instructions															
51-B20-(1/15/91) (S/20)	ALC	VALU ³	15	5/11/91	none		X	X			X	X																						
51-B21-(1/15/91) (S/20)	ALC	VALU ³	15	5/11/91	none		X	X			X	X																						
51-B22-(1/15/91) (S/20)	ALC	VALU ³	15	5/11/91	none		X	X			X	X																						
51-B23-(1/15/91) (S/20)	ALC	VALU ³	1	5/11/91	none		X	X			X	X																						
51-B24-(1/15/91) (S/20)	ALC	VALU ³	5	5/11/91	none		X	X			X	X																						
TRIP CONT.	ALC	VALU ³	4	5/11/91	none		X	X			X	X																						
51-B21-(1/15/91) (S/20)	ALC	VALU ³	15	5/11/91	none		X	X			X	X																						
51-B21-(5/20) (S/20)	ALC	VALU ³	5	5/11/91	none		X	X			X	X																						
51-B21-(5/20) (S/20)	ALC	VALU ³	5	5/11/91	none	X	X			X	X																							
51-B21-(1/15/91) (S/20)	ALC	VALU ³	15	5/11/91	none	X	X			X	X																							
Relinquished By:		Date /Time:		Received by:		Date /Time:		Turnaround Time (Check)																										
Relinquished By:		Date /Time:		Received by:		Date /Time:		same day _____ 72 hours _____																										
Relinquished By:		Date /Time:		Received in Lab by:		Date /Time:		24 hours _____ 5 days _____																										
Relinquished By:		Date /Time:		Received in Lab by:		Date /Time:		48 hours _____ normal _____																										
Relinquished By:		Date /Time:		Received in Lab by:		Date /Time:		Sample Integrity (Check)																										
Relinquished By:		Date /Time:		Received in Lab by:		Date /Time:		intact _____ on ice _____																										

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1029
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 205, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

WEST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Report Number: PIE00761

Sampled: May 11-12, 1999
 Received: May 12, 1999
 Extracted: May 13-25, 1999
 Analyzed: May 14-26, 1999
 Reported: Jun 1, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE00761	(QST-B8)(S/45) (5-11-99)	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE00762	(QST-B8)(S/35) (5-11-99)	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE00763	(QST-B8)(GW/65) (5-12-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00765	(QST-B7)(S/55) (5-12-99)	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A, 8151 & TOC
PIE00766	(QST-B7)(S/37) (5-12-99)	Soil	8081A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE00768	(QST-B7)(GW/63) (5-12-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE00769	(QST-B33)(GW/65) (5-12-99)	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. Results are attached.
 TOC analysis was performed at Columbia Analytical Services. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)


 Robyn Rice
 Project Manager

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Client Project ID: ESTES Landfill 6699030

Report Number: PIE00770

Sampled: May 11-12, 1999
 Received: May 12, 1999
 Extracted: May 13-25, 1999
 Analyzed: May 14-26, 1999
 Reported: Jun 1, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE00770	Trip Blank/B8	Water	8260B
PIE00771	Trip Blank/B7	Water	8260B
PIE00772	Trip Blank/B33	Water	8260B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. Results are attached.
 TOC analysis was performed at Columbia Analytical Services. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B8)(S/45)(5-11-99)
 Lab Number: PIE00761

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	66%
Decachlorobiphenyl (30-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B8)(S/35)(5-11-99)
 Lab Number: PIE00762

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	64%
Decachlorobiphenyl (30-130).....	78%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

3T Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B8)(GW/65)(5-12-99)
 Lab Number: PIE00763

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/L}$ (ppb)			$\mu\text{g/L}$ (ppb)
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	64%
Decachlorobiphenyl (30-130).....	73%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, (QST-B7)(S/55)(5-12-99)
 Lab Number: PIE00765

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	73%
Decachlorobiphenyl (30-130).....	88%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <6 of 53>

ST Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B7)(S/37)(5-12-99)
 Lab Number: PIE00766

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	69%
Decachlorobiphenyl (30-130).....	81%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, (QST-B7)(GW/63)(5-12-99)
 Lab Number: PIE00768

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	63%
Decachlorobiphenyl (30-130).....	65%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B33)(GW/65)(5-12-99)
 Lab Number: PIE00769

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aldrin.....	0.10	N.D.
alpha-BHC.....	0.10	N.D.
beta-BHC.....	0.10	N.D.
delta-BHC.....	0.25	N.D.
gamma-BHC (Lindane).....	0.10	N.D.
Chlordane.....	2.0	N.D.
4,4'-DDD.....	0.10	N.D.
4,4'-DDE.....	0.10	N.D.
4,4'-DDT.....	0.10	N.D.
Dieldrin.....	0.10	N.D.
Endosulfan I.....	0.10	N.D.
Endosulfan II.....	0.10	N.D.
Endosulfan sulfate.....	0.50	N.D.
Endrin.....	0.10	N.D.
Endrin aldehyde.....	0.10	N.D.
Heptachlor.....	0.10	N.D.
Heptachlor epoxide.....	0.10	N.D.
Methoxychlor.....	0.10	N.D.
Toxaphene.....	4.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	74%
Decachlorobiphenyl (30-130).....	44%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <9 of 53>



Del Mar Analytical

2852 Altan Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B8)(S/45)(5-11-99)
 Lab Number: PIE00761

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	88%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <10 of 53>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 7484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B8)(S/35)(5-11-99)
 Lab Number: PIE00762

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.



DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	84%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <11 of 53>



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, (QST-B8)(GW/65)(5-12-99)
 Lab Number: PIE00763

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	77%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <12 of 53>



Del Mar Analytical

2852 Altan Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B7)(S/55)(5-12-99)
 Lab Number: PIE00765

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	87%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Calton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil. (QST-B7)(S/37)(5-12-99)
 Lab Number: PIE00766

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	89%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1464 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B7)(GW/63)(5-12-99)
 Lab Number: PIE00768

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	66%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 405-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B33)(GW/65)(5-12-99)
 Lab Number: PIE00769

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)		µg/L (ppb)
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	43%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <16 of 53>



Del Mar Analytical

Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, (QST-B8)(S/45)(5-11-99)
Lab Number: PIE00761

Sampled: May 11, 1999
Received: May 12, 1999
Extracted: May 13, 1999
Analyzed: May 18, 1999
Reported: Jun 1, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	72%
Toluene-d8 (50-135).....	76%
4-Bromofluorobenzene (70-130).....	72%

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <17 of 53>



Del Mar Analytical

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mierher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, (QST-B8)(S/35)(5-11-99)
 Lab Number: PIE00762

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 13, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

*Due to sample matrix effects, the surrogate recovery was outside acceptance limits.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	68%*
Toluene-d8 (50-135).....	75%
4-Bromofluorobenzene (70-130).....	67%*

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <18 of 53>



Del Mar Analytical

Del Mar Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B8)(GW/65)(5-12-99)
Lab Number: PIE00763

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 14, 1999
Analyzed: May 14, 1999
Reported: Jun 1, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
18525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
7484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	3.0	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	8.2	Vinyl chloride.....	5.0	37
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	94%
Toluene-d8 (75-140).....	99%
4-Bromofluorobenzene (75-135).....	95%

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <19 of 53>



Del Mar Analytical

QST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, (QST-B7)(S/55)(5-12-99)
Lab Number: PIE00765

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 13, 1999
Analyzed: May 18, 1999
Reported: Jun 1, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Due to sample matrix effects, the surrogate recovery was outside acceptance limits.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	68%*
Toluene-d8 (50-135).....	76%
4-Bromofluorobenzene (70-130).....	71%

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <20 of 53>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil. (QST-B7)(S/37)(5-12-99)
 Lab Number: PIE00766

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 13, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene..	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Due to sample matrix effects, the surrogate recovery was outside acceptance limits.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	63%*
Toluene-d8 (50-135).....	71%*
4-Bromofluorobenzene (70-130).....	66%*

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Del Mar Analytical
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, (QST-B7)(GW/63)(5-12-99)
 Lab Number: PIE00768

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 17, 1999
 Analyzed: May 17, 1999
 Reported: Jun 1, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	100	N.D.	1,3-Dichloropropane.....	10	N.D.
Benzene.....	10	N.D.	2,2-Dichloropropane.....	10	N.D.
Bromobenzene.....	25	N.D.	1,1-Dichloropropene.....	10	N.D.
Bromochloromethane.....	25	N.D.	cis-1,3-Dichloropropene.....	10	N.D.
Bromodichloromethane.....	10	N.D.	trans-1,3-Dichloropropene...	10	N.D.
Bromoform.....	25	N.D.	Ethylbenzene.....	10	N.D.
Bromomethane.....	25	N.D.	Hexachlorobutadiene.....	25	N.D.
2-Butanone (MEK).....	50	N.D.	2-Hexanone.....	50	N.D.
n-Butylbenzene.....	25	N.D.	Iodomethane.....	10	N.D.
sec-Butylbenzene.....	25	N.D.	Isopropylbenzene.....	10	N.D.
tert-Butylbenzene.....	25	N.D.	p-Isopropyltoluene.....	10	N.D.
Carbon Disulfide.....	25	N.D.	Methylene chloride.....	50	N.D.
Carbon tetrachloride.....	25	N.D.	4-Methyl-2-pentanone (MIBK).....	50	N.D.
Chlorobenzene.....	10	24	Methyl-tert-butyl ether (MTBE).....	25	N.D.
Chloroethane.....	25	N.D.	Naphthalene.....	25	N.D.
2-Chloroethyl vinyl ether.....	25	N.D.	n-Propylbenzene.....	10	N.D.
Chloroform.....	10	N.D.	Styrene.....	10	N.D.
Chloromethane.....	25	N.D.	1,1,1,2-Tetrachloroethane....	25	N.D.
2-Chlorotoluene.....	25	N.D.	1,1,2,2-Tetrachloroethane....	10	N.D.
4-Chlorotoluene.....	25	N.D.	Tetrachloroethene.....	10	N.D.
Dibromochloromethane.....	10	N.D.	Toluene.....	10	N.D.
1,2-Dibromo-3-chloropropane....	25	N.D.	1,2,3-Trichlorobenzene.....	25	N.D.
1,2-Dibromoethane (EDB).....	10	N.D.	1,2,4-Trichlorobenzene.....	25	N.D.
Dibromomethane.....	10	N.D.	1,1,1-Trichloroethane.....	10	N.D.
1,2-Dichlorobenzene.....	10	29	1,1,2-Trichloroethane.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Trichloroethene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Trichlorofluoromethane.....	25	N.D.
Dichlorodifluoromethane.....	25	N.D.	1,2,3-Trichloropropane.....	50	N.D.
1,1-Dichloroethane.....	10	N.D.	1,2,4-Trimethylbenzene.....	10	N.D.
1,2-Dichloroethane.....	10	N.D.	1,3,5-Trimethylbenzene.....	10	N.D.
1,1-Dichloroethene.....	25	N.D.	Vinyl acetate.....	25	N.D.
cis-1,2-Dichloroethene.....	10	16	Vinyl chloride.....	25	220
trans-1,2-Dichloroethene.....	10	N.D.	Xylenes (Total).....	50	N.D.
1,2-Dichloropropane.....	10	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	102%
4-Bromofluorobenzene (75-135).....	99%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <22 of 53>



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B33)(GW/65)(5-12-99)
Lab Number: PIE00769

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 14, 1999
Analyzed: May 14, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	5.4	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	4.8	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	4.1	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	95%
Toluene-d8 (75-140).....	97%
4-Bromofluorobenzene (75-135).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank/B8
 Lab Number: PIE00770

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 15, 1999
 Analyzed: May 15, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	99%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	98%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <24 of 53>



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
Sample Descript: Water, Trip Blank/B7
Lab Number: PIE00771

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 15, 1999
Analyzed: May 15, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	93%
Toluene-d8 (75-140).....	93%
4-Bromofluorobenzene (75-135).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1344 FAX (818) 779-1841
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank/B33
 Lab Number: PIE00772

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 15, 1999
 Analyzed: May 15, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	98%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	100%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <26 of 53>



Del Mar Analytical

2852 Altan Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil. (QST-B8)(S/45)(5-11-99)
 Lab Number: PIE00761

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: Jun 1, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	55%
Phenol-d6 (35-110).....	59%
2,4,6-Tribromophenol (40-110).....	70%
Nitrobenzene-d5 (30-110).....	50%
2-Fluorobiphenyl (40-110).....	66%
Terphenyl-d14 (45-110).....	57%

Robyn Rice
 Project Manager

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

DT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil. (QST-B8)(S/35)(5-11-99)
 Lab Number: PIE00762

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: Jun 1, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	67%
Phenol-d6 (35-110).....	76%
2,4,6-Tribromophenol (40-110).....	83%
Nitrobenzene-d5 (30-110).....	68%
2-Fluorobiphenyl (40-110).....	82%
Terphenyl-d14 (45-110).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <28 of 53>



2852 Altan Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 770 1844 FAX (818) 770 1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, (QST-B8)(GW/65)(5-12-99)
 Lab Number: PIE00763

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 17, 1999
 Analyzed: May 21, 1999
 Reported: Jun 1, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzydine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene..	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine..	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analyses reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	57%
Phenol-d6 (40-115).....	57%
2,4,6-Tribromophenol (40-140).....	77%
Nitrobenzene-d5 (35-120).....	63%
2-Fluorobiphenyl (30-150).....	62%
Terphenyl-d14 (45-150).....	114%



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, (QST-B7)(S/55)(5-12-99)
Lab Number: PIE00765

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 19, 1999
Analyzed: May 23, 1999
Reported: Jun 1, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	59%
Phenol-d6 (35-110).....	64%
2,4,6-Tribromophenol (40-110).....	68%
Nitrobenzene-d5 (30-110).....	62%
2-Fluorobiphenyl (40-110).....	70%
Terphenyl-d14 (45-110).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
Sample Descript: Soil, (QST-B7)(S/37)(5-12-99)
Lab Number: PIE00766

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 24, 1999
Analyzed: May 25, 1999
Reported: Jun 1, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	69%
Phenol-d6 (35-110).....	65%
2,4,6-Tribromophenol (40-110).....	79%
Nitrobenzene-d5 (30-110).....	64%
2-Fluorobiphenyl (40-110).....	68%
Terphenyl-d14 (45-110).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B7)(GW/63)(5-12-99)
 Lab Number: PIE00768

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: Jun 1, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzdine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene..	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine..	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	24	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

Due to sample matrix effects, the surrogate recovery was outside acceptance

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	80%
Phenol-d6 (40-115).....	27%*
2,4,6-Tribromophenol (40-140).....	104%
Nitrobenzene-d5 (35-120).....	78%
2-Fluorobiphenyl (30-150).....	90%
Terphenyl-d14 (45-150).....	93%



Del Mar Analytical

JT Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
Sample Descript: Water, (QST-B33)(GW/65)(5-12-99)
Lab Number: PIE00769

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 19, 1999
Analyzed: May 23, 1999
Reported: Jun 1, 1999

2852 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
1014 E. Cooky Dr., Suite A, Cotton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
2830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0951

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzydine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene..	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine..	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analyses reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	75%
Phenol-d6 (40-115).....	78%
2,4,6-Tribromophenol (40-140).....	97%
Nitrobenzene-d5 (35-120).....	67%
2-Fluorobiphenyl (30-150).....	82%
Terphenyl-d14 (45-150).....	83%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B8)(S/45)(5-11-99)
 Lab Number: PIE00761

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 21, 1999
 Analyzed: May 21-26, 1999
 Reported: Jun 1, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	N.D.	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	21	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	16	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	0.051	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	11	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	25	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <34 of 53>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B8)(S/35)(5-11-99)
 Lab Number: PIE00762

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 21, 1999
 Analyzed: May 21-26, 1999
 Reported: Jun 1, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	6.1	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	0.79	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	43	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	22	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	2.9	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	15	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	27	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <35 of 53>



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B8)(GW/65)(5-12-99)
Lab Number: PIE00763

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 19, 1999
Analyzed: May 19-25, 1999
Reported: Jun 1, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 005, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	200.7	0.050	0.43	05/19/99	05/23/99
Beryllium.....	200.7	0.0050	N.D.	05/19/99	05/25/99
Cadmium.....	200.7	0.0050	0.017	05/19/99	05/23/99
Chromium.....	200.7	0.010	0.49	05/19/99	05/23/99
Copper.....	200.7	0.020	0.49	05/19/99	05/23/99
Lead.....	200.7	0.050	0.14	05/19/99	05/23/99
Mercury.....	245.1	0.00020	0.00094	05/19/99	05/19/99
Nickel.....	200.7	0.050	0.59	05/19/99	05/23/99
Selenium.....	200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	200.7	0.050	0.053	05/19/99	05/23/99
Zinc.....	200.7	0.050	0.34	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <36 of 53>

QST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B7)(S/55)(5-12-99)
 Lab Number: PIE00765

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 21, 1999
 Analyzed: May 21-26, 1999
 Reported: Jun 1, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	7.9	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	0.89	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	28	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	25	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	3.2	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	16	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	23	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0951

Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, (QST-B7)(S/37)(5-12-99)
 Lab Number: PIE00766

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 21-25, 1999
 Analyzed: May 23-26, 1999
 Reported: Jun 1, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	6.0	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	0.67	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	17	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	20	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	3.6	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/25/99	05/25/99
Nickel.....	EPA 6010B	2.5	14	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	22	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

GT Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, (QST-B7)(GW/63)(5-12-99)
 Lab Number: PIE00768

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19-24, 1999
 Analyzed: May 23-25, 1999
 Reported: Jun 1, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	200.7	0.050	0.059	05/19/99	05/23/99
Beryllium.....	200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	200.7	0.010	0.062	05/19/99	05/23/99
Copper.....	200.7	0.020	0.13	05/19/99	05/23/99
Lead.....	200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	200.7	0.050	0.11	05/19/99	05/23/99
Selenium.....	200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	200.7	0.050	0.055	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, (QST-B33)(GW/65)(5-12-99)
Lab Number: PIE00769

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 19-24, 1999
Analyzed: May 23-25, 1999
Reported: Jun 1, 1999

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	200.7	0.050	N.D.	05/19/99	05/23/99
Beryllium.....	200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	200.7	0.010	N.D.	05/19/99	05/23/99
Copper.....	200.7	0.020	N.D.	05/19/99	05/23/99
Lead.....	200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	200.7	0.050	N.D.	05/19/99	05/23/99
Selenium.....	200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	200.7	0.050	N.D.	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <40 of 53>

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g}/\text{Kg}$ (ppb)			$\mu\text{g}/\text{Kg}$ (ppb)
Aldrin.....	5.0		N.D.
alpha-BHC.....	5.0		N.D.
beta-BHC.....	5.0		N.D.
delta-BHC.....	10		N.D.
gamma-BHC (Lindane).....	5.0		N.D.
Chlordane.....	100		N.D.
4,4'-DDD.....	5.0		N.D.
4,4'-DDE.....	5.0		N.D.
4,4'-DDT.....	5.0		N.D.
Dieldrin.....	5.0		N.D.
Endosulfan I.....	5.0		N.D.
Endosulfan II.....	5.0		N.D.
Endosulfan sulfate.....	20		N.D.
Endrin.....	5.0		N.D.
Endrin aldehyde.....	5.0		N.D.
Heptachlor.....	5.0		N.D.
Heptachlor epoxide.....	5.0		N.D.
Methoxychlor.....	5.0		N.D.
Toxaphene.....	200		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	74%
Decachlorobiphenyl (30-130).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <41 of 53>

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

AT Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/L	(ppb)		µg/L
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	90%
Decachlorobiphenyl (30-130).....	84%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130),.....	86%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999
 Matrix: Water

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Tetrachloro-m-xylene (30-130)....	87%
Decachlorobiphenyl (30-130).....	85%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 13, 1999
 Analyzed: May 18, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	97%
Toluene-d8 (50-135).....	100%
4-Bromofluorobenzene (70-130).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 14, 1999
 Analyzed: May 14, 1999
 Revised: Jun 22, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	97%
Toluene-d8 (75-140).....	96%
4-Bromofluorobenzene (75-135).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 17, 1999
 Analyzed: May 17, 1999
 Reported: Jun 1, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	5.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	97%
Toluene-d8 (75-140).....	96%
4-Bromofluorobenzene (75-135).....	97%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <47 of 53>

WEST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	76%
Phenol-d6 (35-110).....	79%
2,4,6-Tribromophenol (40-110).....	86%
Nitrobenzene-d5 (30-110).....	67%
2-Fluorobiphenyl (40-110).....	77%
Terphenyl-d14 (45-110).....	70%

AST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	81%
Phenol-d6 (35-110).....	77%
2,4,6-Tribromophenol (40-110).....	88%
Nitrobenzene-d5 (30-110).....	79%
2-Fluorobiphenyl (40-110).....	82%
Terphenyl-d14 (45-110).....	92%

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 17, 1999
 Analyzed: May 19, 1999
 Reported: Jun 1, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard	Recoveries (Accept. Limits):
2-Fluorophenol (40-110).....	73%
Phenol-d6 (40-115).....	76%
2,4,6-Tribromophenol (40-140).....	84%
Nitrobenzene-d5 (35-120).....	73%
2-Fluorobiphenyl (30-150).....	83%
Terphenyl-d14 (45-150).....	97%

Robyn Rice
 Project Manager

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: Jun 1, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine
 Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	76%
Phenol-d6 (40-115).....	76%
2,4,6-Tribromophenol (40-140).....	78%
Nitrobenzene-d5 (35-120).....	79%
2-Fluorobiphenyl (30-150).....	76%
Terphenyl-d14 (45-150).....	88%

Robyn Rice
 Project Manager

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 21-25, 1999
 Analyzed: May 21-26, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Beryllium.....	EPA 6010B	0.50	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	N.D.	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	N.D.	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	May 21-25, 1999	May 21-25, 1999
Nickel.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00761.QST <52 of 53>

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 19-24, 1999
 Analyzed: May 19-25, 1999
 Reported: Jun 1, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	200.7	0.050	N.D.	05/19/99	05/23/99
Beryllium.....	200.7	0.0050	N.D.	05/19/99	May 23-25, 1999
Cadmium.....	200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	200.7	0.010	N.D.	05/19/99	05/23/99
Copper.....	200.7	0.020	N.D.	05/19/99	05/23/99
Lead.....	200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	245.1	0.00020	N.D.	May 19-24, 1999	May 19-24, 1999
Nickel.....	200.7	0.050	N.D.	05/19/99	05/23/99
Selenium.....	200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	200.7	0.050	N.D.	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD 8081

DATE: 5/18/99

Analyte	St	LCS	PR
	ppb	ppb	%
DDE	20	18.4	92%
DDD	20	19.3	97%
DDT	20	19.6	98%

Definition of Terms:

- St. Standard Concentration
- LCS. Laboratory Control Sample Result
- PR. Percent Recovery of LCS; $(LCS/St) \times 100$

QA/QC CRITERIA: QA/QC is within acceptance limits.

Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8081
 Matrix: Water
 Instrument: GC

Date: 05/19/99
 Sample #: LCS/LCSD*
 Batch #: IE18PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	0.5	0.393	0.421	79%	84%	7%	40	55-125
DDD	0	0.5	0.403	0.436	81%	87%	8%	20	60-130
DDT	0	0.5	0.413	0.444	83%	89%	7%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provide

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) Note: This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E19 #19

Associated Samples: PIE00761

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
B-BHC	2	74
Endrin Ketone	1	117

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E19 #6

Associated Samples: PIE00761

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
B-BHC	2	80

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Method: 8081A
QC Batch: E18 #6

Associated Samples: PIE00761

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
D-BHC	2	81

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E18 #20

Associated Samples: PIE00761

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
DDD	1	116
Endosulfan Sulfate	1	126
Methoxychlor	1	117
Endrin Ketone	1	123

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



GC CALIBRATION CHECK CRITERIA

Method: 8081A
QC Batch: E18 #33

Associated Samples: PIE00761

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
DDD	1	118
Endosulfan Sulfate	1	119

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result. All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result. An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 5/18/99
 Sample #: IE01745
 Batch #: IE18PE1S

Acceptance Limits

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
PCB 1016 (Arochlor)	0	160	121	121	76%	76%	0%	50	60-140
PCB 1260 (Arochlor)	0	160	127	130	79%	81%	2%	50	60-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical (AZ0426)

This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Coolay Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 5/19/99
 Sample #: LCS/LCSD*
 Batch #: IE18PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
AR 1016	0	4.0	3.41	3.28	85%	82%	4%	≤ 50	60-140%
AR 1260	0	4.0	3.25	3.10	81%	78%	5%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Soil
 Instrument: GCMS

Date: 05/18/99
 Sample #: LCS/LCSD
 Batch #: IE13VM1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	500	175	150	35%	30%	15.4%	30	0-110
1,1-Dichloroethene	0.0	500	365	362	73%	72%	0.8%	30	46-134
1,1-Dichloroethane	0.0	500	403	414	81%	83%	2.7%	30	62-122
Chloroform	0.0	500	442	457	88%	91%	3.3%	30	66-130
1,2-Dichloroethane	0.0	500	461	457	92%	91%	0.9%	30	61-121
Benzene	0.0	500	454	466	91%	93%	2.6%	30	68-128
Trichloroethene	0.0	500	493	489	99%	98%	0.8%	30	59-119
Toluene	0.0	500	647	652	129%	130%	0.8%	30	62-130
Tetrachloroethene	0.0	500	512	512	102%	102%	0.0%	30	64-124
Chlorobenzene	0.0	500	503	504	101%	101%	0%	30	80-120

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9598 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/14/99
 Sample #: PIE00756
 Batch #: IE14021W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	24.0	23.0	96%	92%	4%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	25.0	22.0	100%	88%	12.8%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	80-135%
Chloroform	5.7	25	31.0	31.0	101%	101%	0.0%	≤ 20	80-135%
2-Dichloroethane	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	80-130%
Benzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-135%
Trichloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-130%
Toluene	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	75-135%
Tetrachloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	70-135%
Chlorobenzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

3952 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/17/99
 Sample #: PIE00873
 Batch #: IE17021W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	23.0	20.0	92%	80%	14%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	25.0	21.0	100%	84%	17.4%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	24.0	22.0	96%	88%	8.7%	≤ 20	80-135%
Chloroform	0.0	25	25.0	19.0	100%	76%	27.3%	≤ 20	80-135%
?-Dichloroethane	0.0	25	25.0	15.0	100%	60%	50.0%	≤ 20	80-130%
benzene	0.0	25	25.0	22.0	100%	88%	12.8%	≤ 20	75-135%
Trichloroethene	0.0	25	25.0	21.0	100%	84%	17.4%	≤ 20	75-130%
Toluene	0.0	25	26.0	26.0	104%	104%	0.0%	≤ 20	75-135%
Tetrachloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	70-135%
Chlorobenzene	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

√QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4867 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 8260B

BATCH: IE17021W
 DATE: 5/18/99

Analyte	St	R1	PR	QC Limits
	ppb	ppb	%	%
Vinyl Chloride	25	26.7	107%	25-200
1,1-Dichloroethene	25	25.0	100%	55-165
1,1-Dichloroethane	25	22.7	91%	65-155
Chloroform	25	23.5	94%	65-150
1,2-Dichloroethane	25	22.6	90%	65-155
Benzene	25	24.5	98%	60-155
Trichloroethene	25	25.6	102%	60-150
Toluene	25	25.5	102%	65-155
1,2-Dichloroethene	25	25.9	104%	60-155
o-Crobenzene	25	25.8	103%	65-145

Definition of Terms:

St. Concentration standard added to sample

R1. Standard Result

PR. Percent Recovery

Del Mar Analytical

MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/24/99
 Sample #: IE01713
 Batch #: IE19SE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.3	50.0	41.0	42.0	81%	83%	2%	20	30-95
2-Chlorophenol	0.0	50.0	41.0	42.0	82%	84%	2%	25	30-100
1,4-Dichlorobenzene	0.0	50.0	35.0	33.0	70%	66%	6%	30	25-90
N-Nitroso-di-n-propylamine	0.0	50.0	45.0	47.0	90%	94%	4%	20	35-100
1,2,4-Trichlorobenzene	0.0	50.0	38.0	40.0	76%	80%	5%	25	30-95
2-Chloro-3-methylphenol	0.0	50.0	44.0	46.0	88%	92%	4%	25	40-110
Acenaphthene	0.1	50.0	42.0	43.0	84%	86%	2%	15	35-105
2,4-Dinitrotoluene	0.1	50.0	44.0	46.0	88%	92%	4%	20	35-110
4-Nitrophenol	0.0	50.0	47.0	51.0	94%	102%	8%	25	15-135
Pentachlorophenol	0.0	50.0	52.0	52.0	104%	104%	0%	30	30-115
Pyrene	0.0	50.0	45.0	47.0	90%	94%	4%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC is within acceptance limits.

MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/25/99
 Sample #: IE02608
 Batch #: IE24SE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.1	50.0	34.0	32.0	68%	64%	6%	20	30-95
2-Chlorophenol	0.0	50.0	33.0	31.0	66%	62%	6%	25	30-100
1,4-Dichlorobenzene	0.0	50.0	28.0	26.0	56%	52%	7%	30	25-90
N-Nitroso-di-n-propylamine	0.0	50.0	33.0	34.0	66%	68%	3%	20	35-100
1,2,4-Trichlorobenzene	0.0	50.0	34.0	29.0	68%	58%	16%	25	30-95
Chloro-3-methylphenol	0.0	50.0	37.0	36.0	74%	72%	3%	25	40-110
Acenaphthene	0.1	50.0	39.0	35.0	78%	70%	11%	15	35-105
2,4-Dinitrotoluene	0.0	50.0	45.0	44.0	90%	88%	2%	20	35-110
4-Nitrophenol	0.0	50.0	39.0	30.0	78%	60%	26%	25	15-135
Pentachlorophenol	0.0	50.0	41.0	38.0	82%	76%	8%	30	30-115
Pyrene	0.1	50.0	48.0	50.0	96%	100%	4%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

A/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

LABORATORY CONTROL SAMPLE

EPA METHOD: 8270

DATE: 5/25/99

Analyte	St ppb	R1 ppb	PR %
Phenol	50	38	76%
2-Chlorophenol	50	36	72%
1,4-Dichlorobenzene	50	35	70%
n-Nitroso-di-n-propylamine	50	40	80%
1,2,4-Trichlorobenzene	50	38	76%
4-Chloro-3-Methylphenol	50	46	92%
Acenaphthene	50	39	78%
2,4-Dinitrotoluene	50	43	86%
Nitrophenol	50	44	88%
1,2-Dichlorophenol	50	49	98%
1,3-Dichlorobenzene	50	48	96%

Definition of Terms:

St. Total of standard added to sample

R1. Standard Result

PR. Percent Recovery

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/23/99
 Sample #: LCS/LCSD*
 Batch #: IE19SE1W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.1	50.0	45.0	46.0	90%	92%	2%	15	40-110
2-Chlorophenol	0.0	50.0	44.0	43.0	88%	86%	2%	15	40-110
1,4-Dichlorobenzene	0.0	50.0	41.0	41.0	82%	82%	0%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50.0	49.0	48.0	98%	96%	2%	20	45-120
1,2,4-Trichlorobenzene	0.0	50.0	46.0	47.0	92%	94%	2%	15	44-110
Chloro-3-methylphenol	0.0	50.0	50.0	52.0	100%	104%	4%	20	50-115
Acenaphthene	0.1	50.0	48.0	47.0	96%	94%	2%	15	50-115
2,4-Dinitrotoluene	0.0	50.0	56.0	52.0	112%	104%	7%	15	55-120
4-Nitrophenol	0.2	50.0	53.0	51.0	106%	102%	4%	15	45-120
Pentachlorophenol	0.0	50.0	41.0	42.0	82%	84%	2%	20	50-125
Pyrene	0.1	50.0	53.0	52.0	106%	104%	2%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

IQC Criteria..... All QA/QC criteria was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/19/99
 Sample #: LCS/LCSD*
 Batch #: IE17SE1W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.2	50.0	34.0	35.0	68%	70%	3%	15	40-110
2-Chlorophenol	0.0	50.0	36.0	37.0	72%	74%	3%	15	40-110
1,4-Dichlorobenzene	0.0	50.0	32.0	31.0	64%	62%	3%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50.0	35.0	36.0	70%	72%	3%	20	45-120
1,2,4-Trichlorobenzene	0.0	50.0	33.0	35.0	66%	70%	6%	15	44-110
Chloro-3-methylphenol	0.0	50.0	40.0	44.0	80%	88%	10%	20	50-115
Acenaphthene	0.0	50.0	38.0	40.0	76%	80%	5%	15	50-115
2,4-Dinitrotoluene	0.0	50.0	43.0	40.0	86%	80%	7%	15	55-120
4-Nitrophenol	0.0	50.0	42.0	39.0	84%	78%	7%	15	45-120
Pentachlorophenol	0.0	50.0	52.0	46.0	104%	92%	12%	20	50-125
Pyrene	0.0	50.0	45.0	46.0	90%	92%	2%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QC Criteria..... All QA/QC criteria was within acceptance limits.

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/26/99
 Sample #: PIE00700

Analyte								MEAN
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Beryllium	0	50.0	37.8	47.3	76%	95%	22.3%	85%
Cadmium	0	50.0	37.9	47.7	76%	95%	22.9%	86%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: All QA/QC was within acceptance limits.

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/23/99
 Sample #: PIE00700

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN
	ppm	ppm	ppm	ppm	%	%	%	PR
Antimony	0	50.0	45.0	55.4	90%	111%	20.7%	100%
Arsenic	0	50.0	42.0	50.9	84%	102%	19.2%	93%
Chromium	0	50.0	43.6	51.5	87%	103%	16.6%	95%
Copper*	40.2	50.0	67.8	94.7	55%	109%	33.1%	82%
Lead*	24.3	50.0	57.1	75.5	66%	102%	27.8%	84%
Nickel	0	50.0	42.5	55.2	85%	110%	26.0%	98%
Vanadium	0	50.0	39.5	47.1	79%	94%	17.6%	87%
Silver*	0	50.0	63.8	81.8	128%	164%	24.7%	146%
Thallium	0	50.0	43.8	49.9	88%	100%	13.0%	94%
Zinc**	781	50.0	488	864	0%	166%	55.6%	83%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: $< \text{ or } = 20\%$
 MS/MSD: 75-125%

QA/QC Criteria: **Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.

*The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-1043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/23/99

Analyte	St	R1	PR
	ppm	ppm	%
Copper	50.0	49.8	100%
Lead	50.0	49.8	100%
Silver	50.0	40.8	82%
Zinc	50.0	48.4	97%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 05/25/99
 Sample #: PIE00766
 Batch #: IE25HG1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.333	0.333	0.336	100%	101%	1%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 05/21/99
 Sample #: PIE00666
 Batch #: IE21HG1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.333	0.335	0.329	101%	99%	2%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/22/99
 Sample #: PIE00756

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Arsenic	0	1.0	1.17	1.13	117%	113%	3.5%	115%
Beryllium	0	1.0	1.09	1.06	109%	106%	2.8%	108%
Cadmium	0	1.0	1.01	0.984	101%	98%	2.6%	100%
Chromium	0	1.0	1.08	1.05	108%	105%	2.8%	107%
Copper	0	1.0	1.08	1.06	108%	106%	1.9%	107%
Lead	0	1.0	1.05	1.03	105%	103%	1.9%	104%
Nickel	0	1.0	1.04	1.02	104%	102%	1.9%	103%
Selenium	0	1.0	1.10	1.08	110%	108%	1.8%	109%
Silver	0	0.05	0.0534	0.0526	107%	105%	1.5%	106%
Thallium	0	1.0	1.12	1.10	112%	110%	1.8%	111%
c	0	1.0	1.09	1.05	109%	105%	3.7%	107%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)





MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/24/99
 Sample #: PIE00756

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.12	1.11	112%	111%	0.9%	112%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: $< \text{ or } = 20\%$
 MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/24/99
 Sample #: PIE00587
 Batch #: IE24HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00491	0.00623	98%	125%	23.7%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limit.

MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/19/99
 Sample #: PIE00836
 Batch #: IE19HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
Mercury	0	0.00500	0.00429	0.00439	86%	88%	2.3%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
 Sp..... Spike Concentration added to sample
 MS..... Matrix Spike Result
 MSD..... Matrix Spike Duplicate Result
 PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
 PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
 RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
 Acceptance Limits..... Statistically determined on an annual basis.

 QA/QC Criteria..... All QA/QC was within acceptance limit.



June 2, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30281

Dear Ms. Rice:

Four soil and three water samples for Project Number 'PIE00761.QST' were received May 14, 1999, in good condition. Written results are being provided on this June 2, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Soil	PIE00761	79020s	05/11/99
Soil	PIE00762	79021s	05/11/99
Water	PIE00763	79022w	05/12/99
Soil	PIE00765	79023s	05/12/99
Soil	PIE00766	79024s	05/12/99
Water	PIE00768	79025w	05/12/99
Water	PIE00769	79026w	05/12/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141 OP Pesticides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

ARF: 30281

Sample ID: PIE00761

APPL ID AP79020

Sample Collection Date: 5/11/99

CCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	86.8	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	87.9	63-151	%	5/19/99	5/22/99

Run #: 520071
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

LCI Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00762

Sample Collection Date: 5/11/99

ARF: 30281

APPL ID AP79021

QCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	87.1	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	90.5	63-151	%	5/19/99	5/22/99

Run #: 520072
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141

' Mar Analytical
9030 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00763

Sample Collection Date: 5/12/99

ARF: 30281

APPL ID AP79022

QCG: S8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
A 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	87.4	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	80.3	76-140	%	5/17/99	5/19/99

Run #: 517094
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00765

Sample Collection Date: 5/12/99

ARF: 30281

APPL ID AP79023

QCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Boistar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
A 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	96.6	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	98.0	63-151	%	5/19/99	5/22/99

Run #: 520073
Instrument: NPD03
Sequence: 000520

EPA 8141 OP Pesticides

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00766

Sample Collection Date: 5/12/99

ARF: 30281

APPL ID AP79024

QCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
A 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	90.8	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	86.7	63-151	%	5/19/99	5/22/99

Run #: 520074
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1

EPA 8141

Mar Analytical

9x30 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00768

Sample Collection Date: 5/12/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281

APPL ID AP79025

QCG: \$8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
A 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	96.1	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	86.2	76-140	%	5/17/99	5/19/99

Run #: 517095
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141

Mar Analytical
9630 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00769

Sample Collection Date: 5/12/99

ARF: 30281

APPL ID AP79026

QCG: \$8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfotion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	83.6	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	80.3	76-140	%	5/17/99	5/19/99

Run #: 517096
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

Printed: 5/20/99 12:31:26 PM

EPA 8151 HERBICIDE SOIL

' Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00761

Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281

APPL ID AP79020

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/19/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/19/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Surrogate recovery	126	93-141	%	5/19/99	5/21/99

Run #: 136
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

Printed: 5/21/99 1:05:00 PM

EPA 8151 HERBICIDE SOIL

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00761.QST
Sample ID: PIE00762
Sample Collection Date: 5/11/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281
APPL ID AP79021

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/19/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/19/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Surrogate recovery	125	93-141	%	5/19/99	5/21/99

Run #: 137
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00763

Sample Collection Date: 5/12/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281

APPL ID AP79022

QCG: S8151-990518A-16709

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	42.9 #	61-120	%	5/18/99	5/21/99

Recovery is outside QC limits.

Run #: 155
Instrument: ECD01
Sequence: 990517 ..
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Jl Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00763

Sample Collection Date: 5/12/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281

APPL ID AP79022

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
EPA 8151	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Surrogate Recovery	110	61-120	%	5/25/99	6/1/99

Run #: 84
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00761.QST
Sample ID: PIE00765
Sample Collection Date: 5/12/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281
APPL ID AP79023

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/19/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/19/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Surrogate recovery	122	93-141	%	5/19/99	5/21/99

Run #: 138
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

i Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice
Project: PIE00761.QST
Sample ID: PIE00766
Sample Collection Date: 5/12/99

ARF: 30281
APPL ID AP79024

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/19/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/19/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/19/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/19/99	5/21/99
EPA 8151	Surrogate recovery	120	93-141	%	5/19/99	5/21/99

Run #: 139
Instrument: ECD01
Sequence: 990517 ..
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

I Mar Analytical
9030 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00768

Sample Collection Date: 5/12/99

ARF: 30281

APPL ID AP79025

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	93.6	61-120	%	5/18/99	5/21/99

Run #: 156
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

Printed: 5/24/99 1:36:11 PM

EPA 8151 Herbicides

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00761.QST

Sample ID: PIE00769

Sample Collection Date: 5/12/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30281

APPL ID AP79026

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	94.9	61-120	%	5/18/99	5/21/99

Run #: 157
Instrument: ECD01
Sequence: 990517 ..
Dilution Factor: 1
Initials: KW

Method Blank

EPA 8141

Blank Name/QCG: 990517W - 16623
 Batch ID: \$8141W-990517AW

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
BLANK	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
BLANK	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
BLANK	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Surrogate: Tributylphosphate	77.9	60-150	%	5/17/99	5/19/99
BLANK	Surrogate: Triphenylphosphate	82.6	76-140	%	5/17/99	5/19/99

Run #: 517073
Instrument: NPD03
Sequence: 990517
Initials: FML

Matrix , Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990517AW LCS/LCSD
Date/Initials: 5/18/99 FML
Extraction Date: 5/17/99
Matrix Type: WATER
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	2.50	0.00	1.66	66.6	1.69	67.8	1.8
Diazinon	2.50	0.00	2.47	98.6	2.45	98.1	0.5
Disulfoton	2.50	0.00	1.83	73.1	1.82	72.9	0.3
Methyl parathion	2.50	0.00	2.11	84.3	2.14	85.6	1.5
Stirophos	2.50	0.00	2.25	89.9	2.26	90.4	0.6
Ethion	2.50	0.00	1.91	76.5	1.86	74.2	3.1

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.07	81.4	4.19	83.9
Triphenyl phosphate	5.00	*****	4.38	87.6	4.21	84.2

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/19/99	5/19/99
Analysis Time:	8:13 AM	10:43 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	74	78
Extraction Ratio:	10/1000	10/1000
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

MATIRX SPIKE

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 78845 MS
Date/Initials: 5/19/99 FML
Extraction Date: 5/17/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	2.50	*****	1.55	61.9
Diazinon	2.50	*****	2.13	85.4
Disulfoton	2.50	*****	1.86	74.4
Methyl parathion	2.50	*****	1.92	76.9
Stirophos	2.50	*****	2.01	80.4
Ethion *	2.50	*****	1.44	57.4

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	5.00	*****	3.79	75.8
Triphenyl phosphate	5.00	*****	3.63	72.5

	Prim Col
	Spike
Analysis Date:	5/19/99
Analysis Time:	11:20 AM
Instrument:	NPD03B
Column:	DB-5
Sample/Vial #:	79
Extraction Ratio:	10/1000
Dilution Factor:	1

Sec Col
Spike

Comments: * Ethion out of QC limits.

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Method Blank

EPA 8141 OP Pesticides

Blank Name/QCG: 990519S - 16732
 Batch ID: \$8141S-990519A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	5/19/99	5/22/99
BLANK	Bolstar	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Coumaphos	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Def	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Demeton-s	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Diazinon	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Dichlorvos	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Dimethoate	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Disulfoton	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	EPN	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Ethion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Ethoprop	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Fensulfothion	Not detected	250	ug/kg	5/19/99	5/22/99
BLANK	Fenthion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Malathion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Merphos	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Mevinphos	Not detected	350	ug/kg	5/19/99	5/22/99
BLANK	Naled	Not detected	250	ug/kg	5/19/99	5/22/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Phorate	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Prowl	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Ronnel	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Stirophos	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Sulfotep	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	TEPP	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Tokuthion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Trichloronate	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Trifluralin	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Surrogate: Tributylphosphate	85.1	51-154	%	5/19/99	5/22/99
BLANK	Surrogate: Triphenylphosphate	87.6	63-151	%	5/19/99	5/22/99

Run #: 520061
Instrument: NPD03
Sequence: 990520
Initials: FML

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990519AS LCS/LCSD
Date/Initials: 5/25/99 FML
Extraction Date: 5/19/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	71.6	86.0	73.6	88.4	2.7
Diazinon	83.3	0.000	105	126	107	129	2.5
Disulfoton	83.3	0.000	85.1	102	87.9	105	3.2
Methyl parathion	83.3	0.000	86.4	104	90.5	109	4.6
Stirophos	83.3	0.000	90.5	109	93.1	112	2.8
Ethion	83.3	0.000	75.4	90.5	79.5	95.4	5.3

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	173	104	178	107
Triphenyl phosphatate	167	*****	176	106	184	111

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/22/99	5/22/99
Analysis Time:	7:03 AM	7:40 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	65	66
Extraction Ratio:	10/30	10/30
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: 990519S - 16705
Batch ID: S8151S-990519SA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	5/19/99	5/21/99
BLANK	Dalapon	Not detected	2000	ug/kg	5/19/99	5/21/99
BLANK	2,4-DB	Not detected	400	ug/kg	5/19/99	5/21/99
BLANK	Dicamba	Not detected	40	ug/kg	5/19/99	5/21/99
BLANK	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/19/99	5/21/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	5/19/99	5/21/99
BLANK	MCPA	Not detected	40000	ug/kg	5/19/99	5/21/99
BLANK	MCPP	Not detected	40000	ug/kg	5/19/99	5/21/99
BLANK	2,4,5-T	Not detected	40	ug/kg	5/19/99	5/21/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	5/19/99	5/21/99
BLANK	Surrogate recovery	114	93-141	%	5/19/99	5/21/99

Run #: 132
Instrument: ECD01
Sequence: 990517
Initials: KW

Laboratory Control Spike Recovery
EPA 8151 HERBICIDE SOIL

APPL ID: 990519S-79059 LCS - 16705
Batch ID: S8151S-990519SA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/kg	SPK Result ug/kg	SPK % Recovery	Recovery Limits
2,4,5-T	200	212	106	77-148
2,4,5-TP	200	206	103	87-149
2,4-D	200	243	122	90-181
Dicamba	200	212	106	63-149
Dichlorprop (2,4-DP)	200	218	109	91-183
Dinoseb (DNBP)	200	207	104	71-167
Surrogate recovery	600	700	117	93-141

Comments:

Primary	SPK
Extraction Date :	5/19/99
Analysis Date :	5/21/99
Instrument :	ECD01
Run :	133
Analyst :	KW

Matrix Spike Recoveries

EPA 8151 HERBICIDE SOIL

APPL ID 990519S-79059 MS/MSD - 16705
 Batch ID: \$8151S-990519SA

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/kg	Matrix Result ug/kg	SPK Result ug/kg	DUP Result ug/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	200	ND	224	229	112	115	77-148	2.2	27
2,4,5-TP	200	ND	212	219	106	110	87-149	3.2	27
2,4-D	200	ND	262	270	131	135	90-181	3.0	27
Dicamba	200	ND	236	239	118	120	63-149	1.3	31
Dichlorprop (2,4-DP)	200	ND	229	235	115	118	91-183	2.6	37
Dinoseb (DNBP)	200	ND	211	221	106	111	71-167	4.6	NE
Surrogate recovery	600	NA	731	742	122	124	93-141		

E = Not established.

Comments:

Primary	SPK	DUP
Extraction Date :	5/19/99	5/19/99
Analysis Date :	5/21/99	5/21/99
Instrument :	ECD01	ECD01
Run :	134	135
Analyst :	KW	

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990518W - 16709
Batch ID: \$8151-990518A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
BLANK	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
BLANK	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
BLANK	Surrogate recovery	95.3	61-120	%	5/18/99	5/21/99

Run #: 147
Instrument: ECD01
Sequence: 990517
Initials: KW

Laboratory Control Spike Recoveries
EPA 8151 Herbicides

APPL ID 990518W-79014 LCS/LCSD - 16709
 Batch ID: S8151-990518A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.861	0.893	86.1	89.3	53-134	3.6	32
2,4,5-TP	1.00	0.837	0.862	83.7	86.2	60-118	2.9	24
2,4-D	1.00	1.06	1.08	106	108	44-155	1.9	15
Dicamba	1.00	0.936	0.961	93.6	96.1	48-102	2.6	24
Dichlorprop (2,4-DP)	1.00	0.912	0.913	91.2	91.3	37-146	0.11	18
Dinoseb (DNBP)	1.00	0.858	0.873	85.8	87.3	73-173	1.7	31
Surrogate: 2,4-DCAA	3.00	2.93	2.95	97.7	98.3	61-120		

Comments: _____

	<u>SPK</u>	<u>DUP</u>
Primary		
Extraction Date :	5/18/99	5/18/99
Analysis Date :	5/21/99	5/21/99
Instrument :	ECD01	ECD01
Run :	148	149
Analyst :	KW	

Matrix Spike Recovery

EPA 8151 Herbicides

APPL ID 990518W-79014 MS - 16709
 Batch ID: \$8151-990518A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/L	Matrix Result ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4,5-T	1.00	ND	0.708	70.8	53-134
2,4,5-TP	1.00	ND	0.679	67.9	60-118
2,4-D	1.00	ND	0.785	78.5	44-155
Dicamba	1.00	ND	0.830	83.0	48-102
Dichlorprop (2,4-DP)	1.00	ND	0.693	69.3	37-146
Dinoseb (DNBP)	1.00	ND	0.647	64.7 #	73-173
Surrogate: 2,4-DCAA	3.00	NA	2.40	80.0	61-120

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Extraction Date :	5/18/99
Analysis Date :	5/21/99
Instrument :	ECD01
Run :	150
Analyst :	KW

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990525W - 16863
Batch ID: \$8151-990525B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
BLANK	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
BLANK	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	Surrogate recovery	105	61-120	%	5/25/99	6/1/99

Run #: 79
Instrument: ECD01 --
Sequence: 990525
Initials: KW

Laboratory Control Spike Recoveries

EPA 8151 Herbicides

APPL ID: 990525W-79336 LCS/LCSD - 16863
 Batch ID: \$8151-990525B

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.872	0.897	87.2	89.7	53-134	2.8	32
2,4,5-TP	1.00	0.799	0.814	79.9	81.4	60-118	1.9	24
2,4-D	1.00	1.08	1.11	108	111	44-155	2.7	15
Dicamba	1.00	0.918	0.934	91.8	93.4	48-102	1.7	24
Dichlorprop (2,4-DP)	1.00	0.735	0.746	73.5	74.6	37-146	1.5	18
Dinoseb (DNBP)	1.00	0.899	0.883	89.9	88.3	73-173	1.8	31
Surrogate: 2,4-DCAA	3.00	3.07	3.04	102	101	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/25/99	5/25/99
Analysis Date :	6/1/99	6/1/99
Instrument :	ECD01	ECD01
Run :	80	81
Analyst :	KW	

Matrix Spike Recovery

EPA 8151 Herbicides

APPL ID: 990525W-79336 MS - 16863

Batch ID: S8151-990525B

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

Compound Name	Spike Level ug/L	Matrix Result ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4,5-T	1.11	ND	1.05	94.6	53-134
2,4,5-TP	1.11	ND	0.931	83.9	60-118
2,4-D	1.11	ND	1.34	121	44-155
Dicamba	1.11	ND	0.863	77.7	48-102
Dichlorprop (2,4-DP)	1.11	ND	1.01	91.0	37-146
Dinoseb (DNBP)	1.11	ND	1.02	91.9	73-173
Surrogate: 2,4-DCAA	3.33	NA	3.71	111	61-120

Comments:

Primary	SPK
Extraction Date :	5/25/99
Analysis Date :	6/1/99
Instrument :	ECD01
Run :	82
Analyst :	KW



June 7, 1999

Service Request No: K9902987

Robyn Rice
Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Re: PIE00585.QST

Dear Robyn:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 1999. For your reference, these analyses have been assigned our service request number K9902987.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 280.

Respectfully submitted,

Columbia Analytical Services, Inc.

Les Kennedy
Project Chemist

LK/td

Page 1 of 12

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11-25/99
Date Received: 5/13-28/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon. Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Result
PIE00588	K9902987-001	0.05	0.19
PIE00765	K9902987-002	0.05	0.21
PIE01311	K9902987-004	0.05	ND
PIE01312	K9902987-005	0.05	0.28
PIE01492	K9902987-006	0.05	0.12
PIE01493	K9902987-007	0.05	0.09
PIE01670	K9902987-008	0.05	0.09
Method Blank	K9902987-MB	0.05	ND

Approved By: _____

Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Sample Name	Lab Code	MRL	Result
PIE01220	K9902987-003	0.05	ND
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11/99
Date Received: 5/13/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE00588	K9902987-001DUP	0.05	0.19	0.22	0.20	15

Approved By: _____



Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
LCS Matrix: Soil

Service Request: K9902987
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 5/26/99

Laboratory Control Sample Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Carbon, Total Organic	0.62	0.68	110	85-115

Approved By: _____

Date: 6/4/99

LCS/102194

02987WET.LJ1 - LCS 6/4/99

00006
Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

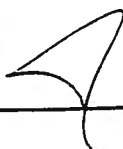
Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE01220	K9902987-003DUP	0.05	ND	ND	ND	-

Approved By: _____



Date: 6/4/99

CHAIN OF CUSTODY FORM

Client Name/Address: RST ENVIRONMENTAL INC 26 N. 44TH ST. SUITE 110 MCENIX, A.C.		Project/PO Number: P5185 000000 0009 1030	
Project Manager: JOHN THORNTON		Phone Number: (602) 244-1112	
Analyst: JEFF HARVEY KRISTINA DROBAY		Fax Number: (602) 244-1120	

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required							Special Instructions			
						1	2	3	4	5	6	7		8		
T-B8)(2/45)(5-12-99)	SOIL	VARIABLES	2	5-11-99 11:00	CHEM	1	1									
T-B5)(2/45)(5-12-99)	SOIL	VARIABLES	3	5-11-99 12:00	CHEM	1	1									
B3)(6W)(5)(5-12-99)	AG	VARIABLES	13	5-12-99 08:00	CHEM METALS	2	2	1	1	1	1	1	1	1	1	
T-B3)(5/57)(5-12-99)	SOIL	VARIABLES	1	5-12-99 08:00	CHEM											
T-B1)(5/53)(5-12-99)	SOIL	VARIABLES	2	5-12-99 11:00	CHEM	1	1									
T-B1)(5/37)(5-12-99)	SOIL	VARIABLES	2	5-12-99 12:15	CHEM	1	1									
T-B1)(5/5)(5-12-99)	SOIL	VARIABLES	2	5-12-99 11:11	CHEM											
T-B7)(6W)(5)(5-12-99)	AG	VARIABLES	13	5-12-99 12:05	CHEM METALS	2	2	1	1	1	1	1	1	1	1	
B3)(6W)(5)(5-12-99)	AG	VARIABLES	13	5-12-99 12:05	CHEM METALS			1	1	1	1	1	1	1	1	
T-B1)(5/5)(5-12-99)	AG	VARIABLES	2		CHEM											

Relinquished By: <i>[Signature]</i>	Date /Time: 5-12-99	Received by: <i>[Signature]</i>	Date /Time: 5-12-99	Turnaround Time: (Check) same day _____ 72 hours _____ 24 hours _____ 5 days _____ 48 hours _____ normal _____
Relinquished By: <i>[Signature]</i>	Date /Time: 5-12-99	Received by: <i>[Signature]</i>	Date /Time: 5-12-99	
Relinquished By: <i>[Signature]</i>	Date /Time: 5-12-99	Received in Lab by: <i>[Signature]</i>	Date /Time: 5-12-99	Sample Integrity: (Check) intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
5525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
Report Number: PIE00749

Sampled: May 11-12, 1999
Received: May 12, 1999
Extracted: May 13-24, 1999
Analyzed: May 13-27, 1999
Reported: May 28, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE00749	QST-B10-(S/10) -5-11-99	Soil	8260B, 8270, 6010B, 7471A, 8081A, 8082, 8141A & 8151
PIE00750	QST-B10-(S/50) -5-12-99	Soil	8260B, 8270, 6010B, 7471A, 8081A, 8082, 8141A & 8151
PIE00751	QST-B10-(GW/50) -5-12-99	Water	8260B, 8270, 200.7, 245.1, 8081A, 8082, 8141A & 8151
PIE00752	Trip Blank/B10	Water	8260B
PIE00753	QST-B9-(S/20) -5-12-99	Soil	8260B, 8270, 6010B, 7471A, 8081A, 8082, 8141A & 8151
PIE00754	QST-B9-(S/50) -5-12-99	Soil	8260B, 8270, 6010B, 7471A, 8081A, 8082, 8141A & 8151
PIE00755	QST-B9-(GW/50) -5-12-99	Water	8260B, 8270, 200.7, 245.1, 8081A, 8082, 8141A & 8151

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)


Robyn Rice
Project Manager



Del Mar Analytical

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Report Number: PIE00756

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 11-12, 1999
Received: May 12, 1999
Extracted: May 13-24, 1999
Analyzed: May 13-27, 1999
Reported: May 28, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE00756	QST-B41-(GW/55) -5-12-99	Water	8260B, 8270, 200.7, 245.1, 8081A, 8082, 8141A & 8151
PIE00757	QST-B32-(GW/55) -5-12-99	Water	8260B, 8270, 200.7, 245.1, 8081A, 8082, 8141A & 8151
PIE00758	Trip Blank/B9	Water	8260B
PIE00759	Trip Blank/B41	Water	8260B
PIE00760	Trip Blank/B32	Water	8260B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B10-(S/10)-5-11-99
 Lab Number: PIE00749

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aldrin.....	5.0		N.D.
alpha-BHC.....	5.0		N.D.
beta-BHC.....	5.0		N.D.
delta-BHC.....	10		N.D.
gamma-BHC (Lindane).....	5.0		N.D.
Chlordane.....	100		N.D.
4,4'-DDD.....	5.0		N.D.
4,4'-DDE.....	5.0		N.D.
4,4'-DDT.....	5.0		N.D.
Dieldrin.....	5.0		N.D.
Endosulfan I.....	5.0		N.D.
Endosulfan II.....	5.0		N.D.
Endosulfan sulfate.....	20		N.D.
Endrin.....	5.0		N.D.
Endrin aldehyde.....	5.0		N.D.
Heptachlor.....	5.0		N.D.
Heptachlor epoxide.....	5.0		N.D.
Methoxychlor.....	5.0		N.D.
Toxaphene.....	200		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	73%
Decachlorobiphenyl (30-130).....	89%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <3 of 57>

1ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/50)-5-12-99
 Lab Number: PIE00750

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)			µg/Kg (ppb)
Aldrin.....	5.0		N.D.
alpha-BHC.....	5.0		N.D.
beta-BHC.....	5.0		N.D.
delta-BHC.....	10		N.D.
gamma-BHC (Lindane).....	5.0		N.D.
Chlordane.....	100		N.D.
4,4'-DDD.....	5.0		N.D.
4,4'-DDE.....	5.0		N.D.
4,4'-DDT.....	5.0		N.D.
Dieldrin.....	5.0		N.D.
Endosulfan I.....	5.0		N.D.
Endosulfan II.....	5.0		N.D.
Endosulfan sulfate.....	20		N.D.
Endrin.....	5.0		N.D.
Endrin aldehyde.....	5.0		N.D.
Heptachlor.....	5.0		N.D.
Heptachlor epoxide.....	5.0		N.D.
Methoxychlor.....	5.0		N.D.
Toxaphene.....	200		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	73%
Decachlorobiphenyl (30-130).....	85%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B10-(GW/50)-5-12-99
 Lab Number: PIE00751

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L	(ppb)	
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	69%
Decachlorobiphenyl (30-130).....	65%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <5 of 57>

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B9-(S/20)-5-12-99
 Lab Number: PIE00753

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	5.0		N.D.
alpha-BHC.....	5.0		N.D.
beta-BHC.....	5.0		N.D.
delta-BHC.....	10		N.D.
gamma-BHC (Lindane).....	5.0		N.D.
Chlordane.....	100		N.D.
4,4'-DDD.....	5.0		N.D.
4,4'-DDE.....	5.0		N.D.
4,4'-DDT.....	5.0		N.D.
Dieldrin.....	5.0		N.D.
Endosulfan I.....	5.0		N.D.
Endosulfan II.....	5.0		N.D.
Endosulfan sulfate.....	20		N.D.
Endrin.....	5.0		N.D.
Endrin aldehyde.....	5.0		N.D.
Heptachlor.....	5.0		N.D.
Heptachlor epoxide.....	5.0		N.D.
Methoxychlor.....	5.0		N.D.
Toxaphene.....	200		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	74%
Decachlorobiphenyl (30-130).....	84%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

EST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B9-(S/50)-5-12-99
 Lab Number: PIE00754

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	71%
Decachlorobiphenyl (30-130).....	90%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B9-(GW/50)-5-12-99
Lab Number: PIE00755

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 18, 1999
Analyzed: May 19, 1999
Reported: May 28, 1999

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
330 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0251

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit	Sample Result
	µg/L (ppb)	
Aldrin.....	0.10	N.D.
alpha-BHC.....	0.10	N.D.
beta-BHC.....	0.10	N.D.
delta-BHC.....	0.25	N.D.
gamma-BHC (Lindane).....	0.10	N.D.
Chlordane.....	2.0	N.D.
4,4'-DDD.....	0.10	N.D.
4,4'-DDE.....	0.10	N.D.
4,4'-DDT.....	0.10	N.D.
Dieldrin.....	0.10	N.D.
Endosulfan I.....	0.10	N.D.
Endosulfan II.....	0.10	N.D.
Endosulfan sulfate.....	0.50	N.D.
Endrin.....	0.10	N.D.
Endrin aldehyde.....	0.10	N.D.
Heptachlor.....	0.10	N.D.
Heptachlor epoxide.....	0.10	N.D.
Methoxychlor.....	0.10	N.D.
Toxaphene.....	4.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	72%
Decachlorobiphenyl (30-130).....	67%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

PIE00749.QST <8 of 57>

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B41-(GW/55)-5-12-99
 Lab Number: PIE00756

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)		
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
ndrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	88%
Decachlorobiphenyl (30-130).....	50%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

WEST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B32-(GW/55)-5-12-99
 Lab Number: PIE00757

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	69%
Decachlorobiphenyl (30-130).....	49%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/10)-5-11-99
 Lab Number: PIE00749

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	89%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

Del Mar Analytical

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B10-(S/50)-5-12-99
 Lab Number: PIE00750

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

2852 Alton Ave., Irvine, CA 92606 949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 619) 505-9596 FAX (619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 480) 785-0043 FAX (480) 785-0851

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130),.....	86%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <12 of 57>



Del Mar Analytical

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B10-(GW/50)-5-12-99
Lab Number: PIE00751

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 18, 1999
Analyzed: May 19, 1999
Reported: May 28, 1999

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
8525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0351

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/L}$ (ppb)			$\mu\text{g/L}$ (ppb)
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	66%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



2352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JUST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B9-(S/20)-5-12-99
 Lab Number: PIE00753

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	89%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B9-(S/50)-5-12-99
 Lab Number: PIE00754

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <15 of 57>



Del Mar Analytical
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B9-(GW/50)-5-12-99
 Lab Number: PIE00755

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	66%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

WEST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B41-(GW/55)-5-12-99
 Lab Number: PIE00756

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	48%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <17 of 57>

Del Mar Analytical

1852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B32-(GW/55)-5-12-99
 Lab Number: PIE00757

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	49%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced except in full without written permission from Del Mar Analytical.

PIE00749.QST <18 of 57>

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B10-(S/10)-5-11-99
 Lab Number: PIE00749

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 13, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	82%
Toluene-d8 (50-135).....	83%
4-Bromofluorobenzene (70-130).....	82%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

1ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/50)-5-12-99
 Lab Number: PIE00750

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 13, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	87%
Toluene-d8 (50-135).....	86%
4-Bromofluorobenzene (70-130).....	85%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B10-(GW/50)-5-12-99
 Lab Number: PIE00751

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Napthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	93%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	92%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <21 of 57>



Del Mar Analytical

1ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
Sample Descript: Water, Trip Blank/B10
Lab Number: PIE00752

2952 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
1114 e. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
1925 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1844
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-100, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 13, 1999
Analyzed: May 13, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	90%
Toluene-d8 (75-140).....	94%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B9-(S/20)-5-12-99
Lab Number: PIE00753

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 13, 1999
Analyzed: May 18, 1999
Reported: May 28, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	76%
Toluene-d8 (50-135).....	78%
4-Bromofluorobenzene (70-130).....	72%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

1851ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B9-(S/50)-5-12-99
Lab Number: PIE00754

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 13, 1999
Analyzed: May 18, 1999
Reported: May 28, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	74%
Toluene-d8 (50-135).....	77%
4-Bromofluorobenzene (70-130).....	73%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B9-(GW/50)-5-12-99
Lab Number: PIE00755

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 14, 1999
Analyzed: May 14, 1999
Revised: Jun 22, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
6525 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
4830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	94%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B41-(GW/55)-5-12-99
 Lab Number: PIE00756

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 14, 1999
 Analyzed: May 14, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	6.3	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	5.7	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	4.9	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	96%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <26 of 57>

ST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B32-(GW/55)-5-12-99
Lab Number: PIE00757

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 14, 1999
Analyzed: May 14, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	5.9	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	4.9	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	4.8	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	74%
Toluene-d8 (75-140).....	75%
4-Bromofluorobenzene (75-135).....	75%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <27 of 57>

Del Mar Analytical

3T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank/B9
Lab Number: PIE00758

2952 Alton Ave., Irvine, CA 92606 949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 480) 785-0043 FAX (480) 785-0851

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 14, 1999
Analyzed: May 14, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Napthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	100%
4-Bromofluorobenzene (75-135).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <28 of 57>

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank/B41
 Lab Number: PIE00759

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 14, 1999
 Analyzed: May 14, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	91%
Toluene-d8 (75-140).....	100%
4-Bromofluorobenzene (75-135).....	94%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

352 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1223
 1014 E. Cooley Dr. Suite A Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr. Suite 805 San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 830 South 51st St. Suite B-120 Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, Trip Blank/B32
 Lab Number: PIE00760

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 14, 1999
 Analyzed: May 14, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropane.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropane...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	96%
Toluene-d8 (75-140).....	99%
4-Bromofluorobenzene (75-135).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

IST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/10)-5-11-99
 Lab Number: PIE00749

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benz(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
1,2-bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard	Recoveries (Accept. Limits):
2-Fluorophenol (25-110).....	55%
Phenol-d6 (35-110).....	55%
2,4,6-Tribromophenol (40-110).....	66%
Nitrobenzene-d5 (30-110).....	55%
2-Fluorobiphenyl (40-110).....	67%
Terphenyl-d14 (45-110).....	81%

Robyn Rice
 Project Manager

AST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/50)-5-12-99
 Lab Number: PIE00750

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	77%
Phenol-d6 (35-110).....	72%
2,4,6-Tribromophenol (40-110).....	83%
Nitrobenzene-d5 (30-110).....	77%
2-Fluorobiphenyl (40-110).....	78%
Terphenyl-d14 (45-110).....	95%

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B10-(GW/50)-5-12-99
 Lab Number: PIE00751

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine
 Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	68%
Phenol-d6 (40-115).....	69%
2,4,6-Tribromophenol (40-140).....	89%
Nitrobenzene-d5 (35-120).....	67%
2-Fluorobiphenyl (30-150).....	81%
Terphenyl-d14 (45-150).....	80%

Robyn Rice
 Project Manager

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B9-(S/20)-5-12-99
 Lab Number: PIE00753

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	250	N.D.	Dimethyl phthalate.....	250	N.D.
Acenaphthylene.....	250	N.D.	4,6-Dinitro-2-methylphenol.....	630	N.D.
Aniline.....	380	N.D.	2,4-Dinitrophenol.....	630	N.D.
Anthracene.....	250	N.D.	2,4-Dinitrotoluene.....	250	N.D.
Azobenzene.....	380	N.D.	2,6-Dinitrotoluene.....	250	N.D.
Benzidine.....	2,500	N.D.	Di-N-octyl phthalate.....	1,300	N.D.
Benzoic Acid.....	1,300	N.D.	Fluoranthene.....	250	N.D.
Benz(a)anthracene.....	250	N.D.	Fluorene.....	250	N.D.
Benzo(b)fluoranthene.....	500	N.D.	Hexachlorobenzene.....	250	N.D.
Benzo(k)fluoranthene.....	500	N.D.	Hexachlorobutadiene.....	250	N.D.
Benzo(g,h,i)perylene.....	380	N.D.	Hexachlorocyclopentadiene.....	1,300	N.D.
Benzo(a)pyrene.....	380	N.D.	Hexachloroethane.....	500	N.D.
Benzyl alcohol.....	500	N.D.	Indeno(1,2,3-cd)pyrene.....	500	N.D.
1,2-Bis(2-chloroethoxy)methane.....	250	N.D.	Isophorone.....	250	N.D.
1,2-Bis(2-chloroethyl)ether.....	250	N.D.	2-Methylnaphthalene.....	250	N.D.
1,2-Bis(2-chloroisopropyl)ether.....	250	N.D.	2-Methylphenol.....	380	N.D.
1,2-Bis(2-ethylhexyl)phthalate.....	2,500	N.D.	4-Methylphenol.....	380	N.D.
4-Bromophenyl phenyl ether.....	380	N.D.	Naphthalene.....	380	N.D.
Butyl benzyl phthalate.....	1,300	N.D.	2-Nitroaniline.....	500	N.D.
4-Chloroaniline.....	250	N.D.	3-Nitroaniline.....	500	N.D.
2-Chloronaphthalene.....	250	N.D.	4-Nitroaniline.....	1,300	N.D.
4-Chloro-3-methylphenol.....	250	N.D.	Nitrobenzene.....	1,300	N.D.
2-Chlorophenol.....	630	N.D.	2-Nitrophenol.....	250	N.D.
4-Chlorophenyl phenyl ether.....	250	N.D.	4-Nitrophenol.....	1,300	N.D.
Chrysene.....	250	N.D.	N-Nitrosodiphenylamine.....	500	N.D.
Dibenz(a,h)anthracene.....	250	N.D.	N-Nitroso-di-N-propylamine.....	380	N.D.
Dibenzofuran.....	250	N.D.	Pentachlorophenol.....	1,300	N.D.
Di-N-butyl phthalate.....	630	N.D.	Phenanthrene.....	250	N.D.
1,3-Dichlorobenzene.....	250	N.D.	Phenol.....	380	N.D.
1,4-Dichlorobenzene.....	250	N.D.	Pyrene.....	380	N.D.
1,2-Dichlorobenzene.....	250	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
3,3-Dichlorobenzidine.....	1,300	N.D.	2,4,5-Trichlorophenol.....	380	N.D.
2,4-Dichlorophenol.....	250	N.D.	2,4,6-Trichlorophenol.....	380	N.D.
Diethyl phthalate.....	250	N.D.			
2,4-Dimethylphenol.....	630	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.5.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard	Recoveries (Accept. Limits)
2-Fluorophenol (25-110).....	66%
Phenol-d6 (35-110).....	68%
2,4,6-Tribromophenol (40-110).....	75%
Nitrobenzene-d5 (30-110).....	64%
2-Fluorobiphenyl (40-110).....	75%
Terphenyl-d14 (45-110).....	92%

Robyn Rice
 Project Manager

IST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B9-(S/50)-5-12-99
 Lab Number: PIE00754

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 23, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benz(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	59%
Phenol-d6 (35-110).....	63%
2,4,6-Tribromophenol (40-110).....	81%
Nitrobenzene-d5 (30-110).....	54%
2-Fluorobiphenyl (40-110).....	69%
Terphenyl-d14 (45-110).....	73%

Robyn Rice
 Project Manager

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B9-(GW/50)-5-12-99
 Lab Number: PIE00755

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	11	N.D.	Dimethyl phthalate.....	11	N.D.
Acenaphthylene.....	11	N.D.	4,6-Dinitro-2-methylphenol...	42	N.D.
Aniline.....	11	N.D.	2,4-Dinitrophenol.....	110	N.D.
Anthracene.....	11	N.D.	2,4-Dinitrotoluene.....	11	N.D.
Azobenzene*.....	21	N.D.	2,6-Dinitrotoluene.....	11	N.D.
Benzidine.....	110	N.D.	Di-N-octyl phthalate.....	42	N.D.
Benzoic Acid.....	110	N.D.	Fluoranthene.....	11	N.D.
Benz(a)anthracene.....	11	N.D.	Fluorene.....	11	N.D.
Benzo(b)fluoranthene.....	11	N.D.	Hexachlorobenzene.....	11	N.D.
Benzo(k)fluoranthene.....	11	N.D.	Hexachlorobutadiene.....	11	N.D.
Benzo(g,h,i)perylene.....	11	N.D.	Hexachlorocyclopentadiene..	42	N.D.
Benzo(a)pyrene.....	11	N.D.	Hexachloroethane.....	11	N.D.
Benzyl alcohol.....	21	N.D.	Indeno(1,2,3-cd)pyrene.....	21	N.D.
Bis(2-chloroethoxy)methane.....	11	N.D.	Isophorone.....	11	N.D.
Bis(2-chloroethyl)ether.....	11	N.D.	2-Methylnaphthalene.....	11	N.D.
Bis(2-chloroisopropyl)ether.....	11	N.D.	2-Methylphenol.....	11	N.D.
Bis(2-ethylhexyl)phthalate.....	110	N.D.	4-Methylphenol.....	11	N.D.
4-Bromophenyl phenyl ether.....	11	N.D.	Napthalene.....	11	N.D.
Butyl benzyl phthalate.....	21	N.D.	2-Nitroaniline.....	21	N.D.
4-Chloroaniline.....	11	N.D.	3-Nitroaniline.....	21	N.D.
2-Chloronaphthalene.....	11	N.D.	4-Nitroaniline.....	110	N.D.
4-Chloro-3-methylphenol.....	21	N.D.	Nitrobenzene.....	42	N.D.
2-Chlorophenol.....	11	N.D.	2-Nitrophenol.....	11	N.D.
4-Chlorophenyl phenyl ether.....	11	N.D.	4-Nitrophenol.....	110	N.D.
Chrysene.....	11	N.D.	N-Nitrosodiphenylamine.....	11	N.D.
Dibenz(a,h)anthracene.....	21	N.D.	N-Nitroso-di-N-propylamine..	11	N.D.
Dibenzofuran.....	11	N.D.	Pentachlorophenol.....	42	N.D.
Di-N-butyl phthalate.....	21	N.D.	Phenanthrene.....	11	N.D.
1,3-Dichlorobenzene.....	11	N.D.	Phenol.....	11	N.D.
1,4-Dichlorobenzene.....	11	N.D.	Pyrene.....	11	N.D.
1,2-Dichlorobenzene.....	11	N.D.	1,2,4-Trichlorobenzene.....	11	N.D.
3,3-Dichlorobenzidine.....	42	N.D.	2,4,5-Trichlorophenol.....	21	N.D.
2,4-Dichlorophenol.....	11	N.D.	2,4,6-Trichlorophenol.....	21	N.D.
Diethyl phthalate.....	11	N.D.			
2,4-Dimethylphenol.....	21	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.06.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard	Recoveries (Accept. Limits):
2-Fluorophenol (40-110).....	79%
Phenol-d6 (40-115).....	81%
2,4,6-Tribromophenol (40-140).....	88%
Nitrobenzene-d5 (35-120).....	82%
2-Fluorobiphenyl (30-150).....	85%
Terphenyl-d14 (45-150).....	114%

Robyn Rice
 Project Manager

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 5525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B41-(GW/55)-5-12-99
 Lab Number: PIE00756

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	73%
Phenol-d6 (40-115).....	72%
2,4,6-Tribromophenol (40-140).....	89%
Nitrobenzene-d5 (35-120).....	82%
2-Fluorobiphenyl (30-150).....	81%
Terphenyl-d14 (45-150).....	100%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <37 of 57>

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B32-(GW/55)-5-12-99
 Lab Number: PIE00757

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: May 28, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine
 Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	72%
Phenol-d6 (40-115).....	68%
2,4,6-Tribromophenol (40-140).....	76%
Nitrobenzene-d5 (35-120).....	68%
2-Fluorobiphenyl (30-150).....	68%
Terphenyl-d14 (45-150).....	105%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <38 of 57>

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 5525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/10)-5-11-99
 Lab Number: PIE00749

Sampled: May 11, 1999
 Received: May 12, 1999
 Extracted: May 21, 1999
 Analyzed: May 21-26, 1999
 Reported: May 28, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	0.50	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	9.4	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	9.3	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	4.9	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	8.9	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	25	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <39 of 57>

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B10-(S/50)-5-12-99
 Lab Number: PIE00750

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 21, 1999
 Analyzed: May 21-27, 1999
 Reported: May 28, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	7.0	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	10	05/21/99	05/23/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/21/99	05/27/99
Cadmium.....	EPA 6010B	0.50	1.5	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	180	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	29	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	4.8	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	28	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	26	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B10-(GW/50)-5-12-99
 Lab Number: PIE00751

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19, 1999
 Analyzed: May 19-25, 1999
 Reported: May 28, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	EPA 200.7	0.050	0.065	05/19/99	05/23/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	EPA 200.7	0.0050	0.0060	05/19/99	05/23/99
Chromium.....	EPA 200.7	0.010	0.32	05/19/99	05/23/99
Copper.....	EPA 200.7	0.020	0.22	05/19/99	05/23/99
Lead.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	EPA 245.1	0.00020	0.00040	05/19/99	05/19/99
Nickel.....	EPA 200.7	0.050	0.39	05/19/99	05/23/99
Selenium.....	EPA 200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	EPA 200.7	0.050	0.092	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <41 of 57>

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B9-(S/20)-5-12-99
 Lab Number: PIE00753

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 21, 1999
 Analyzed: May 21-27, 1999
 Reported: May 28, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/21/99	05/27/99
Cadmium.....	EPA 6010B	0.50	1.5	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	55	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	39	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	3.2	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	20	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	48	05/21/99	05/23/99

*Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Del Mar Analytical

QST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B9-(S/50)-5-12-99
Lab Number: PIE00754

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 21, 1999
Analyzed: May 21-26, 1999
Reported: May 28, 1999

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	.....	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	5.5	05/21/99	05/23/99
Beryllium.....	EPA 6010B	0.50	N.D.	05/21/99	05/26/99
Cadmium.....	EPA 6010B	0.50	0.57	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	20	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	16	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	3.4	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	12	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	18	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <43 of 57>

Del Mar Analytical

QST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
Sample Descript: Water, QST-B9-(GW/50)-5-12-99
Lab Number: PIE00755

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 19-24, 1999
Analyzed: May 23-25, 1999
Reported: May 28, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
2525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	EPA 200.7	0.010	0.034	05/19/99	05/23/99
Copper.....	EPA 200.7	0.020	0.081	05/19/99	05/23/99
Lead.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	EPA 200.7	0.050	0.13	05/19/99	05/23/99
Selenium.....	EPA 200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	EPA 200.7	0.050	0.052	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced except in full without written permission from Del Mar Analytical

PIE00749.QST <44 of 57>

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B41-(GW/55)-5-12-99
 Lab Number: PIE00756

Sampled: May 12, 1999
 Received: May 12, 1999
 Extracted: May 19-24, 1999
 Analyzed: May 23-25, 1999
 Reported: May 28, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	EPA 200.7	0.010	N.D.	05/19/99	05/23/99
Copper.....	EPA 200.7	0.020	N.D.	05/19/99	05/23/99
Lead.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Selenium.....	EPA 200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

QST Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B32-(GW/55)-5-12-99
Lab Number: PIE00757

Sampled: May 12, 1999
Received: May 12, 1999
Extracted: May 19-24, 1999
Analyzed: May 23-25, 1999
Reported: May 28, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 251-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
6525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	EPA 200.7	0.010	N.D.	05/19/99	05/23/99
Copper.....	EPA 200.7	0.020	N.D.	05/19/99	05/23/99
Lead.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/24/99	05/24/99
Nickel.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Selenium.....	EPA 200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <46 of 57>

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	74%
Decachlorobiphenyl (30-130).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

1ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit	Sample Result
	µg/L (ppb)		µg/L (ppb)
Aldrin.....	0.10	N.D.
alpha-BHC.....	0.10	N.D.
beta-BHC.....	0.10	N.D.
delta-BHC.....	0.25	N.D.
gamma-BHC (Lindane).....	0.10	N.D.
Chlordane.....	2.0	N.D.
4,4'-DDD.....	0.10	N.D.
4,4'-DDE.....	0.10	N.D.
4,4'-DDT.....	0.10	N.D.
Dieldrin.....	0.10	N.D.
Endosulfan I.....	0.10	N.D.
Endosulfan II.....	0.10	N.D.
Endosulfan sulfate.....	0.50	N.D.
Endrin.....	0.10	N.D.
Endrin aldehyde.....	0.10	N.D.
Heptachlor.....	0.10	N.D.
Heptachlor epoxide.....	0.10	N.D.
Methoxychlor.....	0.10	N.D.
Toxaphene.....	4.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	90%
Decachlorobiphenyl (30-130).....	84%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 18, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	86%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 18, 1999
 Analyzed: May 19, 1999
 Reported: May 28, 1999
 Matrix: Water

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits)	
Tetrachloro-m-xylene (30-130)....	87%
Decachlorobiphenyl (30-130).....	85%

1ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 13, 1999
 Analyzed: May 18, 1999
 Reported: May 28, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	97%
Toluene-d8 (50-135).....	100%
4-Bromofluorobenzene (70-130).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miher

Method Blank

Extracted: May 13, 1999
 Analyzed: May 13, 1999
 Revised: Jun 22, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

J.R.R.

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	92%
Toluene-d8 (75-140).....	93%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE00749.QST <52 of 57>

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 14, 1999
 Analyzed: May 14, 1999
 Reported: May 28, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	5.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	97%
Toluene-d8 (75-140).....	96%
4-Bromofluorobenzene (75-135).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: May 28, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benz(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
2-Fluorophenol (25-110).....	76%
Phenol-d6 (35-110).....	79%
2,4,6-Tribromophenol (40-110).....	86%
Nitrobenzene-d5 (30-110).....	67%
2-Fluorobiphenyl (40-110).....	77%
Terphenyl-d14 (45-110).....	70%

WEST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 19, 1999
 Analyzed: May 24, 1999
 Reported: May 28, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benz(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	76%
Phenol-d6 (40-115).....	76%
2,4,6-Tribromophenol (40-140).....	78%
Nitrobenzene-d5 (35-120).....	79%
2-Fluorobiphenyl (30-150).....	76%
Terphenyl-d14 (45-150).....	88%

Robyn Rice
 Project Manager

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 314 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 525 Sherman Way, Suite C, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 21, 1999
 Analyzed: May 21-27, 1999
 Reported: May 28, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Beryllium.....	EPA 6010B	0.50	N.D.	05/21/99	May 26-27, 1999
Cadmium.....	EPA 6010B	0.50	N.D.	05/21/99	05/26/99
Chromium.....	EPA 6010B	2.0	N.D.	05/21/99	05/23/99
Copper.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Lead.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Mercury.....	EPA 7471A	0.020	N.D.	05/21/99	05/21/99
Nickel.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Selenium.....	EPA 6010B	10	N.D.	05/21/99	05/23/99
Silver.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99
Thallium.....	EPA 6010B	5.0	N.D.	05/21/99	05/23/99
Zinc.....	EPA 6010B	2.5	N.D.	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 19-24, 1999
 Analyzed: May 19-25, 1999
 Reported: May 28, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/19/99	05/25/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/19/99	05/23/99
Chromium.....	EPA 200.7	0.010	N.D.	05/19/99	05/23/99
Copper.....	EPA 200.7	0.020	N.D.	05/19/99	05/23/99
Lead.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Mercury.....	EPA 245.1	0.00020	N.D.	May 19-24, 1999	May 19-24, 1999
Nickel.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Selenium.....	EPA 200.7	0.060	N.D.	05/19/99	05/23/99
Silver.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Thallium.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99
Zinc.....	EPA 200.7	0.050	N.D.	05/19/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8081
 Matrix: Water
 Instrument: GC

Date: 05/19/99
 Sample #: LCS/LCSD*
 Batch #: IE18PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	0.5	0.393	0.421	79%	84%	7%	40	55-125
DDD	0	0.5	0.403	0.436	81%	87%	8%	20	60-130
DDT	0	0.5	0.413	0.444	83%	89%	7%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provide

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD: $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference: $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) Note: This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 949) 261-1022 FAX (949) 261-1229
1014 E. Cooley Dr., Suite A, Colton, CA 92324 909) 370-4667 FAX (909) 370-1046
5525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
3930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Method: 8081A
QC Batch: E18 #33

Associated Samples: PIE00749

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
DDD	1	118
Endosulfan Sulfate	1	119

- ¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.
- ² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 5525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 955-0043 FAX (480) 955-0851

Method: 8081A
QC Batch: E18 #20

Associated Samples: PIE00749

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
DDD	1	116
Endosulfan Sulfate	1	126
Methoxychlor	1	117
Endrin Ketone	1	123

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
5525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Method: 8081A
QC Batch: E18 #6

Associated Samples: PIE00749

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
D-BHC	2	81

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result. All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result. An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120 Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

Method: 8081A
 QC Batch: E19 #19

Associated Samples: PIE00749

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
B-BHC	2	74
Endrin Ketone	1	117

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 5/18/99
 Sample #: IE01745
 Batch #: IE18PE1S

Acceptance Limits

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
PCB 1016 (Arochlor)	0	160	121	121	76%	76%	0%	50	60-140
PCB 1260 (Arochlor)	0	160	127	130	79%	81%	2%	50	60-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS: $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD: $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference: $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 5/19/99
 Sample #: LCS/LCSD*
 Batch #: IE18PE1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
AR 1016	0	4.0	3.41	3.28	85%	82%	4%	≤ 50	60-140%
AR 1260	0	4.0	3.25	3.10	81%	78%	5%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.



Del Mar Analytical

2852 Alton Ave. Irvine, CA 92606 949 261-1022 FAX (949) 261-1023
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 909 370-4667 FAX (909) 370-1046
 1525 Sherman Way, Suite C, Van Nuys, CA 91406 818 770-1844 FAX (818) 770-1844
 484 Chesapeake Dr., Suite 605, San Diego, CA 92123 619 505-9596 FAX (619) 505-2680
 1630 South 51st St., Suite B-120, Phoenix, AZ 85044 480 795-0043 FAX (480) 795-0854

LABORATORY CONTROL SAMPLE

EPA METHOD 8081

DATE: 5/18/99
 BATCH: IE18PE1S

Analyte	St	LCS	PR
	ppb	ppb	%
DDE	20	18.4	92%
DDD	20	19.3	97%
DDT	20	19.6	98%

Definition of Terms:

- St. Standard Concentration
- LCS. Laboratory Control Sample Result
- PR. Percent Recovery of LCS: (LCS/St) X 100

QA/QC CRITERIA: QA/QC is within acceptance limits.

Del Mar Analytical



BS/BSD DATA REPORT

EPA Method: 8260B
 Bench: Soil
 Instrument: GCMS

Date: 05/18/99
 Sample #: PIE00589
 Batch #: IE18021S

Analyte	<u>R1</u>	<u>Sp</u>	<u>BS</u>	<u>BSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	500	491	507	98%	101%	3.2%	≤ 112	0-100%
1,1-Dichloroethene	0.0	500	493	510	99%	102%	3.4%	≤ 20	70-125%
1,1-Dichloroethane	0.0	500	489	501	98%	100%	2.4%	≤ 20	75-115%
Chloroform	0.0	500	507	525	101%	105%	3.5%	≤ 26	75-120%
1,2-Dichloroethane	0.0	500	496	487	99%	97%	1.8%	≤ 20	70-115%
Benzene	0.0	500	517	522	103%	104%	1.0%	≤ 20	80-120%
Trichloroethene	0.0	500	518	510	104%	102%	1.6%	≤ 20	75-120%
Toluene	0.0	500	540	532	108%	106%	1.5%	≤ 20	80-125%
Tetrachloroethene	0.0	500	514	526	103%	105%	2.3%	≤ 20	75-120%
Chlorobenzene	0.0	500	540	525	108%	105%	3%	≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- BS..... Bench Spike Result
- BSD..... Bench Spike Duplicate Result
- PR1..... Percent Recovery of BS; $((BS-R1)/SP) \times 100$
- PR2..... Percent Recovery of BSD; $((BSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference: $((BS-BSD)/(BS+BSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

QA/QC Criteria..... All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/24/99
 Sample #: IE01713
 Batch #: IE19SE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.3	50.0	41.0	42.0	81%	83%	2%	20	30-95
2-Chlorophenol	0.0	50.0	41.0	42.0	82%	84%	2%	25	30-100
1,4-Dichlorobenzene	0.0	50.0	35.0	33.0	70%	66%	6%	30	25-90
N-Nitroso-di-n-propylamine	0.0	50.0	45.0	47.0	90%	94%	4%	20	35-100
1,2,4-Trichlorobenzene	0.0	50.0	38.0	40.0	76%	80%	5%	25	30-95
4-Chloro-3-methylphenol	0.0	50.0	44.0	46.0	88%	92%	4%	25	40-110
acenaphthene	0.1	50.0	42.0	43.0	84%	86%	2%	15	35-105
2,4-Dinitrotoluene	0.1	50.0	44.0	46.0	88%	92%	4%	20	35-110
4-Nitrophenol	0.0	50.0	47.0	51.0	94%	102%	8%	25	15-135
Pentachlorophenol	0.0	50.0	52.0	52.0	104%	104%	0%	30	30-115
Pyrene	0.0	50.0	45.0	47.0	90%	94%	4%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS: ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC is within acceptance limits.

Del Mar Analytical (AZ0426)

This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/13/99
 Sample #: PIE00587
 Batch #: IE13011W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	32.3	33.2	129%	133%	3%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	29.5	28.5	118%	114%	3.4%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	27.3	26.9	109%	108%	1.5%	≤ 20	80-135%
Chloroform	3.1	25	30.6	30.4	110%	109%	0.7%	≤ 20	80-135%
1,2-Dichloroethane	0.0	25	25.4	24.9	102%	100%	2.0%	≤ 20	80-130%
Benzene	0.0	25	30.1	29.4	120%	118%	2.4%	≤ 20	75-135%
Trichloroethene	0.0	25	26.3	25.9	105%	104%	1.5%	≤ 20	75-130%
Toluene	9.3	25	35.1	34.9	103%	102%	0.6%	≤ 20	75-135%
Tetrachloroethene	0.0	25	25.1	24.5	100%	98%	2.4%	≤ 20	70-135%
Chlorobenzene	0.0	25	26.1	25.3	104%	101%	3.1%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/14/99
 Sample #: PIE00756
 Batch #: IE14021W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	24.0	23.0	96%	92%	4%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	25.0	22.0	100%	88%	12.8%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	80-135%
Chloroform	5.7	25	31.0	31.0	101%	101%	0.0%	≤ 20	80-135%
1,2-Dichloroethane	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	80-130%
enzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-135%
Trichloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-130%
Toluene	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	75-135%
Tetrachloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	70-135%
Chlorobenzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference: ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/23/99
 Sample #: LCS/LCSD*
 Batch #: IE19SE1W

Analyte

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.1	50.0	45.0	46.0	90%	92%	2%	15	40-110
2-Chlorophenol	0.0	50.0	44.0	43.0	88%	86%	2%	15	40-110
1,4-Dichlorobenzene	0.0	50.0	41.0	41.0	82%	82%	0%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50.0	49.0	48.0	98%	96%	2%	20	45-120
1,2,4-Trichlorobenzene	0.0	50.0	46.0	47.0	92%	94%	2%	15	44-110
4-Chloro-3-methylphenol	0.0	50.0	50.0	52.0	100%	104%	4%	20	50-115
Acenaphthene	0.1	50.0	48.0	47.0	96%	94%	2%	15	50-115
2,4-Dinitrotoluene	0.0	50.0	56.0	52.0	112%	104%	7%	15	55-120
4-Nitrophenol	0.2	50.0	53.0	51.0	106%	102%	4%	15	45-120
Pentachlorophenol	0.0	50.0	41.0	42.0	82%	84%	2%	20	50-125
Pyrene	0.1	50.0	53.0	52.0	106%	104%	2%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.



MS/MSD DATA REPORT

METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

Date: 5/23/99
Sample #: PIE00700

Analyte								MEAN
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	50.0	45.0	55.4	90%	111%	20.7%	100%
Arsenic	0	50.0	42.0	50.9	84%	102%	19.2%	93%
Chromium	0	50.0	43.6	51.5	87%	103%	16.6%	95%
Copper*	40.2	50.0	67.8	94.7	55%	109%	33.1%	82%
Lead*	24.3	50.0	57.1	75.5	66%	102%	27.8%	84%
Nickel	0	50.0	42.5	55.2	85%	110%	26.0%	98%
Selenium	0	50.0	39.5	47.1	79%	94%	17.6%	87%
Silver*	0	50.0	63.8	81.8	128%	164%	24.7%	146%
Thallium	0	50.0	43.8	49.9	88%	100%	13.0%	94%
Zinc**	781	50.0	488	864	0%	166%	55.6%	83%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference: ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: **Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.

*The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr. Suite 805, San Diego, CA 92123 619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120 Phoenix, AZ 85044 480) 785-0043 FAX 480) 785 0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/23/99

Analyte	St	R1	PR
	ppm	ppm	%
Copper	50.0	49.8	100%
Lead	50.0	49.8	100%
Silver	50.0	40.8	82%
Zinc	50.0	48.4	97%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1: $(R1/St) \times 100$
- Acceptance Limits** LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

Date: 5/26/99
Sample #: PIE00700

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Beryllium	0	50.0	37.8	47.3	76%	95%	22.3%	85%
Cadmium	0	50.0	37.9	47.7	76%	95%	22.9%	86%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference: $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 05/21/99
 Sample #: PIE00666
 Batch #: IE21HG1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.333	0.335	0.329	101%	99%	2%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limits.

MS/MSD DATA REPORT

METHOD: 200.7
INSTRUMENT: ICP
MATRIX: Water

Date: 5/24/99
Sample #: PIE00756

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.12	1.11	112%	111%	0.9%	112%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS: ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD: ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference: ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
 MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/22/99
 Sample #: PIE00756

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Arsenic	0	1.0	1.17	1.13	117%	113%	3.5%	115%
Beryllium	0	1.0	1.09	1.06	109%	106%	2.8%	108%
Cadmium	0	1.0	1.01	0.984	101%	98%	2.6%	100%
Chromium	0	1.0	1.08	1.05	108%	105%	2.8%	107%
Copper	0	1.0	1.08	1.06	108%	106%	1.9%	107%
Lead	0	1.0	1.05	1.03	105%	103%	1.9%	104%
Nickel	0	1.0	1.04	1.02	104%	102%	1.9%	103%
Selenium	0	1.0	1.10	1.08	110%	108%	1.8%	109%
Silver	0	0.05	0.0534	0.0526	107%	105%	1.5%	106%
Thallium	0	1.0	1.12	1.10	112%	110%	1.8%	111%
inc	0	1.0	1.09	1.05	109%	105%	3.7%	107%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
 MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/19/99
 Sample #: PIE00836
 Batch #: IE19HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
Mercury	0	0.00500	0.00429	0.00439	86%	88%	2.3%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limit.



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/24/99
 Sample #: PIE00587
 Batch #: IE24HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
								%	%
Mercury	0	0.00500	0.00491	0.00623	98%	125%	23.7%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limit.



May 27, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30280

Dear Ms. Rice:

Four water samples and four soil samples for Project Number 'PIE00749.QST' were received May 14, 1999, in good condition. Written results are being provided on this May 27, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Soil	PIE00749	79012s	05/11/99
Soil	PIE00750	79013s	05/12/99
Water	PIE00751	79014w	05/12/99
Soil	PIE00753	79015s	05/12/99
Soil	PIE00754	79016s	05/12/99
Water	PIE00755	79017w	05/12/99
Water	PIE00756	79018w	05/12/99
Water	PIE00757	79019w	05/12/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141 OP Pesticides

Del Mar Analytical
 330 South 51st. St., Ste B-120
 Phoenix AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Robyn Rice
 Project: PIE00749.QST
 Sample ID: PIE00749
 Sample Collection Date: 5/11/99

ARF: 30280
 APPL ID AP79012
 QCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Boistar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Strophanth	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate X	104	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate X	98.2	63-151	%	5/19/99	5/22/99

Run #: 520067,028
 Instrument: NPD03
 Sequence: 990520,524
 Dilution Factor: 1,2
 Initials: FML

EPA 8141

Del Mar Analytical
830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00751

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79014

QCG: S8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Boistar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	89.8	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	87.0	76-140	%	5/17/99	5/19/99

Run #: 517090
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

Printed: 5/20/99 12:31:25 PM

EPA 8141 OP Pesticides

Del Mar Analytical
 830 South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Robyn Rice
 Project: PIE00749.QST
 Sample ID: PIE00750
 Sample Collection Date: 5/12/99

ARF: 30280
 APPL ID AP79013
 QCG: S8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinohosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfotion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mephos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stropanos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	92.6	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	87.9	63-151	%	5/19/99	5/22/99

Run #: 520068,029
 Instrument: NPD03
 Sequence: 990520,524
 Dilution Factor: 1,2
 Initials: FML

EPA 8141

J. Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00751

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79014

QCG: \$8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	89.8	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	87.0	76-140	%	5/17/99	5/19/99

Run #: 517090
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00753

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79015

QCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	91.5	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	94.6	63-151	%	5/19/99	5/22/99

Run #: 520069
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

J Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00754

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79016

QCG: \$8141S-990519A-16732

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/19/99	5/22/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Def	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/19/99	5/22/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Fensulfthion	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/19/99	5/22/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/19/99	5/22/99
EPA 8141	Surrogate: Tributylphosphate	79.2	51-154	%	5/19/99	5/22/99
EPA 8141	Surrogate: Triphenylphosphate	77.7	63-151	%	5/19/99	5/22/99

Run #: 520070
Instrument: NPD03
Sequence: 990520
Dilution Factor: 1
Initials: FML

EPA 8141

J Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00755

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79017

QCG: S8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	85.9	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	82.8	76-140	%	5/17/99	5/19/99

Run #: 517091
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141

Jel Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00756

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79018

QCG: \$8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	82.5	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	81.9	76-140	%	5/17/99	5/19/99

Run #: 517092
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8141

J Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00757

Sample Collection Date: 5/12/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30280

APPL ID AP79019

QCG: \$8141W-990517AW-1662

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
EPA 8141	Surrogate: Tributylphosphate	89.0	60-150	%	5/17/99	5/19/99
EPA 8141	Surrogate: Triphenylphosphate	84.7	76-140	%	5/17/99	5/19/99

Run #: 517093
Instrument: NPD03
Sequence: 990517
Dilution Factor: 1
Initials: FML

EPA 8151 HERBICIDE SOIL

I Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice
Project: PIE00749.QST
Sample ID: PIE00749
Sample Collection Date: 5/11/99

ARF: 30280
APPL ID AP79012
QCG: S8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Surrogate recovery	116	93-141	%	5/17/99	5/21/99

Run #: 124
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00750

Sample Collection Date: 5/12/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30280

APPL ID AP79013

QCG: S8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Surrogate recovery	118	93-141	%	5/17/99	5/21/99

Run #: 125
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00751

Sample Collection Date: 5/12/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30280

APPL ID AP79014

QCG: \$8151-990518A-16709

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	70.7	81-120	%	5/18/99	5/21/99

Run #: 151
Instrument: ECD01
Sequence: 990517 . .
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

J Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00753

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79015

QCG: S8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dinoseb (DNEP)	Not detected	100	ug/kg	5/17/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Surrogate recovery	118	93-141	%	5/17/99	5/21/99

Run #: 126
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00754

Sample Collection Date: 5/12/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30280

APPL ID AP79016

QCG: \$8151S-990517SA-16689

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/17/99	5/21/99
EPA 3151	2,4-DB	Not detected	400	ug/kg	5/17/99	5/21/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/21/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/21/99
EPA 8151	Surrogate recovery	116	93-141	%	5/17/99	5/21/99

Run #: 127

Instrument: ECD01

Sequence: 990517

Dilution Factor: 1

Initials: KW

Printed: 5/21/99 10:45:01 AM

EPA 8151 Herbicides

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00755

Sample Collection Date: 5/12/99

ARF: 30280

APPL ID AP79017

QCG: S8151-990518A-16709

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	92.1	61-120	%	5/18/99	5/21/99

Run #: 152
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Lab Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE00749.QST

Sample ID: PIE00756

Sample Collection Date: 5/12/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30280

APPL ID AP79018

QCG: \$8151-990518A-16709

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	95.9	61-120	%	5/18/99	5/21/99

Run #: 153
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

I Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE00749.QST
Sample ID: PIE00757
Sample Collection Date: 5/12/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30280
APPL ID AP79019
QCG: S8151-990518A-16709

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
EPA 8151	Dinoseb (DNEP)	Not detected	0.25	ug/L	5/18/99	5/21/99
EPA 8151	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
EPA 8151	Surrogate Recovery	95.4	31-120	%	5/18/99	5/21/99

Run #: 154
Instrument: ECD01
Sequence: 990517
Dilution Factor: 1
Initials: KW

Printed: 5/21/99 1:26:10 PM

Method Blank

EPA 8141 OP Pesticides

Blank Name/QCG: 990519S - 16732
 Batch ID: S8141S-990519A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	5/19/99	5/22/99
BLANK	Bolstar	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Coumaphos	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Def	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Demeton-s	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Diazinon	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Dichlorvos	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Dimethoate	Not detected	100	ug/kg	5/19/99	5/22/99
BLANK	Disulfoton	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	EPN	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Ethion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Ethoprop	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Fensuifothion	Not detected	250	ug/kg	5/19/99	5/22/99
BLANK	Fenthion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Malathion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Merphos	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Mevinphos	Not detected	350	ug/kg	5/19/99	5/22/99
BLANK	Naled	Not detected	250	ug/kg	5/19/99	5/22/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Phorate	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Prowl	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Ronnel	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Stirophos	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Sulfotep	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	TEPP	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Tokuthion	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Trichloronate	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Trifluralin	Not detected	50	ug/kg	5/19/99	5/22/99
BLANK	Surrogate: Tributylphosphate	85.1	51-154	%	5/19/99	5/22/99
BLANK	Surrogate: Triphenylphosphate	87.6	63-151	%	5/19/99	5/22/99

Run #: 520061
 Instrument: NPD03

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141

APPL Sample #: **990519AS LCS/LCSD**

Date/Initials: 5/25/99 FML

Extraction Date: 5/19/99

Matrix Type: SOIL

Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	71.6	86.0	73.6	88.4	2.7
Diazinon	83.3	0.000	105	126	107	129	2.5
Disulfoton	83.3	0.000	85.1	102	87.9	105	3.2
Methyl parathion	83.3	0.000	86.4	104	90.5	109	4.6
Stirophos	83.3	0.000	90.5	109	93.1	112	2.8
Ethion	83.3	0.000	75.4	90.5	79.5	95.4	5.3

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	173	104	178	107
Triphenyl phosphate	167	*****	176	106	184	111

	Primary Column		Secondary Column	
	Spike	Spk Dup	Spike	Spk Dup
Analysis Date:	5/22/99	5/22/99		
Analysis Time:	7:03 AM	7:40 AM		
Instrument:	NPD03B	NPD03B		
Column:	DB-5	DB-5		
Sample/Vial #:	65	66		
Extraction Ratio:	10/30	10/30		
Dilution Factor:	1	1		

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank

EPA 8141

Blank Name/QCG: 990517W - 16623
 Batch ID: \$8141W-990517AW

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	5/17/99	5/19/99
BLANK	Bolstar	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Coumaphos	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Def	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Demeton-s	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Diazinon	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	5/17/99	5/19/99
BLANK	Dimethoate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Disulfoton	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	EPN	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ethion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ethoprop	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	5/17/99	5/19/99
BLANK	Fenthion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Malathion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Merphos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Mevinphos	Not detected	3.5	ug/L	5/17/99	5/19/99
BLANK	Naled	Not detected	2.5	ug/L	5/17/99	5/19/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Phorate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Prowl	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Ronnel	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Stirophos	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Sulfotep	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Tepp	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Tokuthion	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Trichloronate	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Trifluralin	Not detected	0.50	ug/L	5/17/99	5/19/99
BLANK	Surrogate: Tributylphosphate	77.9	60-150	%	5/17/99	5/19/99
BLANK	Surrogate: Triphenylphosphate	82.6	76-140	%	5/17/99	5/19/99

Run #: 517073
Instrument: NPD03
Sequence: 990517
Initials: FML

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990517AW LCS/LCSD
Date/Initials: 5/18/99 FML
Extraction Date: 5/17/99
Matrix Type: WATER
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	2.50	0.00	1.66	66.6	1.69	67.8	1.8
Diazinon	2.50	0.00	2.47	98.6	2.45	98.1	0.5
Disulfoton	2.50	0.00	1.83	73.1	1.82	72.9	0.3
Methyl parathion	2.50	0.00	2.11	84.3	2.14	85.6	1.5
Stirophos	2.50	0.00	2.25	89.9	2.26	90.4	0.6
Ethion	2.50	0.00	1.91	76.5	1.86	74.2	3.1

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.07	81.4	4.19	83.9
Triphenyl phosphatate	5.00	*****	4.38	87.6	4.21	84.2

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/19/99	5/19/99
Analysis Time:	8:13 AM	10:43 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	74	78
Extraction Ratio:	10/1000	10/1000
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

MATIRX SPIKE

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 78845 MS
Date/Initials: 5/19/99 FML
Extraction Date: 5/17/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	2.50	*****	1.55	61.9
Diazinon	2.50	*****	2.13	85.4
Disulfoton	2.50	*****	1.86	74.4
Methyl parathion	2.50	*****	1.92	76.9
Stirophos	2.50	*****	2.01	80.4
Ethion *	2.50	*****	1.44	57.4

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	5.00	*****	3.79	75.8
Triphenyl phosphate	5.00	*****	3.63	72.5

	Prim Col Spike	Sec Col Spike
Analysis Date:	5/19/99	
Analysis Time:	11:20 AM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	79	
Extraction Ratio:	10/1000	
Dilution Factor:	1	

Comments:	* Ethion out of QC limits.

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: 990517S - 16689
Batch ID: S8151S-990517SA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	5/17/99	5/20/99
BLANK	Dalapon	Not detected	2000	ug/kg	5/17/99	5/20/99
BLANK	2,4-DB	Not detected	400	ug/kg	5/17/99	5/20/99
BLANK	Dicamba	Not detected	40	ug/kg	5/17/99	5/20/99
BLANK	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/17/99	5/20/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	5/17/99	5/20/99
BLANK	MCPA	Not detected	40000	ug/kg	5/17/99	5/20/99
BLANK	MCPP	Not detected	40000	ug/kg	5/17/99	5/20/99
BLANK	2,4,5-T	Not detected	40	ug/kg	5/17/99	5/20/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	5/17/99	5/20/99
BLANK	Surrogate recovery	109	93-141	%	5/17/99	5/20/99

Run #: 95
Instrument: ECD01
Sequence: 990517
Initials: KW

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990518W - 16709
Batch ID: S8151-990518A

APPL Inc.
4203 West Swift Avenue
Fresno. CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/18/99	5/21/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/18/99	5/21/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/18/99	5/21/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/18/99	5/21/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/18/99	5/21/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/18/99	5/21/99
BLANK	MCPA	Not detected	100	ug/L	5/18/99	5/21/99
BLANK	MCPP	Not detected	100	ug/L	5/18/99	5/21/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/18/99	5/21/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/18/99	5/21/99
BLANK	Surrogate recovery	95.3	61-120	%	5/18/99	5/21/99

Run #: 147
Instrument: ECD01
Sequence: 990517
Initials: KW

Printed: 5/24/99 1:36:33 PM

Laboratory Control Spike Recoveries

EPA 8151 Herbicides

APPL ID 990518W-79014 LCS/LCSD - 16709
 Batch ID: S8151-990518A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.861	0.893	86.1	89.3	53-134	3.6	32
2,4,5-TP	1.00	0.837	0.862	83.7	86.2	60-118	2.9	24
2,4-D	1.00	1.06	1.08	106	108	44-155	1.9	15
Dicamba	1.00	0.936	0.961	93.6	96.1	48-102	2.6	24
Dichlorprop (2,4-DP)	1.00	0.912	0.913	91.2	91.3	37-146	0.11	18
Dinoseb (DNBP)	1.00	0.858	0.873	85.8	87.3	73-173	1.7	31
Surrogate: 2,4-DCAA	3.00	2.93	2.95	97.7	98.3	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/18/99	5/18/99
Analysis Date :	5/21/99	5/21/99
Instrument :	ECD01	ECD01
Run :	148	149
Analyst :	KW	

Matrix Spike Recovery

EPA 8151 Herbicides

APPL ID 990518W-79014 MS - 16709
 Batch ID: S8151-990518A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/L	Matrix Result ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4,5-T	1.00	ND	0.708	70.8	53-134
2,4,5-TP	1.00	ND	0.679	67.9	60-118
2,4-D	1.00	ND	0.785	78.5	44-155
Dicamba	1.00	ND	0.830	83.0	48-102
Dichlorprop (2,4-DP)	1.00	ND	0.693	69.3	37-146
Dinoseb (DNBP)	1.00	ND	0.647	64.7 #	73-173
Surrogate: 2,4-DCAA	3.00	NA	2.40	80.0	61-120

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Extraction Date :	5/18/99
Analysis Date :	5/21/99
Instrument :	ECD01
Run :	150
Analyst :	KW

CHAIN OF CUSTODY FORM

Client Name/Address: OSI 922 N. 4th St Phoenix AZ	Project/PO Number: C-7705 CSI-1-1-1111	Analysis Required													
Project Manager: JOHN MICHIELO	Phone Number: 602 244 1192	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH
Sampler: JEFF MARTIN	Fax Number: 244 7280														

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	METH	Special Instructions
BIO-(S/10)-5-11-99	SOX	VIALS	3	5-11-99 16:40	NONE	X	X	X	X	X	X	X	X	X	X	X	X	
BIO-(S/50)-5-12-99	SOX	VIALS	2	5-12-99 11:30	NONE	X	X	X	X	X	X	X	X	X	X	X	X	
BIO-(LW/50)-5-12-99	H2O	VIALS	15	5-12-99 14:30	VIALS	X	X	X	X	X	X	X	X	X	X	X	X	
CIP BLANK	H2O	VIALS	34	-	NONE	X												
B9-(S/20)-5-12-99	SOX	VIALS	3	5-12-99 11:15	NONE	X	X	X	X	X	X	X	X	X	X	X	X	
B9-(S/50)-5-12-99	SOX	VIALS	2	5-12-99 12:05	NONE	X	X	X	X	X	X	X	X	X	X	X	X	
B9-(LW/50)-5-12-99	H2O	VIALS	15	5-12-99 14:30	VIALS	X	X	X	X	X	X	X	X	X	X	X	X	
B9-(LW/55)-5-12-99	H2O	VIALS	15	5-12-99 14:30	VIALS	X	X	X	X	X	X	X	X	X	X	X	X	
B32-(LW/50)-5-12-99	H2O	VIALS	15	5-12-99 14:30	VIALS	X	X	X	X	X	X	X	X	X	X	X	X	

Relinquished By: JEFF MARTIN	Date /Time: 5-12-99 10:30	Received by: (Signature)	Date /Time: 5-12-99 11:00	Turnaround Time: (Check) same day _____ 72 hours _____ 24 hours _____ 5 days _____ 48 hours _____ normal <u>2122K</u>
Relinquished By: (Signature)	Date /Time: (Signature)	Received by: (Signature)	Date /Time: (Signature)	Sample Integrity: (Check) intact <u>X</u> on ice <u>X</u>
Relinquished By: (Signature)	Date /Time: (Signature)	Received in Lab by: (Signature)	Date /Time: (Signature)	

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-8667 FAX (909) 370-1046
 16825 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-8344 FAX (818) 779-8343
 4884 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 305-9596 FAX (619) 305-9689
 9330 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 385-0043 FAX (480) 385-0951

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Report Number: PIF00650

Sampled: May 11-26, 1999
 Relogged: Jun 11, 1999
 Extracted: 5/13-6/2, 1999
 Analyzed: 5/14-6/3, 1999
 Reported: Jun 24, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIF00650	QST-B21-(S/80)- (5/11/99)	Soil	6010B
PIF00651	QST-B21-(GW/80)- (5/11/99)	Water	200.7
PIF00652	QST-B10-(S/10)- (5/11/99)	Soil	6010B
PIF00653	QST-B10-(S/50)- (5/12/99)	Soil	6010B
PIF00654	QST-B10-(GW/50)- (5/12/99)	Water	200.7
PIF00655	QST-B9-(S/20)- (5/12/99)	Soil	6010B
PIF00656	QST-B9-(S/50)- (5/12/99)	Soil	6010B
PIF00657	QST-B9-(GW/50)- (5/12/99)	Water	200.7
PIF00658	QST-B41-(GW/55)- (5/12/99)	Water	200.7
PIF00659	QST-B32-(GW/55)- (5/12/99)	Water	200.7
PIF00660	QST-B8-(S/45)- (5/11/99)	Soil	6010B
PIF00661	QST-B8-(S/35)- (5/11/99)	Soil	6010B
PIF00662	QST-B8-(GW/65)- (5/12/99)	Water	200.7
PIF00663	QST-B7-(S/55)- (5/12/99)	Soil	6010B
PIF00664	QST-B7-(S/37)- (5/12/99)	Soil	6010B

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

RR
 Robyn Rice
 Project Manager

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Report Number: PIF00665

Sampled: May 11-26, 1999
 Relogged: Jun 11, 1999
 Extracted: 5/13-6/2, 1999
 Analyzed: 5/14-6/3, 1999
 Reported: Jun 24, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIF00665	QST-B7-(GW 63)- (5/12/99)	Water	200.7
PIF00666	QST-B33-(GW 65)- (5/12/99)	Water	200.7
PIF00667	QST-B11-(GW 75)- (5/19/99)	Water	200.7
PIF00668	QST-B11-(S 66)- (5/19/99)	Soil	6010B
PIF00669	QST-B11-(S 5)- (5/19/99)	Soil	6010B
PIF00670	QST-B34-(GW 60)- (5/19/99)	Water	200.7
PIF00671	QST-B12-(GW 55)- (5/20/99)	Water	200.7
PIF00672	QST-B39-(S 55)- (5/20/99)	Soil	6010B
PIF00673	QST-B12-(S/45)- (5/20/99)	Soil	6010B
PIF00674	QST-B12-(S/34)- (5/20/99)	Soil	6010B
PIF00675	QST-B13-(S/40)- (5/20/99)	Soil	6010B
PIF00676	QST-B38-(S/50)- (5/20/99)	Soil	6010B
PIF00677	QST-B13-(S/50)- (5/20/99)	Soil	6010B
PIF00678	QST-B37-(S/25)- (5/20/99)	Soil	6010B
PIF00679	QST-B13-(GW/60)- (5/20/99)	Water	200.7

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolidge Dr., Suite A, Cerritos, CA 92324 (909) 370-6667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-0444 FAX (818) 770-0443
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 405-9595 FAX (619) 405-9689
 9830 South 1st St., Suite 11-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Soil, EW-25-(S:35)-(5/24/99)
 Report Number: PIF00680

Sampled: May 11-26, 1999
 Relogged: Jun 11, 1999
 Extracted: 5/13-6/2, 1999
 Analyzed: 5/14-6/3, 1999
 Reported: Jun 24, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIF00680	EW-25-(S:35)- (5/24/99)	Soil	6010B
PIF00681	EW-25-(S:45)- (5/24/99)	Soil	6010B
PIF00682	QST-B46-(GW:50)- (5/25/99)	Water	200.7
PIF00683	QST-B50-(GW:45)- (5/26/99)	Water	200.7
PIF00684	EW-24-(S:40)- (5/26/99)	Soil	6010B
PIF00685	EW-24-(S:50)- (5/26/99)	Soil	6010B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All Analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

RR
 Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Coolidge Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite 111, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 444 Chesapeake Dr., Suite 805, San Diego, CA 92122 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

EST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil
 First Sample #: PIF00650

Sampled: May 11, 1999
 Relogged: Jun 11, 1999
 Extracted: May 21, 1999
 Analyzed: May 23, 1999
 Reported: Jun 24, 1999

TOTAL BARIUM (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00650	QST-B21-(S/80)- (5/11/99)	1.0	45	05/21/99	05/23/99
PIF00652	QST-B10-(S/10)- (5/11/99)	1.0	59	05/21/99	05/23/99
PIF00660	QST-B8-(S/45)- (5/11/99)	1.0	47	05/21/99	05/23/99
PIF00661	QST-B8-(S/35)- (5/11/99)	1.0	58	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil
 First Sample #: PIF00653

Sampled: May 12, 1999
 Relogged: Jun 11, 1999
 Extracted: May 21, 1999
 Analyzed: May 23, 1999
 Reported: Jun 24, 1999

TOTAL BARIUM (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00653	QST-B10-(S.50)- (5/12/99)	1.0	140	05/21/99	05/23/99
PIF00655	QST-B9-(S.20)- (5/12/99)	1.0	81	05/21/99	05/23/99
PIF00656	QST-B9-(S.50)- (5/12/99)	1.0	64	05/21/99	05/23/99
PIF00663	QST-B7-(S.55)- (5/12/99)	1.0	61	05/21/99	05/23/99
PIF00664	QST-B7-(S.37)- (5/12/99)	1.0	67	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1011 E. Center Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16528 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 9404 Chesapeake Dr., Suite 302, San Diego, CA 92123 (619) 505-0996 FAX (619) 505-9889
 9830 South 51st St., Suite 3-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00668

Sampled: May 19, 1999
 Relogged: Jun 11, 1999
 Extracted: May 25, 1999
 Analyzed: May 26, 1999
 Reported: Jun 24, 1999

TOTAL BARIUM (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00668	QST-B11-(S.66)- (5/19/99)	1.0	47	05/25/99	05/26/99
PIF00669	QST-B11-(S.5)- (5/19/99)	1.0	82	05/25/99	05/26/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1011 E. Coolidge Dr., Suite A, Colton, CA 92324 (909) 570-4667 FAX (909) 570-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-0444 FAX (818) 779-0443
 1484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 525-9596 FAX (619) 505-0689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00672

Sampled: May 20, 1999
 Relogged: Jun 11, 1999
 Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 24, 1999

TOTAL BARIUM (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00672	QST-B39-(S/55)- (5/20/99)	1.0	31	05/27/99	05/28/99
PIF00673	QST-B12-(S/45)- (5/20/99)	1.0	36	05/27/99	05/28/99
PIF00674	QST-B12-(S/34)- (5/20/99)	1.0	65	05/27/99	05/28/99
PIF00675	QST-B13-(S/40)- (5/20/99)	1.0	38	05/27/99	05/28/99
PIF00676	QST-B38-(S/50)- (5/20/99)	1.0	28	05/27/99	05/28/99
PIF00677	QST-B13-(S/50)- (5/20/99)	1.0	52	05/27/99	05/28/99
PIF00678	QST-B37-(S/25)- (5/20/99)	1.0	80	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil
 First Sample #: PIF00680

Sampled: May 24, 1999
 Relogged: Jun 11, 1999
 Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 24, 1999

TOTAL BARIUM (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00680	EW-25-(S/35)- (5/24/99)	1.0	46	05/27/99	05/28/99
PIF00681	EW-25-(S/45)- (5/24/99)	1.0	40	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00684

Sampled: May 26, 1999
 Relogged: Jun 11, 1999
 Extracted: Jun 2, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 24, 1999

TOTAL BARIUM (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00684	EW-24-(S/40)- (5/26/99)	1.0	63	06/02/99	06/03/99
PIF00685	EW-24-(S/50)- (5/26/99)	1.0	170	06/02/99	06/03/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92122 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite 10-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil
 First Sample #: PIF00650

Sampled: May 11, 1999
 Relogged: Jun 11, 1999
 Extracted: May 21, 1999
 Analyzed: May 23, 1999
 Reported: Jun 24, 1999

TOTAL MANGANESE (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00650	QST-B21-(S/80)- (5/11/99)	5.0	230	05/21/99	05/23/99
PIF00652	QST-B10-(S/10)- (5/11/99)	5.0	180	05/21/99	05/23/99
PIF00660	QST-B8-(S/45)- (5/11/99)	5.0	170	05/21/99	05/23/99
PIF00661	QST-B8-(S/35)- (5/11/99)	5.0	280	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

3852 Allen Ave., Irvine, CA 92606 (800) 261-1022 FAX (949) 261-1228
 1014 E. Coker Dr., Suite A, Corona, CA 92724 (909) 370-4667 FAX (909) 370-1046
 66525 Sherman Way, Suite C-1, Van Nuys, CA 91411 (818) 770-1844 FAX (818) 770-1844
 4484 Chesapeake Dr., Suite 205, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-100, Phoenix, AZ 85044 (480) 335-0043 FAX (480) 335-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00653

Sampled: May 12, 1999
 Relogged: Jun 11, 1999
 Extracted: May 21, 1999
 Analyzed: May 23, 1999
 Reported: Jun 24, 1999

TOTAL MANGANESE (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00653	QST-B10-(S.50)- (5/12/99)	5.0	690	05/21/99	05/23/99
PIF00655	QST-B9-(S.20)- (5/12/99)	5.0	410	05/21/99	05/23/99
PIF00656	QST-B9-(S.50)- (5/12/99)	5.0	220	05/21/99	05/23/99
PIF00663	QST-B7-(S.55)- (5/12/99)	5.0	330	05/21/99	05/23/99
PIF00664	QST-B7-(S.37)- (5/12/99)	5.0	280	05/21/99	05/23/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 761-1022 FAX (949) 261-1228
 1011 E. Coolway Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1344 FAX (818) 779-1343
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 595-0996 FAX (619) 505-0689
 19830 South 31st St., Suite 3112, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00668

Sampled: May 19, 1999
 Relogged: Jun 11, 1999
 Extracted: May 25, 1999
 Analyzed: May 26, 1999
 Reported: Jun 24, 1999

TOTAL MANGANESE (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00668	QST-B11-(S/66)- (5/19/99)	5.0	190	05/25/99	05/26/99
PIF00669	QST-B11-(S/5)- (5/19/99)	5.0	170	05/25/99	05/26/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92122 (619) 455-8596 FAX (619) 405-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00672

Sampled: May 20, 1999
 Relogged: Jun 11, 1999
 Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 24, 1999

TOTAL MANGANESE (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00672	QST-B39-(S/55)- (5/20/99)	5.0	88	05/27/99	05/28/99
PIF00673	QST-B12-(S/45)- (5/20/99)	5.0	160	05/27/99	05/28/99
PIF00674	QST-B12-(S/34)- (5/20/99)	5.0	340	05/27/99	05/28/99
PIF00675	QST-B13-(S/40)- (5/20/99)	5.0	140	05/27/99	05/28/99
PIF00676	QST-B38-(S/50)- (5/20/99)	5.0	150	05/27/99	05/28/99
PIF00677	QST-B13-(S/50)- (5/20/99)	5.0	200	05/27/99	05/28/99
PIF00678	QST-B37-(S/25)- (5/20/99)	5.0	180	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 605, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 21st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00680

Sampled: May 24, 1999
 Relogged: Jun 11, 1999
 Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 24, 1999

TOTAL MANGANESE (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00680	EW-25-(S/35)- (5/24/99)	5.0	220	05/27/99	05/28/99
PIF00681	EW-25-(S/45)- (5/24/99)	5.0	260	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

3852 Allen Ave., Irvine, CA 92606 (949) 761-0222 FAX (949) 761-1228
 1011 E. Caylor Dr., Suite A, Centex, CA 92521 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-12, Van Nuys, CA 91406 (818) 770-1344 FAX (818) 770-1343
 9484 Chesapeake Dr., Suite 809, San Diego, CA 92123 (619) 505-9996 FAX (619) 505-9889
 9830 South 1st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil
 First Sample #: PIF00684

Sampled: May 26, 1999
 Relogged: Jun 11, 1999
 Extracted: Jun 2, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 24, 1999

TOTAL MANGANESE (EPA 6010B)

Laboratory Number	Sample Description	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
PIF00684	EW-24-(S/40)- (5/26/99)	5.0	330	06/02/99	06/03/99
PIF00685	EW-24-(S/50)- (5/26/99)	5.0	320	06/02/99	06/03/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Colton Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16925 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 305-0596 FAX (619) 305-0689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 385-0043 FAX (480) 385-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00651

Sampled: May 11, 1999
 Relogged: Jun 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 14, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE BARIUM (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00651	QST-B21-(GW/80)- (5/11/99)	0.010	6.8	05/13/99	05/14/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-0222 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-0667 FAX (909) 370-0666
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-0644 FAX (818) 770-0643
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-0596 FAX (619) 505-0689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 325-0943 FAX (480) 325-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00654

Sampled: May 12, 1999
 Relogged: Jun 11, 1999
 Extracted: May 19, 1999
 Analyzed: May 22, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE BARIUM (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00654	QST-B10-(GW/50)- (5/12/99)	0.010	2.6	05/19/99	05/22/99
PIF00657	QST-B9-(GW/50)- (5/12/99)	0.010	0.75	05/19/99	05/22/99
PIF00658	QST-B41-(GW/55)- (5/12/99)	0.010	N.D.	05/19/99	05/22/99
PIF00659	QST-B32-(GW/55)- (5/12/99)	0.010	N.D.	05/19/99	05/22/99
PIF00662	QST-B8-(GW/65)- (5/12/99)	0.010	2.7	05/19/99	05/22/99
PIF00665	QST-B7-(GW/63)- (5/12/99)	0.010	0.90	05/19/99	05/22/99
PIF00666	QST-B33-(GW/65)- (5/12/99)	0.010	N.D.	05/19/99	05/22/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Colton Dr. Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16528 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 770-1344 FAX (818) 770-1843
 4484 Chesapeake Dr. Suite 305 San Diego, CA 92123 (619) 505-0596 FAX (619) 505-9889
 9830 South 51st St. Suite B-120 Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00667

Sampled: May 19, 1999
 Relogged: Jun 11, 1999
 Extracted: May 20, 1999
 Analyzed: May 21, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE BARIUM (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00667	QST-B11-(GW/75)- (5/19/99)	0.010	1.5	05/20/99	05/21/99
PIF00670	QST-B34-(GW/60)- (5/19/99)	0.010	N.D.	05/20/99	05/21/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-0667 FAX (909) 370-1046
 1625 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1344 FAX (818) 770-1843
 1484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 81st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water
 First Sample #: PIF00671

Sampled: May 20, 1999
 Relogged: Jun 11, 1999
 Extracted: May 24-26, 1999
 Analyzed: May 24-27, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE BARIUM (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00671	QST-B12-(GW/55)- (5/20/99)	0.010	4.8	05/24/99	05/24/99
PIF00679	QST-B13-(GW/60)- (5/20/99)	0.010	2.3	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-0222 FAX (949) 261-0228
 1014 E. Caslov Dr., Suite A, Colton, CA 92324 (909) 370-0667 FAX (909) 370-0646
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-0844 FAX (818) 770-0843
 9484 Chesapeake Dr., Suite 105, San Diego, CA 92123 (619) 455-0596 FAX (619) 455-0689
 9830 South First St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0051

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00682

Sampled: May 25, 1999
 Relogged: Jun 11, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE BARIUM (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00682	QST-B46-(GW/50)- (5/25/99)	0.010	N.D.	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Cotton, CA 92321 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 770-8444 FAX (818) 770-8444
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-0596 FAX (619) 505-0689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water
 First Sample #: PIF00683

Sampled: May 26, 1999
 Relogged: Jun 11, 1999
 Extracted: May 28, 1999
 Analyzed: May 28, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE BARIUM (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00683	QST-B50-(GW/45)- (5/26/99)	0.010	N.D.	05/28/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Cerritos, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 41st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00651

Sampled: May 11, 1999
 Relogged: Jun 11, 1999
 Extracted: May 13, 1999
 Analyzed: May 14, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE MANGANESE (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00651	QST-B21-(GW/80)- (5/11/99)	0.050	22	05/13/99	05/14/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

3852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16925 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 405-9996 FAX (619) 405-9889
 10830 South 1st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00654

Sampled: May 12, 1999
 Relogged: Jun 11, 1999
 Extracted: May 19, 1999
 Analyzed: May 22, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE MANGANESE (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00654	QST-B10-(GW/50)- (5/12/99)	0.050	11	05/19/99	05/22/99
PIF00657	QST-B9-(GW/50)- (5/12/99)	0.050	4.1	05/19/99	05/22/99
PIF00658	QST-B41-(GW/55)- (5/12/99)	0.050	N.D.	05/19/99	05/22/99
PIF00659	QST-B32-(GW/55)- (5/12/99)	0.050	N.D.	05/19/99	05/22/99
PIF00662	QST-B8-(GW/65)- (5/12/99)	0.050	13	05/19/99	05/22/99
PIF00665	QST-B7-(GW/63)- (5/12/99)	0.050	4.8	05/19/99	05/22/99
PIF00666	QST-B33-(GW/65)- (5/12/99)	0.050	N.D.	05/19/99	05/22/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Way, Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Colton Dr., Suite A, Colton, CA 92324 (909) 379-4667 FAX (909) 379-0346
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 773-0944 FAX (818) 773-0943
 4484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-0936 FAX (619) 505-0689
 9830 South 51st St., Suite B-100, Phoenix, AZ 85044 (480) 385-0043 FAX (480) 385-0951

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00667

Sampled: May 19, 1999
 Relogged: Jun 11, 1999
 Extracted: May 20, 1999
 Analyzed: May 21, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE MANGANESE (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00667	QST-B11-(GW/75)- (5/19/99)	0.050	9.8	05/20/99	05/21/99
PIF00670	QST-B34-(GW/60)- (5/19/99)	0.050	N.D.	05/20/99	05/21/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-0946
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91411 (818) 770-1844 FAX (818) 770-0343
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9699
 1830 South First St., Suite 1120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0854

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water
 First Sample #: PIF00671

Sampled: May 20, 1999
 Relogged: Jun 11, 1999
 Extracted: May 24-26, 1999
 Analyzed: May 24-27, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE MANGANESE (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00671	QST-B12-(GW/55)- (5/20/99)	0.050	32	05/24/99	05/24/99
PIF00679	QST-B13-(GW/60)- (5/20/99)	0.050	8.6	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 773-1844 FAX (818) 770-1843
 9484 Chosacoma Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9609
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water
 First Sample #: PIF00682

Sampled: May 25, 1999
 Relogged: Jun 11, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE MANGANESE (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00682	QST-B46-(GW/50)- (5/25/99)	0.050	N.D.	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2352 Allen Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1011 E. Coley Dr. Suite A, Colton, CA 92324 (909) 370-0667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-0844 FAX (818) 770-0843
 3484 Chesapeake Dr. Suite 305, San Diego, CA 92123 (619) 435-0596 FAX (619) 405-0689
 3830 South 31st St. Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water
 First Sample #: PIF00683

Sampled: May 26, 1999
 Relogged: Jun 11, 1999
 Extracted: May 28, 1999
 Analyzed: May 28, 1999
 Reported: Jun 24, 1999

TOTAL RECOVERABLE MANGANESE (EPA 200.7)

Laboratory Number	Sample Description	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
PIF00683	QST-B50-(GW/45)- (5/26/99)	0.050	N.D.	05/28/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cowley Dr., Suite A, Costa Mesa, CA 92626 (949) 273-0667 FAX (949) 270-1046
 14525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 770-1344 FAX (818) 770-1943
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 435-0596 FAX (619) 435-0689
 1830 South 181 St., Suite 13-120, Phoenix, AZ 85044 (480) 385-0043 FAX (480) 385-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Method Blank

Extracted: 5/21-6/2, 1999
 Analyzed: 5/23-6/3, 1999
 Reported: Jun 24, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Barium.....	EPA 6010B	1.0	N.D.	5/21-6/2, 1999	5/23-6/3, 1999
Manganese.....	EPA 6010B	5.0	N.D.	5/21-6/2, 1999	5/23-6/3, 1999

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/23/99
 Sample #: PIE00455

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN
	ppm	ppm	ppm	ppm	%	%	%	PR
Barium	17.9	50.0	60.2	67.7	85%	100%	11.7%	92%
Manganese	65.7	50.0	113	129	95%	127%	13.2%	111%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD/2)) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: All QA/QC was within acceptance limits.

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 13-28, 1999
 Analyzed: May 14-28, 1999
 Reported: Jun 24, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Barium.....	EPA 200.7	0.010	N.D.	May 13-28, 1999	May 14-28, 1999
Manganese.....	EPA 200.7	0.050	N.D.	May 13-28, 1999	May 14-28, 1999

Analytes reported as N.D. were not present at or above the reporting limit.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/26/99
 Sample #: PIE01118

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN
	ppm	ppm	ppm	ppm	%	%	%	PR
Barium	113	50.0	153	153	80%	80%	0.0%	80%
Manganese	338	50.0	373	370	70%	64%	0.8%	67%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp. Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/26/99

Analyte	St	R1	PR
<hr/>	<hr/>	<hr/>	<hr/>
	ppm	ppm	%
Manganese	50.0	48.9	98%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/28/99
 Sample #: PIE01425

Analyte								MEAN
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	120	50.0	166	170	92%	100%	2.4%	96%
Manganese	494	50.0	361	520	0%	52%	36.1%	26%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-0867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 770-1844 FAX (818) 770-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 405-9596 FAX (619) 405-9689
 1830 South 51st St., Suite 13-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0951

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

DATE: 5/28/99

Analyte	St	R1	PR
	ppm	ppm	%
Manganese	50.0	49.4	99%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/28/99
 Sample #: PIE01417

Analyte	MEAN							
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	53.2	50.0	91.8	101	77%	96%	9.5%	86%
Manganese	127	50.0	166	165	78%	76%	0.6%	77%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolley Dr., Suite A, Costa, CA 92324 (909) 370-6667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/28/99

Analyte	St	R1	PR
	ppm	ppm	%
Manganese	50.0	47.8	96%

**Definition of Terms:**

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)





MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 6/3/99
 Sample #: PIE01423

Analyte								MEAN
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium*	88.6	50.0	137	128	97%	79%	6.8%	88%
Manganese**	368	50.0	185	433	0%	130%	80.3%	65%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: **Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.

*The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolidge Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 405-9596 FAX (619) 405-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

DATE: 6/3/99

Analyte	St	R1	PR
	ppm	ppm	%
Barium	50.0	49.0	98%
Manganese	50.0	49.9	100%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/23/99
 Sample #: PIE00700

Analyte								MEAN
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	23.9	50.0	53.0	75.1	58%	102%	34.5%	80%
Manganese	0	50.0	41.0	51.6	82%	103%	22.9%	93%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

3852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 809, San Diego, CA 92123 (619) 405-9596 FAX (619) 405-9689
 9830 South 31st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/23/99

Analyte	St	R1	PR
	ppm	ppm	%
Barium	50.0	49.9	100%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 405-0689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/14/99
 Sample #: PIE00678

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	0.034	1.0	1.01	1.02	98%	99%	1.0%	98%
Manganese	0	1.0	0.987	0.997	99%	100%	1.0%	99%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference: $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave. Irvine, CA 92618 (949) 361-0122 FAX (949) 361-0129
 1014 E. Cooley Dr. Suite A, Carlsbad, CA 92008 (949) 370-4667 FAX (949) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91411 (818) 770-1844 FAX (818) 770-1843
 9484 Chesapeake Dr. Suite 305, San Diego, CA 92123 (619) 595-1696 FAX (619) 595-0689
 9830 South 51st St. Suite B-120, Phoenix, AZ 85044 (480) 385-0343 FAX (480) 385-0351

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/22/99
 Sample #: PIE00756

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	0	1.0	1.06	1.04	106%	104%	1.9%	105%
Manganese	0	1.0	1.06	1.04	106%	104%	1.9%	105%

Definition of terms:

- R1..... Result of Sample Analysis
 - SP..... Spike Concentration Added to Sample
 - MS..... Matrix Spike Result
 - MSD..... Matrix Spike Duplicate Result
 - PR1..... Percent Recovery of MS: $((MS-R1) / SP) \times 100$
 - PR2..... Percent Recovery of MSD: $((MSD-R1) / SP) \times 100$
 - RPD..... Relative Percent Difference: $((MS-MSD)/(MS+MSD/2)) \times 100$
 - Acceptance Limits RPD: < or = 20%
 - MS/MSD: 70-130%
- QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0051

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/21/99
 Sample #: PIE00868

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	0.133	1.0	1.20	1.12	107%	99%	6.9%	103%
Manganese	0	1.0	0.931	0.942	93%	94%	1.2%	94%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS: ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD: ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606
 1014 E. Cooley Dr., Suite A, Colton, CA 92324
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044

(949) 261-1022 FAX (949) 261-1228
 (909) 370-4667 FAX (909) 370-1046
 (818) 770-1844 FAX (818) 770-1843
 (619) 405-9596 FAX (619) 505-9689
 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/24/99
 Sample #: PIE01390

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%

Barium	0.0827	1.0	1.01	1.02	93%	94%	1.0%	93%
Manganese	0.106	1.0	1.05	1.06	94%	95%	0.9%	95%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: $< \text{ or } = 20\%$
 MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

METHOD: 200.7
INSTRUMENT: ICP
MATRIX: Water

Date: 5/27/99
Sample #: PIE01576

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%

Barium	0	1.0	0.987	1.01	99%	101%	2.3%	100%
Manganese	0	1.0	0.995	0.994	100%	99%	0.1%	99%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: $< \text{ or } = 20\%$
MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 1825 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 405-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/28/99
 Sample #: PIE01663

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Barium	0	1.0	0.972	0.951	97%	95%	2.2%	96%
Manganese	0	1.0	0.961	0.941	96%	94%	2.1%	95%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS: $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD: $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference: $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

2852 Alton Ave., Irvin, CA 92614 (949) 261-1022 FAX (949) 261-1228
 4 E. Conley Dr., Suite A Cotton, CA 92324 (909) 370-4687 FAX (909) 370-1646
 Van Way, Suite C-11, Van Nuys, CA 91406 (818) 778-1844 FAX (818) 778-1843
 181st St., Suite B-120, Phoenix, AZ 85044 (602) 785-0043 FAX (602) 785-0881
 Teak Dr., Suite 805, San Diego, CA 92123 (619) 505-8598 FAX (619) 505-9690

GB- 6705

CHAIN OF CUSTODY FORM

Quote #: _____ Page 1 of 1

Name/Address: ENVIRONMENTAL INC. N. 44TH ST., SUITE 110 DENIX, AZ
 Project/PO Number: ESTES LANDFILL 669 9030
 Manager: JOHN MIEHER
 Phone Number: (602) 244-1192
 Fax Number: (602) 244-9280

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required										Special Instructions		
						VOL 8260	SVOC 8270	metals/mercury 6010/7471	organochlorine pesticides 8081	PCB 8082	organophosphorus pesticides 8141	chlorinated hydrocarbons 8151						
(5/76)-5-10-99	SOIL	VARIABLES	2	5-10-99 10:25	NONE	X	X	X	X	X	X	X						
(5/70)-5-10-99	SOIL	VARIABLES	3	5-10-99 11:15	NONE	X	X	X	X	X	X	X						
1P BLANK	AQ	VOA	2	5-10-99 1509	HCl	Z	/	/	/	/	/	/						
18(6/25)(5/10/99)	AQ	VARIABLES	13	5-10-99 1427	HCl-VOA HNO3-nobab	Z	Z	1	2	2	2	2						
18(5/40)(5/0/99)	SOIL	VARIABLES	3	5-10-99 1120	CHILL	1	Z											
1(6/30)5-10-99	H2O	VARIABLES	13	5-10-99 14:30	VARIABLES	X	X	X	X	X	X	X						
8(5/74)5-10-99	SOIL	ENVELOPE	1	5-10-99 1152	CHILL	1	/	/	/	/	/	/						

John Mieher

John Mieher

Shipped By: *John Mieher* Date/Time: 5-10-99 1519
 Shipped By: *John Mieher* Date/Time: 5-10-99 1558

Received by: *John Wood* Date/Time: 5-10-99 1519
 Received by: *John Wood* Date/Time: 5-10-99 1558

Turnaround Time: (Check) *Check*
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal _____
 Sample Integrity: (Check)
 intact on ice

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due in 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

2852 Alton Ave., Irvine (949) 261-1022 FAX (949) 261-1228
 14 E. Cooley Dr., Suite A Colton, CA 92324 (909) 370-4667 FAX (909) 370-1048
 Roman Way, Suite C-11, Van Nuys, CA 91406 (818) 778-1844 FAX (818) 778-1843
 18141 St. Suite B-120, Phoenix, AZ 85044 (602) 785-0043 FAX (602) 785-0051
 Speake Dr., Suite 805, San Diego, CA 92123 (619) 505-9506 FAX (619) 505-9580

GB- 670

CHAIN OF CUSTODY FORM

Quote #: _____ Page 1 of _____

Name/Address: ENVIRONMENTAL INC N. 44TH ST., SUITE 110 PHOENIX, AZ		Project/PO Number: ESTES LANDFILL 669 9030		Analysis Required											
Manager: JOHN MEIER		Phone Number: (602) 244-1192		0260 VOC 0270 SVOC METALS/MERCURY 6010/7471 ORGANOCHEMIST PESTICIDES 8081 PCB 8082 ORGANOPHOSPHORUS PESTICIDES 8141 8151 CHLORINATED HYDROCARBONS TOC walkley-black											
Contact: JEFF MARDN PATRICIA DRABAT		Fax Number: (602) 244-9280													
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	0260 VOC	0270 SVOC	METALS/MERCURY 6010/7471	ORGANOCHEMIST PESTICIDES 8081	PCB 8082	ORGANOPHOSPHORUS PESTICIDES 8141	8151 CHLORINATED HYDROCARBONS	TOC	walkley-black	Special Instructions
320 (GW/80) (5-11-99)	AQ	VARIES	13	5-11-99 1107	VOA-HCL METALS HNO3	2	2	1	2	2	2	2	/	/	
331 (GW/80) (5-11-99)	AQ	VARIES	13	5-11-99 1213	VOA-HCL METALS HNO3	2	2	1	2	2	2	2	/	/	
330 (GW/80) (5-11-99)	AQ	VARIES	13	5-11-99 1407	VOA-HCL METALS HNO3	2	2	1	2	2	2	2	/	/	
20 (S/76) (5-11-99)	SOIL	BRASS	1	5-11-99 1009	CHILL	/	/	/	/	/	/	/	/	/	
20 (S/64) (5-11-99)	SOIL	VARIES	2	5-11-99 0858	CHILL	1	2	/	/	/	/	/	/	/	
20 (S/25) (5-11-99)	SOIL	VARIES	3	5-11-99 0858	CHILL	2	2	/	/	/	/	/	/	/	
P BLANK	AQ	VOA	4	---	CHILL	4	/	/	/	/	/	/	/	/	
40 (GW/80) (5-11-99)	AQ	VARIES	13	5-11-99 1440	VOA-HCL METALS HNO3	2	2	1	2	2	2	2	/	/	
21 (S/20) - 5-11-99	SOIL	VARIES	3	5-11-99 0930	CHILL	X	X	X	X	X	X	X			
21 (S/33) - 5-11-99	SOIL	VARIES	3	5-11-99 1120	CHILL	X	X	X	X	X	X	X			
21 (GW/80) - 5-11-99	AQ	VARIES	13	5-11-99 1415	VARIES	X	X	X	X	X	X	X			
Shipped By: FR M. ALLEN		Date / Time: 5-11-99 15:30		Received by: T. Polman		Date / Time: 5-11-99 15:30		Turnaround Time: (Check)							
Shipped By: T. Polman		Date / Time: 5-11-99 16:00		Received by:		Date / Time:		same day _____ 72 hours _____							
Shipped By:		Date / Time:		Received in Lab by: Jaime Wood		Date / Time: 5-11-99 5:19-1600		24 hours _____ 5 days _____							
								48 hours _____ normal _____							
								Sample Integrity: (Check)							
								intact <input checked="" type="checkbox"/> on ice <input checked="" type="checkbox"/>							

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

CHAIN OF CUSTODY FORM

Project/PO Number: **6699030**
ESTES LANDFILL

Analysis Required

Method 8260
 Method 8270
 Methods 6010/7471
 Method 8081
 Method 8082
 Method 8141
 Method 8151

Address: **N. 44TH ST #110**
HOLMUR AVE

Manager: **IN MIETHEZ**
JEFF MARTIN

Phone Number: **602 244 1192**
 Fax Number: **244 9280**

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	METHOD 8260	METHOD 8270	METHODS 6010/7471	METHOD 8081	METHOD 8082	METHOD 8141	METHOD 8151	Special Instructions
(S/10)-5-11-99	SOIL	VIALS	3	5-11-99 1640	NONE	X	X	X	X	X	X	X	
(S/50)-5-12-99	SOIL	VIALS	2	5-12-99 0825	NONE	X	X	X	X	X	X	X	
(6W/50)-5-12-99	H2O	VIALS	13	5-12-99 0930	VARIABLES	X	X	X	X	X	X	X	
BLANK	H2O	VIALS	34	-	YES	X							
(S/20)-5-12-99	SOIL	VIALS	3	5-12-99 11:15	NONE	X	X	X	X	X	X	X	
(S/50)-5-12-99	SOIL	VIALS	2	5-12-99 1205	NONE	X	X	X	X	X	X	X	
(6W/50)-5-12-99	H2O	VIALS	13	5-12-99 1430	VARIABLES	X	X	X	X	X	X	X	
(6W/55)-5-12-99	H2O	VIALS	13	5-12-99 1545	VARIABLES	X	X	X	X	X	X	X	
(6W/55)-5-12-99	H2O	VIALS	13	5-12-99 1600	VARIABLES	X	X	X	X	X	X	X	

Received By: **JEFF MARTIN** Date/Time: **5-12-99 1640**

Received By: **[Signature]** Date/Time: **5-12-99 1640**

Turnaround Time: (Check)
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal **2 weeks**

Received in Lab by: **[Signature]** Date/Time: **5-12-99 1716**

Sample Integrity: (Check)
 intact on ice

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Del Mar Analytical

2852 Anon Ave., Irvine, CA 949 (949) 261-1022 FAX (949) 261-1228
 314 E. Cooley Dr., Suite A Co. 909 (909) 370-4667 FAX (909) 370-1046
 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4th St. Suite B-120, Phoenix, AZ 85044 (602) 785-0043 FAX (602) 785-0851
 Apache Dr., Suite 805, San Diego, CA 92123 (619) 505-9598 FAX (619) 505-9689

012057

CHAIN OF CUSTODY FORM

Page 1 of 1

Name/Address:
ENVIRONMENTAL INC.
101 N 14TH ST. SUITE 110
PHOENIX, AZ
 Manager:
JOHN MEHER
JEFF MARTIN
LICIA DROBAT

Project/PO Number:
ESTES LANDFILL
669 9030
 Phone Number:
(602) 244-1192
 Fax Number:
(602) 244-9280

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	B260 VOC	B270 SVOC	Metals / Mercury 6010/7471	ORGANOCHLORINE PESTICIDES 8081	PCB 8082	ORGANOPHOSPHORUS PESTICIDES 8141	CHLORINATED HYDROCARBONS 8151	ASTM D2487	TOC WALKLEY-BLACK	Special Instructions
8) (S/45) (5-12-99)	SOIL	VARIES	2	5-11-99 1637	HCl	1	1								
5) (S/35) (5-12-99)	SOIL	VARIES	3	5-11-99 1614	HCl	1	2								
1) (GW/65) (5-12-99)	AQ	VARIES	13	5-12-99 0847	VOA-HCl METALS-HNO3	2	2	1	2	2	2	2			
2) (S/57) (5-12-99)	SOIL	BRASS	1	5-12-99 0803	HCl								1		
1) (S/55) (5-12-99)	SOIL	VARIES	2	5-12-99 1422	HCl	1	1								
1) (S/57) (5-12-99)	SOIL	VARIES	2	5-12-99 1215	HCl	1	1							X	ANALYZE FOR TOC BY WALKLEY-BLACK
1) (S/5) (5-12-99)	SOIL	BRASS	2	5-12-99 1117	HCl								2		
1) (GW/65) (5-12-99)	AQ	VARIES	13	5-12-99 1508	HCl-VOA HNO3-METALS	2	2	1	2	2	2	2			
3) (610/65) (5-12-99)	AQ	VARIES	13	5-12-99 1555	HCl-VOA HNO3-METALS	2	2	1	2	2	2	2			
1) BLANK	AQ	VOA	3		HCl	3									

Received By: **L. Drobat** Date/Time: **5-12-99 1639**
 Received By: **J. Johnson** Date/Time: **5-12-99 1716**

Received by: **J. Johnson** Date/Time: **5-12-99 1639**
 Received by: **J. Johnson** Date/Time: **5-12-99 1716**

Turnaround Time: (Check)
 same day 72 hours
 24 hours 5 days
 48 hours normal 2 WEEK

Received in Lab by: **Jaime L. Ward** Date/Time: **5-12-99 1716**

Sample Integrity: (Check)
 intact on ice

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

CHAIN OF CUSTODY FORM

Client/Address: ENVIRONMENTAL INC.
 144TH ST., SUITE 110
 PHOENIX, AZ

Project/PO Number: ESTES LANDFILL
 669 9030

Analysis Required

Manager: JOHN NIEHER

Phone Number: (602) 244-1192

Fax Number: (602) 244-9280

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required											Special Instructions
						VOC 8260	SVOC 8270	organochlorine 8081 pesticides	8082 PCB	metals / Hg 6010 / 7471	organophosphorus 8141 pesticides	chlorinated 8151 herbicides	TOC	WACKLEY-BLACK			
11(GW/TS)(5-19-99)	AQ	VARIOUS	13	5-19-99 1236	VOA-HCl metals HNO ₃	2	2	2	2	1	2	2	/	/			
1(S/66)(5-19-99)	SOIL	ENCORE BRASS	2	5-19-99 1140	CHILL	1	1						→	/			
1(S/5)(5-19-99)	SOIL	ENCORE BRASS	2	5-19-99 0927	CHILL	1	1						→	/			
1(GW/60)(5-19-99)	AQ	VARIOUS	14	5-19-99 1500	VOA-HCl metals HNO ₃	2	2	2	2	1	2	2	1	/			
TRIP BLANK/B-11	AQ	VOA	1	5-19-99 1520	HCL	1											
0 BLANK/R-34	AQ	VOA	1	5-19-99	HCL	1											

Received By: *[Signature]* Date /Time: 05/19/99 1605

Received by: _____ Date /Time: _____

Turnaround Time: (Check)
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal

Received in Lab by: *James Wood* Date /Time: 5/19/99 1605

Sample Integrity: (Check)
 intact on ice

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Del Mar Analytical

2852 Alton Ave., Iv
 114 E. Cooley Dr., Suite A Coh
 rman Way, Suite C-11, Van Nuys, CA 91406
 4th St & I St., Suite B-120, Phoenix, AZ 85044
 Speake Dr., Suite 905, San Diego, CA 92123

(949) 261-1022 FAX (949) 261-1228
 (909) 370-4667 FAX (909) 370-1046
 (818) 779-1844 FAX (818) 779-1843
 (602) 785-0043 FAX (602) 785-0851
 (619) 505-8596 FAX (619) 505-9689

012602

CHAIN OF CUSTODY FORM

Page 1 of 1

Name/Address: ENVIRONMENTAL INC
 J. 44TH ST., SUITE 110
 PHOENIX, AZ

Project/PO Number: ESTES LANDFILL
 069 9030

Manager: JOHN MIEHEL
 PATRICIA A. DROBAT
 JEFF MARTIN

Phone Number: (602) 244-1192
 Fax Number: (602) 244-9280

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required										Special Instructions
						8260 VOC	8270 SVOC	ORGANOCHLORINE PESTICIDES 8081	8082 PCB	ORGANOPHOSPHORUS PESTICIDES 8141	CHLORINATED HERBICIDES 8151	METALS / HCL 6010/7471	TRC	WALKLEY-BLACK		
21P BLANK	AQ	VOA	1	5-11-99	HCl	1	/	/	/	/	/	/	/	/	/	
12(GW/55)(5-20-99)	AQ	VARIES	13	5-20-99 0950	VOA-HCl METALS-HNO3	2	2	2	2	2	2	1	/	/		
39(S/55)(5-20-99)	SOIL	ENCORE BRASS	3	5-20-99 1416	CHILL	1	2	/	/	/	/	/	/	/		
12(S/45)(5-20-99)	SOIL	ENCORE BRASS	3	5-20-99 840	CHILL	1	2	/	/	/	/	/	/	/		
12(S/3A)(5-20-99)	SOIL	ENCORE BRASS	3	5-20-99 0816	CHILL	1	2	/	/	/	/	/	/	/		
2(S/50)(5-20-99)	SOIL	ENCORE BRASS	2	5-20-99 0851	CHILL	1	/	/	/	/	/	/	/	/		
3(S/40)(5-20-99)	SOIL	ENCORE BRASS	3	5-20-99 1415	CHILL	1	2	/	/	/	/	/	/	/		
38(S/50)(5-20-99)	SOIL	ENCORE BRASS	3	5-20-99 1218	CHILL	1	2	/	/	/	/	/	/	/		
13(S/50)(5-20-99)	SOIL	ENCORE BRASS	3	5-20-99 1434	CHILL	1	2	/	/	/	/	/	/	/		
37(S/25)(5-20-99)	SOIL	ENCORE BRASS	2	5-20-99 1507	CHILL	1	1	/	/	/	/	/	/	/		
13(GW/60)(5-20-99)	AQ	VARIES	13	5-20-99 1525	VOA HCl METALS HNO3	2	2	2	2	2	2	1	/	/		
BLANK	AQ	VOA	1	5-11-99	HCl	1	/	/	/	/	/	/	/	/		

Shipped By: [Signature] Date / Time: 5-20-99 1604

Received by: [Signature] Date / Time: 5/20/99 1604

Turnaround Time: (Check) same day 72 hours
 24 hours 5 days
 48 hours normal

Shipped By: [Signature] Date / Time: 5-20-99 1632

Received by: [Signature] Date / Time: 5/20/99 1632

Received in Lab by: [Signature] Date / Time: 5/20/99 1632

Sample Integrity: (Check) intact on ice

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is in 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

CHAIN OF CUSTODY FORM

Name/Address:
 QST
 N. 44TH ST #110
 PHOENIX, AZ
 Manager:
 HW MIEHEK
 JEFF MARTIN

Project/PO Number:
 ESTES LAND FILL
 6699030

Phone Number:
 602 244 1192

Fax Number:
 244-9280

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required										Special Instructions		
						VOC'S	TC	METHOD WALKLEY-BLACK	METHOD 8270	METHODS 6010/7471	METHOD 8081	METHOD 8082	METHOD 8141	METHOD 8151				
-(5/40)-5-24-99	SOIL	VACUES	2	5-24-99 10:55	NONE	X	X											
-(5/50)-5-24-99	SOIL	"	2	5-24-99 15:10	"	X	X											
(5/35)-5-24-99	SOIL	VACUES	3	5-24-99 12:01		X		X	X	X	X	X	X					
(5/45)-5-24-99	SOIL	"	3	5-24-99 14:24		X		X	X	X	X	X	X					

Released By: JEFF MARTIN Date /Time: 5-24-99 1600

Received by: [Signature] Date /Time: 5/24/99 1600

Turnaround Time: (Check)
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal A

Released By: [Signature] Date /Time: 5/24/99 1621

Received by: _____ Date /Time: _____

Released By: _____ Date /Time: _____

Received in Lab by: [Signature] Date /Time: 5/25/99 1621

Sample Integrity: (Check)
 intact A on ice A

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

2852 Alton Ave., Irvine, CA 92618 (949) 261-1228 FAX (949) 261-1228
 Cooley Dr., Suite A Colton, CA 92316 (909) 370-4887 FAX (909) 370-1046
 Way, Suite C-11, Van Nuys, CA 91411 (818) 779-1844 FAX (818) 779-1844
 4th St., Suite B-120, Phoenix, AZ 85044 (602) 785-0043 FAX (602) 785-0851
 4th Dr., Suite 905, San Diego, CA 92123 (619) 505-8386 FAX (619) 505-9688

CHAIN OF CUSTODY FORM

Quote # _____ Page 1 of _____

Client/Address:
 ENVIRONMENTAL, INC.
 144TH ST. SUITE 110
 PHOENIX, ARIZONA

Project/PO Number:
 ESTES LANDFILL
 66A 9030

Manager: JOHN MIEHEK
 PATRICIA A. DEBOAT

Phone Number:
 (602) 244-1192
 Fax Number:

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	0260 VOC	0270 SVOC	ORGANOCHLORINE 8081 PESTICIDES	8082 PCB	ORGANOPHOSPHORUS 8141 PESTICIDES	CHLORINATED 8151 HERBICIDES	METALS / HB 6010/7471	TBC	WATER/BLACK	Special Instructions
P BLANK	AQ	VQA	1		HCl	1									
(6W/50)-5-25-99	AQ	VACIES	13	5-25-99 09:30	VACIES	X	X	X	X	X	X	X			
(5/13)-5-25-99	SOL	BRASS	1	5-25-99 11:55	NONE								X		

Shipped By: F MARTIN Date/Time: 5-25-99 15:45

Received by: Doug Roberts Date/Time: 5/25/99 15:45

Turnaround Time: (Check)
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal 2

Shipped By: [Signature] Date/Time: 5/25/99 16:15

Received by: [Signature] Date/Time: 5-25-99 16:15

Sample Integrity: (Check)
 intact ✓ on ice ✓

Shipped By: .. Date/Time:

Received in Lab by: M. Vilchinsky Date/Time: 5-25-99 16:15

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

CHAIN OF CUSTODY FORM

Quote #: _____ Page 1 of 2

Name/Address: ENVIRONMENTAL, INC. N. 44TH ST, SUITE 110 PHOENIX, AZ			Project/PO Number: ESTES LANDFILL 669 9030			Analysis Required									
Manager: JOHN MIETEK PATRICIA A. DROBAT			Phone Number: (602) 244-1192			Fax Number:									
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	8260 VOC	8270 SVOC	CHLORINATED HYDROCARBONS 8151	ORGANIC CHLORINE PESTICIDES 8081	ORGANIC PHENOLS PESTICIDES 8141	METALS/MERCURY 6010/7471	8082 PCB	Special Instructions		
P BLANK	AQ	VQA	1	5-5-99	HCl	1	/	/	/	/	/	/			
50(GW/45)(5-26-99)	AQ	varies	13	5-26-99 1024	HCl-van HNO ₃ -METALS	2	2	2	2	2	1	2			
4(S/40)(5-26-99)	SOIL	EXPOSED BRASS	3	5-26-99 0827	CHILL	1	2								
4(S/50)(5-26-99)	SOIL	EXPOSED BRASS	3	5-26-99 0904	CHILL	1	2								
Shipped By: <u>C. M. [Signature]</u> Date/Time: <u>5/26/99 1502</u>					Received by: _____ Date/Time: _____					Turnaround Time: (Check) same day _____ 72 hours _____ 24 hours _____ 5 days _____ 48 hours _____ normal <input checked="" type="checkbox"/>					
Date/Time: _____					Received by: _____ Date/Time: _____					Sample Integrity: (Check) intact _____ on ice _____					
Date/Time: _____					Received in Lab by: <u>[Signature]</u> Date/Time: <u>5/26/99 1502</u>										

I hereby agree to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is to be disposed of after 30 days.

JST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: 6699031-0300

Report Number: PIF00954

Sampled: May 12-20, 1999
 Received: Jun 15, 1999
 Extracted: Jun 29, 1999
 Analyzed: Jun 29, 1999
 Reported: Jun 30, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIF00954	QSTB9-S/69-5/12/99	Soil	9081
PIF00955	QSTB12-S/56-5/20/99	Soil	9081

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.
HOLDING TIMES: Holding times were met.
PRESERVATION: Samples requiring preservation were verified prior to sample analysis.
PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.
QA/QC CRITERIA: All Analyses met method criteria.
OBSERVATIONS: No significant observations were made.
SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)


 Robyn Rice
 Project Manager



Del Mar Analytical

1852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 1625 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9489
 4830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0821

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: 6699031-0300

Sample Descript: Soil
 First Sample #: PIF00954

Sampled: May 12, 1999
 Received: Jun 15, 1999
 Extracted: Jun 29, 1999
 Analyzed: Jun 29, 1999
 Reported: Jun 30, 1999


CATION EXCHANGE CAPACITY (EPA 9081)

Laboratory Number	Sample Description	Reporting Limit meq/Kg	Sample Result meq/Kg	Date Extracted	Date Analyzed
PIF00954	QSTB9-S/69-5/12/99	N.A.	98	06/29/99	06/29/99

Analysis was completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

 R.R.

Robyn Rice
 Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Colton Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 14525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite #05, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: 6699031-0300

Sample Descript: Soil
 First Sample #: PIF00955

Sampled: May 20, 1999
 Received: Jun 15, 1999
 Extracted: Jun 29, 1999
 Analyzed: Jun 29, 1999
 Reported: Jun 30, 1999

CATION EXCHANGE CAPACITY (EPA 9081)

Laboratory Number	Sample Description	Reporting Limit meq/Kg	Sample Result meq/Kg	Date Extracted	Date Analyzed
PIF00955	QSTB12-S/56-5/20/99	N.A.	130	06/29/99	06/29/99

Analysis was completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 6/29/99
 Sample #: IF03214

Analyte							MEAN	
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Sodium	90	50.0	146	146	112%	112%	0.0%	112%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: All QA/QC was within acceptance limits.



1 FAX (714) 261 1228
 2 FAX (602) 968 1066
 3 FAX (818) 779 1843
 4 FAX (602) 968 1538

9830 South 51st St., Suite B-120
 Phoenix, AZ 85044

CHAIN OF CUSTODY FORM

Client Name/Address DST ENVIRONMENTAL 426 W. WASHINGTON ST. #110 PHOENIX AZ 85008		Project/PO Number: 1.6 9903/ 0500				Analysis Required										
Project Manager/Phone Number: JOHN MICHEK (602) 244-1177		Sampler: M. Crocker				COC-15-199 MADE IN AZ 100% RECYCLED										
Sample Description	Sample Matrix	Container Type	#of Cont	Sampling Date/Time	Preservatives																Special Instructions
DST B1- 5/14 - 5/12/99	SOIL	BRASS	1	5/12/99 12:52												
DST B12 5/56 - 5/5/99	SOIL	BRASS	1	5/20/99 12:09												
Relinquished By: <i>Michael Michek</i>		Date /Time: <i>5/20 3:50</i>				Received by: <i>M. Crocker</i>		Date /Time: <i>5/20 4:15</i>				Turnaround Time: (check) <input type="checkbox"/> same day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> 5 days <input type="checkbox"/> 48 hours <input checked="" type="checkbox"/> normal				
Relinquished By: <i>John Michek</i>		Date /Time: <i>5/17 11:30</i>				Received by:		Date /Time:				Sample Integrity: (Check) <input type="checkbox"/> intact <input type="checkbox"/> on ice				
Relinquished By:		Date /Time:				Received in Lab by:		Date /Time:								

Note: Sample(s) will be disposed of after 30 days.

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Report Number: PIE01217

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 20-27, 1999
 Analyzed: 5/22-6/2, 1999
 Reported: Jun 2-4, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01217	QST-B11(GW/75) (5-19-99)	Water	8260B, 8270, 8081A, 8082, 200.7, 245.1, 8141A & 8151
PIE01218	QST-B11(S/66) (5-19-99)	Soil	8260B, 8270, 8081A, 8082, 6010B, 7471A, 8141A & 8151
PIE01219	QST-B11(S/5) (5-19-99)	Soil	8260B, 8270, 8081A, 8082, 6010B, 7471A, 8141A & 8151
PIE01220	QST-B34(GW/60) (5-19-99)	Water	8260B, 8270, 8081A, 8082, 200.7, 245.1, 8141A, 8151 & Walkly Black Method
PIE01221	Trip Blank/B11	Water	8260B
PIE01222	Trip Blank/B34	Water	8260B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. The TOC analysis was performed at Columbia Analytical Services. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)


 Robyn Rice
 Project Manager

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B11(GW/75)(5-19-99)
 Lab Number: PIE01217

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 4, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	68%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

ST Environmental
6 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B11(S/66)(5-19-99)
Lab Number: PIE01218

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 19, 1999
Received: May 19, 1999
Extracted: May 26, 1999
Analyzed: Jun 2, 1999
Reported: Jun 4, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)			µg/Kg (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	99%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

3T Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B11(S/5)(5-19-99)
 Lab Number: PIE01219

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 4, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		$\mu\text{g/Kg}$ (ppb)
Aldrin.....	5.0		N.D.
alpha-BHC.....	5.0		N.D.
beta-BHC.....	5.0		N.D.
delta-BHC.....	10		N.D.
gamma-BHC (Lindane).....	5.0		N.D.
Chlordane.....	100		N.D.
4,4'-DDD.....	5.0		9.9
4,4'-DDE.....	5.0		20
4,4'-DDT.....	5.0		N.D.
Dieldrin.....	5.0		N.D.
Endosulfan I.....	5.0		N.D.
Endosulfan II.....	5.0		N.D.
Endosulfan sulfate.....	20		N.D.
Endrin.....	5.0		N.D.
Endrin aldehyde.....	5.0		N.D.
Heptachlor.....	5.0		N.D.
Heptachlor epoxide.....	5.0		N.D.
Methoxychlor.....	5.0		N.D.
Toxaphene.....	200		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Del Mar Analytical
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B34(GW/60)(5-19-99)
 Lab Number: PIE01220

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 4, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aldrin.....	0.10	N.D.
alpha-BHC.....	0.10	N.D.
beta-BHC.....	0.10	N.D.
delta-BHC.....	0.25	N.D.
gamma-BHC (Lindane).....	0.10	N.D.
Chlordane.....	2.0	N.D.
4,4'-DDD.....	0.10	N.D.
4,4'-DDE.....	0.10	N.D.
4,4'-DDT.....	0.10	N.D.
Dieldrin.....	0.10	N.D.
Endosulfan I.....	0.10	N.D.
Endosulfan II.....	0.10	N.D.
Endosulfan sulfate.....	0.50	N.D.
Endrin.....	0.10	N.D.
Endrin aldehyde.....	0.10	N.D.
Heptachlor.....	0.10	N.D.
Heptachlor epoxide.....	0.10	N.D.
Methoxychlor.....	0.10	N.D.
Toxaphene.....	4.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	70%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01217.QST <5 of 33>



Del Mar Analytical

3T Environmental
26 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B11(GW/75)(5-19-99)
Lab Number: PIE01217

Sampled: May 19, 1999
Received: May 19, 1999
Extracted: May 24, 1999
Analyzed: May 27, 1999
Reported: Jun 4, 1999

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	34%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B11(S/66)(5-19-99)
 Lab Number: PIE01218

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 4, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.(C)
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	100%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cuddey Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B11(S/5)(5-19-99)
 Lab Number: PIE01219

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 4, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.(C)
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 18525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1840
 3484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B34(GW/60)(5-19-99)
 Lab Number: PIE01220

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 27, 1999
 Reported: Jun 4, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/L}$ (ppb)			$\mu\text{g/L}$ (ppb)
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	40%

Del Mar Analytical

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-811(GW/75)(5-19-99)
 Lab Number: PIE01217

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 25, 1999
 Analyzed: May 25, 1999
 Revised: Jun 22, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	90%
Toluene-d8 (75-140).....	97%
4-Bromofluorobenzene (75-135).....	94%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B11(S/66)(5-19-99)
 Lab Number: PIE01218

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 20, 1999
 Analyzed: May 24, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	88%
Toluene-d8 (50-135).....	98%
4-Bromofluorobenzene (70-130).....	88%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B11(S/5)(5-19-99)
 Lab Number: PIE01219

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 20, 1999
 Analyzed: May 24, 1999
 Reported: Jun 2, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recovers (Accept. Limits):	
Dibromofluoromethane (70-125).....	95%
Toluene-d8 (50-135).....	103%
4-Bromofluorobenzene (70-130).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01217.QST <12 of 33>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B34(GW/60)(5-19-99)
 Lab Number: PIE01220

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 25, 1999
 Analyzed: May 25, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	4.0	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	2.8	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	3.6	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	88%
Toluene-d8 (75-140).....	97%
4-Bromofluorobenzene (75-135).....	92%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, Trip Blank/B11
 Lab Number: PIE01221

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 25, 1999
 Analyzed: May 25, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	87%
Toluene-d8 (75-140).....	100%
4-Bromofluorobenzene (75-135).....	99%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank/B34
Lab Number: PIE01222

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1840
9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 19, 1999
Received: May 19, 1999
Extracted: May 25, 1999
Analyzed: May 25, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recovers (Accept. Limits):	
Dibromofluoromethane (70-160).....	85%
Toluene-d8 (75-140).....	101%
4-Bromofluorobenzene (75-135).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01217.QST <15 of 33>

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B11(GW/75)(5-19-99)
 Lab Number: PIE01217

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 4, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(C)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.(C)
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.(C)
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	62%
Phenol-d6 (40-115).....	48%
2,4,6-Tribromophenol (40-140).....	72%
Nitrobenzene-d5 (35-120).....	84%
2-Fluorobiphenyl (30-150).....	81%
Terphenyl-d14 (45-150).....	110%



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B11(S/66)(5-19-99)
 Lab Number: PIE01218

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 4, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	2,300	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

*Due to sample matrix effects, the surrogate recovery was outside acceptance limits.

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	75%
Phenol-d6 (35-110).....	72%
2,4,6-Tribromophenol (40-110).....	92%
Nitrobenzene-d5 (30-110).....	74%
2-Fluorobiphenyl (40-110).....	84%
Terphenyl-d14 (45-110).....	113%*

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B11(S/5)(5-19-99)
 Lab Number: PIE01219

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 4, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	57%
Phenol-d6 (35-110).....	57%
2,4,6-Tribromophenol (40-110).....	74%
Nitrobenzene-d5 (30-110).....	65%
2-Fluorobiphenyl (40-110).....	66%
Terphenyl-d14 (45-110).....	86%

Robyn Rice
 Project Manager

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B34(GW/60)(5-19-99)
 Lab Number: PIE01220

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 4, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(C)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.(C)
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.(C)
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	67%
Phenol-d6 (40-115).....	66%
2,4,6-Tribromophenol (40-140).....	78%
Nitrobenzene-d5 (35-120).....	77%
2-Fluorobiphenyl (30-150).....	72%
Terphenyl-d14 (45-150).....	107%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

RPT.XLS <19 of 33>



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B11(GW/75)(5-19-99)
 Lab Number: PIE01217

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 20-26, 1999
 Analyzed: May 22-27, 1999
 Reported: Jun 2, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/25/99
Arsenic.....	EPA 200.7	0.050	0.16	05/26/99	05/27/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/20/99	05/22/99
Cadmium.....	EPA 200.7	0.0050	0.0099	05/20/99	05/22/99
Chromium.....	EPA 200.7	0.010	0.43	05/20/99	05/22/99
Copper.....	EPA 200.7	0.020	0.25	05/20/99	05/22/99
Lead.....	EPA 200.7	0.050	0.11	05/20/99	05/22/99
Mercury.....	EPA 245.1	0.00020	0.00046	05/26/99	05/26/99
Nickel.....	EPA 200.7	0.050	0.38	05/20/99	05/22/99
Selenium.....	EPA 200.7	0.060	N.D.	05/20/99	05/22/99
Silver.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/22/99
Thallium.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/23/99
Zinc.....	EPA 200.7	0.050	0.26	05/20/99	05/22/99

L= Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.



DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, QST-B11(S/66)(5-19-99)
 Lab Number: PIE01218

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 25-27, 1999
 Analyzed: May 26-28, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/25/99	05/28/99
Cadmium.....	EPA 6010B	0.50	0.66	05/25/99	05/26/99
Chromium.....	EPA 6010B	2.0	15	05/25/99	05/26/99
Copper.....	EPA 6010B	2.5	17	05/25/99	05/26/99
Lead.....	EPA 6010B	2.5	3.4	05/25/99	05/26/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	9.5	05/25/99	05/26/99
Selenium.....	EPA 6010B	10	N.D.	05/25/99	05/26/99
Silver.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99
Thallium.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Zinc.....	EPA 6010B	2.5	29	05/25/99	05/26/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 4.



DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01217.QST <21 of 33>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, QST-B11(S/5)(5-19-99)
 Lab Number: PIE01219

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 25-27, 1999
 Analyzed: May 26-28, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/25/99	05/28/99
Cadmium.....	EPA 6010B	0.50	1.1	05/25/99	05/26/99
Chromium.....	EPA 6010B	2.0	15	05/25/99	05/26/99
Copper.....	EPA 6010B	2.5	8.3	05/25/99	05/26/99
Lead.....	EPA 6010B	2.5	3.2	05/25/99	05/26/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	17	05/25/99	05/26/99
Selenium.....	EPA 6010B	10	N.D.	05/25/99	05/26/99
Silver.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99
Thallium.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Zinc.....	EPA 6010B	2.5	18	05/25/99	05/26/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 4.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01217.QST <22 of 33>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B34(GW/60)(5-19-99)
 Lab Number: PIE01220

Sampled: May 19, 1999
 Received: May 19, 1999
 Extracted: May 20-26, 1999
 Analyzed: May 22-26, 1999
 Reported: Jun 2, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/25/99
Arsenic.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/23/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/20/99	05/22/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/20/99	05/22/99
Chromium.....	EPA 200.7	0.010	N.D.	05/20/99	05/22/99
Copper.....	EPA 200.7	0.020	0.037	05/20/99	05/22/99
Lead.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/26/99	05/26/99
Nickel.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99
Selenium.....	EPA 200.7	0.060	N.D.	05/20/99	05/23/99
Silver.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/22/99
Thallium.....	EPA 200.7	0.050	N.D.(L)	05/20/99	05/23/99
Zinc.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99

L= Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 4, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	63%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 26, 1999
 Analyzed: May 29, 1999
 Reported: Jun 4, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit	Sample Result
	$\mu\text{g}/\text{Kg}$ (ppb)	
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	90%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Method Blank

Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 4, 1999
 Matrix: Water

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	71%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 4, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	71%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 25, 1999
 Analyzed: May 25, 1999
 Revised: Jun 22, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropane.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

J.R.R.

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	84%
Toluene-d8 (75-140).....	99%
4-Bromofluorobenzene (75-135).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mierher

Method Blank

Extracted: May 20, 1999
 Analyzed: May 24, 1999
 Reported: Jun 2, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	102%
Toluene-d8 (50-135).....	106%
4-Bromofluorobenzene (70-130).....	100%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

DT Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 4, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	68%
Phenol-d6 (40-115).....	69%
2,4,6-Tribromophenol (40-140).....	83%
Nitrobenzene-d5 (35-120).....	77%
2-Fluorobiphenyl (30-150).....	77%
Terphenyl-d14 (45-150).....	101%

Robyn Rice
 Project Manager

ST Environmental
 16 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 24, 1999
 Analyzed: May 27, 1999
 Reported: Jun 4, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	80%
Phenol-d6 (35-110).....	85%
2,4,6-Tribromophenol (40-110).....	87%
Nitrobenzene-d5 (30-110).....	81%
2-Fluorobiphenyl (40-110).....	84%
Terphenyl-d14 (45-110).....	82%

3T Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 20-26, 1999
 Analyzed: May 22-27, 1999
 Reported: Jun 2, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/20/99	05/25/99
Arsenic.....	EPA 200.7	0.050	N.D.	May 20-26, 1999	May 23-27, 1999
Beryllium.....	EPA 200.7	0.0050	N.D.	05/20/99	05/22/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/20/99	05/22/99
Chromium.....	EPA 200.7	0.010	N.D.	05/20/99	05/22/99
Copper.....	EPA 200.7	0.020	N.D.	05/20/99	05/22/99
Lead.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/26/99	05/26/99
Nickel.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99
Selenium.....	EPA 200.7	0.060	N.D.	05/20/99	May 22-23, 1999
Silver.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99
Thallium.....	EPA 200.7	0.050	N.D.	05/20/99	05/23/99
Zinc.....	EPA 200.7	0.050	N.D.	05/20/99	05/22/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mierher

Method Blank

Extracted: May 25-27, 1999
 Analyzed: May 26-28, 1999
 Reported: Jun 2, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Beryllium.....	EPA 6010B	0.50	N.D.	05/25/99	05/28/99
Cadmium.....	EPA 6010B	0.50	N.D.	05/25/99	05/26/99
Chromium.....	EPA 6010B	2.0	N.D.	05/25/99	05/26/99
Copper.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99
Lead.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99
Selenium.....	EPA 6010B	10	N.D.	05/25/99	05/26/99
Silver.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99
Thallium.....	EPA 6010B	5.0	N.D.	05/25/99	05/26/99
Zinc.....	EPA 6010B	2.5	N.D.	05/25/99	05/26/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8081
 Matrix: Water
 Instrument: GC

Date: 05/25/99
 Sample #: LCS/LCSD*
 Batch #: IE24PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	0.5	0.407	0.342	81%	68%	17%	40	55-125
DDD	0	0.5	0.431	0.381	86%	76%	12%	20	60-130
DDT	0	0.5	0.422	0.360	84%	72%	16%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provide

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) Note: This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolwy Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Soil
 Instrument: GC

Date: 5/29/99
 Sample #: IE02645
 Batch #: IE26PE1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	55	20	72.9	89.0	90%	170%	20%	50	20-145
DDD	0	20	54.2	64.1	271%	321%	17%	30	50-130
DDT	130	20	130	164	0%	170%	23%	30	20-160

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91408 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795 0043 FAX (480) 795 0851

LABORATORY CONTROL SAMPLE

EPA METHOD 8081

DATE: 5/29/99
 BATCH: IE26PE1S

Analyte	St	LCS	PR
	ppb	ppb	%
DDE	20	20.8	104%
DDD	20	21.3	107%
DDT	20	22.3	112%

Definition of Terms:

- St. Standard Concentration
- LCS. Laboratory Control Sample Result
- PR. Percent Recovery of LCS; $(LCS/St) \times 100$

QA/QC CRITERIA: QA/QC is within acceptance limits.

Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91408 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0051

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E25 #16

Associated Samples: PIE01217

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
Endrin	1	120
DDD	1	119
DDT	1	118
Endosulfan Sulfate	1	119
Methoxychlor	1	125

- The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
 All samples that were ND for this compound were unaffected and reported unqualified.
- The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
 An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Calton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 5/25/99
 Sample #: LCS/LCSD*
 Batch #: IE24PE1W

Analyte							Acceptance Limits		
	R1	Sp	MS	MSD	PR1	PR2	RPD	RPD	PR1/PR2
	ppb	ppb	ppb	ppb	%	%	%	%	%
AR 1016	0	4.0	2.65	2.62	66%	66%	1%	≤ 50	60-140%
AR 1260	0	4.0	2.76	2.72	69%	68%	1%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-1043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 5/27/99
 Sample #: IE03235
 Batch #: IE26PE1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
PCB 1016 (Arochlor)	0	160	162	180	101%	113%	11%	50	60-140
PCB 1260 (Arochlor)	0	160	180	198	113%	124%	10%	50	60-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)

This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

GC CALIBRATION CHECK CRITERIA

Method: 8082
QC Batch: E27 #45

Associated Samples: PIE01217

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
PCB 1016	1	122

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/25/99
 Sample #: PIE01235
 Batch #: IE25021W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	22.0	23.0	88%	92%	4%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	24.0	24.0	96%	96%	0.0%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	24.0	24.0	96%	96%	0.0%	≤ 20	80-135%
Chloroform	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	80-135%
1,2-Dichloroethane	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	80-130%
Benzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-135%
Trichloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-130%
Toluene	0.0	25	26.0	26.0	104%	104%	0.0%	≤ 20	75-135%
Tetrachloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	70-135%
Chlorobenzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Soil
 Instrument: GCMS

Date: 05/24/99
 Sample #: PIE01263
 Batch #: IE20MS1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	500	334	324	67%	65%	3.0%	≤ 112	0-100%
1,1-Dichloroethene	0.0	500	436	445	87%	89%	2.0%	≤ 20	70-125%
1,1-Dichloroethane	0.0	500	423	428	85%	86%	1.2%	≤ 20	75-115%
Chloroform	0.0	500	448	460	90%	92%	2.6%	≤ 26	75-120%
1,2-Dichloroethane	0.0	500	444	477	89%	95%	7.2%	≤ 20	70-115%
Benzene	0.0	500	460	469	92%	94%	1.9%	≤ 20	80-120%
Trichloroethene	0.0	500	480	477	96%	95%	0.6%	≤ 20	75-120%
Toluene	0.0	500	477	490	95%	98%	2.7%	≤ 20	80-125%
Tetrachloroethene	0.0	500	475	492	95%	98%	3.5%	≤ 20	75-120%
Chlorobenzene	0.0	500	476	472	95%	94%	1%	≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

✓QC Criteria..... All QA/QC recoveries were within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/28/99
 Sample #: LCS/LCSD*
 Batch #: IE24SE2W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.1	50	49	49	98%	98%	0%	15	40-110
2-Chlorophenol	0.0	50	45	45	90%	90%	0%	15	40-110
1,4-Dichlorobenzene	0.0	50	42	43	84%	86%	2%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50	54	54	108%	108%	0%	20	45-120
1,2,4-Trichlorobenzene	0.0	50	47	51	94%	102%	8%	15	44-110
2-Chloro-3-methylphenol	0.0	50	53	54	106%	108%	2%	20	50-115
Acenaphthene	0.0	50	51	54	102%	108%	6%	15	50-115
2,4-Dinitrotoluene	0.0	50	56	56	112%	112%	0%	15	55-120
4-Nitrophenol	0.0	50	54	52	108%	104%	4%	15	45-120
Pentachlorophenol	0.0	50	55	57	110%	114%	4%	20	50-125
Pyrene	0.0	50	51	55	102%	110%	8%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

JQC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/25/99
 Sample #: IE02608
 Batch #: IE24SE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.1	50.0	34.0	32.0	68%	64%	6%	20	30-110
2-Chlorophenol	0.0	50.0	33.0	31.0	66%	62%	6%	25	30-110
1,4-Dichlorobenzene	0.0	50.0	28.0	26.0	56%	52%	7%	30	25-110
N-Nitroso-di-n-propylamine	0.0	50.0	33.0	34.0	66%	68%	3%	20	35-110
1,2,4-Trichlorobenzene	0.0	50.0	34.0	29.0	68%	58%	16%	25	30-110
2-Chloro-3-methylphenol	0.0	50.0	37.0	36.0	74%	72%	3%	25	40-110
Acenaphthene	0.1	50.0	39.0	35.0	78%	70%	11%	15	35-110
2,4-Dinitrotoluene	0.0	50.0	45.0	44.0	90%	88%	2%	20	35-110
4-Nitrophenol	0.0	50.0	39.0	30.0	78%	60%	26%	25	15-135
Pentachlorophenol	0.0	50.0	41.0	38.0	82%	76%	8%	30	30-115
Pyrene	0.1	50.0	48.0	50.0	96%	100%	4%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

VQC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Del Mar Analytical (AZ0426)

This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cuddey Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0041 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 8270

DATE: 5/25/99

Analyte	St	R1	PR
	ppb	ppb	%
Phenol	50	38	76%
2-Chlorophenol	50	36	72%
1,4-Dichlorobenzene	50	35	70%
n-Nitroso-di-n-propylamine	50	40	80%
1,2,4-Trichlorobenzene	50	38	76%
4-Chloro-3-Methylphenol	50	46	92%
Acenaphthene	50	39	78%
2,4-Dinitrotoluene	50	43	86%
Nitrophenol	50	44	88%
1,2-Dichlorophenol	50	49	98%
Pyrene	50	48	96%

Definition of Terms:

St. Total of standard added to sample

R1. Standard Result

PR. Percent Recovery

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolidge Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0051

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/23/99
 Sample #: PIE00868

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Arsenic	0	1.0	1.46	1.21	146%	121%	18.7%	134%
Selenium	0	1.0	0.283	0.798	28%	80%	95.3%	54%
Thallium	0	1.0	1.65	0.372	165%	37%	126.4%	101%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LCS DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

DATE: 5/23/99

Analyte	St	LCS	PR
	ppm	ppm	%
Arsenic	1.0	1.18	118%
Selenium	1.0	1.13	113%
Thallium	1.0	1.18	118%

Definition of Terms:

- St. Standard Concentration
- LCS. Standard Result
- PR. Percent Recovery of LCS; $(LCS/St) \times 100$

Acceptance Limits LCS: 85-115%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/27/99
 Sample #: PIE01576

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Arsenic	0	1.0	1.02	1.04	102%	104%	1.9%	103%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
 MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

LCS DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

DATE: 5/24/99

Analyte	St	LCS	PR
	ppm	ppm	%
Antimony	1.0	1.20	120%

Definition of Terms:

- St. Standard Concentration
- LCS. Standard Result
- PR. Percent Recovery of LCS; $(LCS/St) \times 100$

Acceptance Limits LCS: 85-115%

QA/QC CRITERIA: See Case Narrative.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/21/99
 Sample #: PIE00868

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Beryllium	0	1.0	1.00	1.02	100%	102%	2.0%	101%
Cadmium	0	1.0	1.10	1.13	110%	113%	2.7%	112%
Chromium	0	1.0	0.913	0.949	91%	95%	3.9%	93%
Copper	0	1.0	0.904	0.986	90%	99%	8.7%	95%
Lead	0	1.0	1.110	1.16	111%	116%	4.4%	114%
Nickel	0	1.0	0.981	0.935	98%	94%	4.8%	96%
Selenium	0.314	1.0	1.31	1.45	100%	114%	10.1%	107%
Silver	0	0.05	0.0932	*	*	*	*	*
Zinc	0	1.0	0.426	0.565	43%	57%	28.1%	50%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91408 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

LCS DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

DATE: 5/21/99

Analyte	St	LCS	PR
	ppm	ppm	%
Silver	0.05	0.060	120%
Zinc	1.0	1.12	112%

Definition of Terms:

- St. Standard Concentration
- LCS. Standard Result
- PR. Percent Recovery of LCS; (LCS/St) X 100

Acceptance Limits LCS: 85-115%

QA/QC CRITERIA: See Case Narrative.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1844
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/26/99
 Sample #: PIE01118

Analyte

	MEAN							
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	1.59	50.0	24.2	19.3	45%	35%	22.5%	40%
Arsenic	5.36	50.0	47.0	46.8	83%	83%	0.4%	83%
Beryllium	0	50.0	36.3	36.2	73%	72%	0.3%	73%
Cadmium	2.55	50.0	38.9	39.4	73%	74%	1.3%	73%
Chromium	47.4	50.0	89.1	88.6	83%	82%	0.6%	83%
per	28.9	50.0	67.8	79.1	78%	100%	15.4%	89%
Lead	20.7	50.0	58.7	58.5	76%	76%	0.3%	76%
Nickel	42.0	50.0	81.2	83.4	78%	83%	2.7%	81%
Selenium	0	50.0	25.4	24.9	51%	50%	2.0%	50%
Silver	0	50.0	38.8	39.0	78%	78%	0.5%	78%
Thallium	3.91	50.0	36.5	39.4	65%	71%	7.6%	68%
Zinc	53.9	50.0	99.5	105	91%	102%	5.4%	97%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0951

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/26/99

Analyte	St	R1	PR
	ppm	ppm	%
Antimony	50.0	53.1	106%
Beryllium	50.0	46.8	94%
Cadmium	50.0	46.4	93%
Copper	50.0	47.1	94%
Lead	50.0	46.3	93%
Selenium	50.0	43.4	87%
Silver	50.0	45.3	91%
Thallium	50.0	45.0	90%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/26/99
 Sample #: PIE01158
 Batch #: IE26HG1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00455	0.00450	91%	90%	1.1%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limit.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 05/27/99
 Sample #: PIE01139
 Batch #: IE27HG1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
								%	%
Mercury	0.049	0.333	0.357	0.358	92%	93%	0%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



June 4, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30338

Dear Ms. Rice:

Two soil and two water samples for Project Number 'PIE01217.QST' were received May 21, 1999, in good condition. Written results are being provided on this June 4, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Water	PIE01217	79336w	05/19/99
Soil	PIE01218	79337s	05/19/99
Soil	PIE01219	79338s	05/19/99
Water	PIE01220	79339w	05/19/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jaime Wood

Project: PIE01217.QST

Sample ID: PIE01217

Sample Collection Date: 5/19/99

ARF: 30338

APPL ID AP79336

QCG: \$8141W-990525A-16838

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/25/99	5/29/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Def	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/25/99	5/29/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	86.1	60-150	%	5/25/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	81.2	76-140	%	5/25/99	5/29/99

Run #: 528028
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Jaime Wood

Project: PIE01217.QST

Sample ID: PIE01218

Sample Collection Date: 5/19/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30338

APPL ID AP79337

QCG: \$8141S-990524S-16850

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/24/99	5/29/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/24/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/24/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/24/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	93.9	51-154	%	5/24/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	88.6	63-151	%	5/24/99	5/29/99

Run #: 528046
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

J Mar Analytical
 9830 South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Jaime Wood

Project: PIE01217.QST

Sample ID: PIE01219

Sample Collection Date: 5/19/99

ARF: 30338

APPL ID AP79338

QCG: \$8141S-990524AS-16850

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/24/99	5/29/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/24/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/24/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/24/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/24/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/24/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	98.0	51-154	%	5/24/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	91.6	63-151	%	5/24/99	5/29/99

Run #: 528049
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141

I Mar Analytical
 9830 South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Jaime Wood
 Project: PIE01217.QST
 Sample ID: PIE01220
 Sample Collection Date: 5/19/99

ARF: 30338
 APPL ID AP79339
 QCG: \$8141W-990525A-16838

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/25/99	5/29/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Def	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/25/99	5/29/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	77.5	60-150	%	5/25/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	75.1 #	76-140	%	5/25/99	5/29/99

= Recovery is outside QC limits.

Run #: 528029
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8151 Herbicides

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jaime Wood

Project: PIE01217.QST

Sample ID: PIE01217

Sample Collection Date: 5/19/99

ARF: 30338

APPL ID AP79336

QCG: \$8151-990525B-16863

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
EPA 8151	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Surrogate Recovery	105	61-120	%	5/25/99	6/1/99

Run #: 83
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Jaime Wood

Project: PIE01217.QST

Sample ID: PIE01218

Sample Collection Date: 5/19/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30338

APPL ID AP79337

QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Surrogate recovery	139	93-141	%	5/25/99	5/27/99

Run #: 56
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

I Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Jaime Wood
Project: PIE01217.QST
Sample ID: PIE01219
Sample Collection Date: 5/19/99

ARF: 30338
APPL ID AP79338
QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Surrogate recovery	123	93-141	%	5/25/99	5/27/99

Run #: 57
Instrument: ECD01
Sequence: 990525 . .
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Mar Analytical

9830 South 51st. St., Ste B-120

Phoenix, AZ 85044

Attn: Jaime Wood

Project: PIE01217.QST

Sample ID: PIE01220

Sample Collection Date: 5/19/99

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

ARF: 30338

APPL ID AP79339

QCG: \$8151-990525B-16863

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
EPA 8151	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Surrogate Recovery	101	61-120	%	5/25/99	6/1/99

Run #: 85
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

Method Blank

EPA 8141

Blank Name/QCG: 990525W - 16838
 Batch ID: \$8141W-990525A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	5/25/99	5/29/99
BLANK	Bolstar	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Coumaphos	Not detected	1.0	ug/L	5/25/99	5/29/99
BLANK	Def	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Demeton-s	Not detected	1.0	ug/L	5/25/99	5/29/99
BLANK	Diazinon	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	5/25/99	5/29/99
BLANK	Dimethoate	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Disulfoton	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	EPN	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Ethion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Ethoprop	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	5/25/99	5/29/99
BLANK	Fenthion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Malathion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Merphos	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Mevinphos	Not detected	3.5	ug/L	5/25/99	5/29/99
BLANK	Naled	Not detected	2.5	ug/L	5/25/99	5/29/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Phorate	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Prowl	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Ronnel	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Stirophos	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Sulfotep	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Tepp	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Tokuthion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Trichloronate	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Trifluralin	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Surrogate: Tributylphosphate	81.1	60-150	%	5/25/99	5/29/99
BLANK	Surrogate: Triphenylphosphate	74.6#	76-140	%	5/25/99	5/29/99

= Recovery is outside QC limits.

Run #: 528024
Instrument: NPD03
Sequence: 990528
Initials: FML

Laboratory Control Spike - LCS

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: **990525A 79402W MS-1**
Date/Initials: 6/1/99 FML
Extraction Date: 5/25/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	2.50	*****	1.59	63.6
Diazinon	2.50	*****	2.47	98.6
Disulfoton	2.50	*****	1.43	57.4
Methyl parathion	2.50	*****	1.83	73.2
Stirophos	2.50	*****	2.06	82.3
Ethion	2.50	*****	1.80	71.8

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	5.00	*****	4.33	86.6
Triphenyl phosphat	5.00	*****	4.06	81.2

	Prim Col	Sec Col
	Spike	Spike
Analysis Date:	5/29/99	
Analysis Time:	5:08 AM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	27	
Extraction Ratio:	10/1000	
Dilution Factor:	1	

Comments:

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990525AW LCS/LCSD
Date/Initials: 3/4/99 FML
Extraction Date: 2/24/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate *	2.50	0.00	1.39	55.4	0.95	37.8	38
Diazinon	2.50	0.00	2.26	90.5	2.31	92.3	1.9
Disulfoton *	2.50	0.00	1.32	52.6	1.03	41.0	25
Methyl parathion	2.50	0.00	1.67	66.9	1.71	68.3	2.0
Stirophos	2.50	0.00	1.85	74.0	1.97	79.0	6.4
Ethion	2.50	0.00	1.63	65.2	1.73	69.1	5.9

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.08	81.6	4.05	81.1
Triphenyl phosphat	5.00	*****	3.88	77.6	4.03	80.6

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/29/99	5/29/99
Analysis Time:	3:53 AM	4:30 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	25	26
Extraction Ratio:	10/1000	10/1000
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments: * Disulfoton and Phorate for the LCSD are out of QC limits.

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank

EPA 8141 OP Pesticides

Blank Name/QCG: 990524S - 16850
 Batch ID: \$8141S-990524AS

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	5/24/99	5/29/99
BLANK	Bolstar	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Coumaphos	Not detected	100	ug/kg	5/24/99	5/29/99
BLANK	Def	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Demeton-s	Not detected	100	ug/kg	5/24/99	5/29/99
BLANK	Diazinon	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Dichlorvos	Not detected	100	ug/kg	5/24/99	5/29/99
BLANK	Dimethoate	Not detected	100	ug/kg	5/24/99	5/29/99
BLANK	Disulfoton	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	EPN	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Ethion	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Ethoprop	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Fensulfothion	Not detected	250	ug/kg	5/24/99	5/29/99
BLANK	Fenthion	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Malathion	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Merphos	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Mevinphos	Not detected	350	ug/kg	5/24/99	5/29/99
BLANK	Naled	Not detected	250	ug/kg	5/24/99	5/29/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Phorate	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Prowl	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Ronnel	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Stirophos	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Sulfotep	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	TEPP	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Tokuthion	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Trichloronate	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Trifluralin	Not detected	50	ug/kg	5/24/99	5/29/99
BLANK	Surrogate: Tributylphosphate	98.3	51-154	%	5/24/99	5/29/99
BLANK	Surrogate: Triphenylphosphate	96.2	63-151	%	5/24/99	5/29/99

Run #: 528039
Instrument: NPD03
Sequence: 990528
Initials: FML

Laboratory Control Spike - LCS

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141

APPL Sample #: 990524A LCS

Date/Initials: 6/1/99 FML

Extraction Date: 5/24/99

Matrix Type: SOIL

Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	83.3	*****	66.6	79.9
Diazinon	83.3	*****	93.7	112
Disulfoton	83.3	*****	77.1	92.6
Methyl parathion	83.3	*****	75.5	90.6
Stirophos	83.3	*****	84.7	102
Ethion	83.3	*****	68.4	82.0

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	167	*****	162	96.9
Triphenyl phosphate	167	*****	159	95.1

	Prim Col Spike	Sec Col Spike
Analysis Date:	5/29/99	
Analysis Time:	1:10 AM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	40	
Extraction Ratio:	10/30	
Dilution Factor:	1	

Comments:

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990524A 79279S MS/MSD
Date/Initials: 6/1/99 FML
Extraction Date: 5/24/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	65.5	78.5	63.8	76.6	2.5
Diazinon	83.3	0.000	95.5	115	95.4	115	0.0
Disulfoton	83.3	0.000	67.4	80.8	62.3	74.8	7.8
Methyl parathion	83.3	0.000	77.7	93.2	76.9	92.2	1.1
Stirophos	83.3	0.000	89.6	108	88.8	107	0.9
Ethion	83.3	0.000	69.3	83.2	69.3	83.1	0.0

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	-----	163	98.1	165	98.8
Triphenyl phosphat	167	-----	158	94.7	156	93.6

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/29/99	5/29/99
Analysis Time:	1:48 AM	2:25 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	41	42
Extraction Ratio:	10/30	10/30
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: **990525S - 16823**
Batch ID: **\$8151S-990525A**

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
BLANK	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
BLANK	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
BLANK	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
BLANK	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
BLANK	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
BLANK	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
BLANK	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
BLANK	Surrogate recovery	135	93-141	%	5/25/99	5/27/99

Run #: 50
Instrument: ECD01
Sequence: 990525
Initials: KW

Laboratory Control Spike Recovery
EPA 8151 HERBICIDE SOIL

APPL ID: 990525S-79337 LCS - 16823
Batch ID: \$8151S-990525A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/kg	SPK Result ug/kg	SPK % Recovery	Recovery Limits
2,4,5-T	200	235	118	77-148
2,4,5-TP	200	216	108	87-149
2,4-D	200	281	141	90-181
Dicamba	200	238	119	63-149
Dichlorprop (2,4-DP)	200	198	99.0	91-183
Dinoseb (DNBP)	200	252	126	71-167
Surrogate recovery	600	788	131	93-141

Comments: _____

Primary	SPK
Extraction Date :	5/25/99
Analysis Date :	5/27/99
Instrument :	ECD01
Run :	51
Analyst :	KW

Matrix Spike Recoveries

EPA 8151 HERBICIDE SOIL

APPL ID: 990525S-79337 MS/MSD - 16823
 Batch ID: S8151S-990525A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Lvl ug/kg	Matrix Result ug/kg	SPK Result ug/kg	DUP Result ug/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	200	ND	237	230	119	115	77-148	3.0	27
2,4,5-TP	200	ND	217	213	109	107	87-149	1.9	27
2,4-D	200	ND	286	274	143	137	90-181	4.3	27
Dicamba	200	ND	233	226	117	113	63-149	3.1	31
Dichlorprop (2,4-DP)	200	ND	198	195	99.0	97.5	91-183	1.5	37
Dinoseb (DNBP)	200	ND	239	230	120	115	71-167	3.8	NE
Surrogate recovery	600	NA	781	766	130	128	93-141		

IE = Not established.

Comments:

Primary	SPK	DUP
Extraction Date :	5/25/99	5/25/99
Analysis Date :	5/27/99	5/27/99
Instrument :	ECD01	ECD01
Run :	54	55
Analyst :	KW	

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990525W - 16863
Batch ID: S8151-990525B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
BLANK	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
BLANK	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	Surrogate recovery	105	61-120	%	5/25/99	6/1/99

Run #: 79
Instrument: ECD01
Sequence: 990525
Initials: KW

Laboratory Control Spike Recoveries
EPA 8151 Herbicides

APPL ID: 990525W-79336 LCS/LCSD - 16863
Batch ID: S8151-990525B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.872	0.897	87.2	89.7	53-134	2.8	32
2,4,5-TP	1.00	0.799	0.814	79.9	81.4	60-118	1.9	24
2,4-D	1.00	1.08	1.11	108	111	44-155	2.7	15
Dicamba	1.00	0.918	0.934	91.8	93.4	48-102	1.7	24
Diclorprop (2,4-DP)	1.00	0.735	0.746	73.5	74.6	37-146	1.5	18
Dinoseb (DNBP)	1.00	0.899	0.883	89.9	88.3	73-173	1.8	31

Surrogate: 2,4-DCAA	3.00	3.07	3.04	102	101	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/25/99	5/25/99
Analysis Date :	6/1/99	6/1/99
Instrument :	ECD01	ECD01
Run :	80	81
Analyst :	KW	

Matrix Spike Recovery
EPA 8151 Herbicides

APPL ID: 990525W-79336 MS - 16863
Batch ID: S8151-990525B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/L	Matrix Result ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4,5-T	1.11	ND	1.05	94.6	53-134
2,4,5-TP	1.11	ND	0.931	83.9	60-118
2,4-D	1.11	ND	1.34	121	44-155
Dicamba	1.11	ND	0.863	77.7	48-102
Dichlorprop (2,4-DP)	1.11	ND	1.01	91.0	37-146
Dinoseb (DNBP)	1.11	ND	1.02	91.9	73-173
Surrogate: 2,4-DCAA	3.33	NA	3.71	111	61-120

Comments: _____

Primary	SPK
Extraction Date :	5/25/99
Analysis Date :	6/1/99
Instrument :	ECD01
Run :	82



June 7, 1999

Service Request No: K9902987

Robyn Rice
Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Re: PIE00585.QST

Dear Robyn:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 1999. For your reference, these analyses have been assigned our service request number K9902987.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 280.

Respectfully submitted,

Columbia Analytical Services, Inc.

Les Kennedy
Project Chemist

LK/td

Page 1 of 12

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11-25/99
Date Received: 5/13-28/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Result
PIE00588	K9902987-001	0.05	0.19
PIE00765	K9902987-002	0.05	0.21
PIE01311	K9902987-004	0.05	ND
PIE01312	K9902987-005	0.05	0.28
PIE01492	K9902987-006	0.05	0.12
PIE01493	K9902987-007	0.05	0.09
PIE01670	K9902987-008	0.05	0.09
Method Blank	K9902987-MB	0.05	ND

Approved By: _____

Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

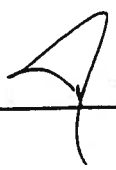
Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Sample Name	Lab Code	MRL	Result
PIE01220	K9902987-003	0.05	ND
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11/99
Date Received: 5/13/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE00588	K9902987-001DUP	0.05	0.19	0.22	0.20	15

Approved By: _____



Date: _____

6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
LCS Matrix: Soil

Service Request: K9902987
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 5/26/99

Laboratory Control Sample Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Carbon, Total Organic	0.62	0.68	110	85-115

Approved By: _____

LCS/102194

02987WET.LJ1 - LCS 6/4/99

Date: 6/4/99

00006
Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE01220	K9902987-003DUP	0.05	ND	ND	ND	-

Approved By: _____



Date: 6/4/99

CHAIN OF CUSTODY FORM

Client Name/Address: **ST ENVIRONMENTAL INC.** Project/PO Number: **ESTER, CARROLL**

**26 N. 4TH ST., SUITE 110
 MCKENIX, AZ**

669 9030

Analysis Required

Project Manager: **JOHN MICHELE**

Phone Number: **(602) 244-1142**

Analyst: **PATRICIA DRUPAL
 TEFF MARTIN**

Fax Number: **(602) 244-9280**

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	VOC SOG	SVOC SOG	Organics SOG	Pesticides	Metals	Nutrients	Microbiology	TOC	Special Instructions
ST-B11 (GW/TS) (5-19-99)	AQ	VARIOUS	13	5-19-99 12-36	NOA-1101 includes HNO ₃	2	2	2	2	1	2	2	2	Special Instructions (Large diagonal line through the table)
ST-B11 (S/UC) (5-11-99)	SOIL	EMERSON LABS	2	5-11-99 11-11	NOA-1101	1	1	1	1	1	1	1	1	
ST-B11 (S/US) (5-11-99)	SOIL	EMERSON LABS	2	5-11-99 11-11	NOA-1101	1	1	1	1	1	1	1	1	
ST-B34 (EN/DOYE) (5-17-99)	AQ	VARIOUS	14	5-17-99 15-00	NOA-1101 includes HNO ₃	2	2	2	2	1	2	2	2	
TRIP BLANK/B11	AQ	VOH	1	5-17-99 15-00	H ₂ O	1								
TRIP BLANK/R-34	AQ	VOH	1	5-17-99 15-00	H ₂ O	1								

Relinquished By: *[Signature]* Date/Time: **05/17/99 1605**

Received by: *[Signature]* Date/Time: _____

Turnaround Time: (Check)
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal

Relinquished By: *[Signature]* Date/Time: _____

Received by: *[Signature]* Date/Time: _____

Sample Integrity: (Check)
 intact on ice

Relinquished By: _____ Date/Time: _____ Received in Lab by: _____ Date/Time: _____

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Report Number: PIE01307

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: 5/21-6/3, 1999
 Analyzed: 5/24-6/3, 1999
 Reported: Jun 2-8, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01307	Trip Blank	Water	8260B
PIE01308	QST-B12(GW/55) (5-20-99)	Water	8260B, 8270, 8081A, 200.7, 245.1, 8082, 8141A & 8151
PIE01309	QST-B39(S/55) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A & 8151
PIE01310	QST-B12(S/45) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A & 8151
PIE01311	QST-B12(S/34) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A, 8151 & Walkly Black Method
PIE01312	QST-B12(S/50) (5-20-99)	Soil	8260B & Walkly Black Method
PIE01313	QST-B13(S/40) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A & 8151
PIE01314	QST-B38(S/50) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A & 8151
PIE01315	QST-B13(S/50) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A & 8151
PIE01316	QST-B37(S/25) (5-20-99)	Soil	8260B, 8270, 8081A, 6010B, 7471A, 8082, 8141A & 8151
PIE01317	QST-B13(GW/60) (5-20-99)	Water	8260B, 8270, 8081A, 200.7, 245.1, 8082, 8141A & 8151
PIE01318	Trip Blank	Water	8260B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. The TOC analysis was performed at Columbia Analytical Services. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Water, QST-B12(GW/55)(5-20-99)
 Lab Number: PIE01308

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)		
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
ndrin.....	0.10	.....	N.D.
ndrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	41%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B39(S/55)(5-20-99)
 Lab Number: PIE01309

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		$\mu\text{g/Kg}$ (ppb)
Aldrin.....	8.5	.....	N.D.
alpha-BHC.....	8.5	.....	N.D.
beta-BHC.....	8.5	.....	N.D.
delta-BHC.....	17	.....	N.D.
gamma-BHC (Lindane).....	8.5	.....	N.D.
Chlordane.....	170	.....	N.D.
4,4'-DDD.....	8.5	.....	N.D.
4,4'-DDE.....	8.5	.....	N.D.
4,4'-DDT.....	8.5	.....	N.D.
Dieldrin.....	8.5	.....	N.D.
Endosulfan I.....	8.5	.....	N.D.
Endosulfan II.....	8.5	.....	N.D.
Endosulfan sulfate.....	34	.....	N.D.
Endrin.....	8.5	.....	N.D.
Endrin aldehyde.....	8.5	.....	N.D.
Heptachlor.....	8.5	.....	N.D.
Heptachlor epoxide.....	8.5	.....	N.D.
Methoxychlor.....	8.5	.....	N.D.
Toxaphene.....	340	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.7.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <3 of 62>



Del Mar Analytical

2352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B12(S/45)(5-20-99)
 Lab Number: PIE01310

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		µg/Kg (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	84%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B12(S/34)(5-20-99)
 Lab Number: PIE01311

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
ndrin.....	5.0	.....	N.D.
drin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/40)(5-20-99)
 Lab Number: PIE01313

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)			µg/Kg (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	75%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1840
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-0506 FAX (619) 505-9689
 2830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B38(S/50)(5-20-99)
 Lab Number: PIE01314

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/50)(5-20-99)
 Lab Number: PIE01315

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aldrin.....	8.5	.....	N.D.
alpha-BHC.....	8.5	.....	N.D.
beta-BHC.....	8.5	.....	N.D.
delta-BHC.....	17	.....	N.D.
gamma-BHC (Lindane).....	8.5	.....	N.D.
Chlordane.....	170	.....	N.D.
4,4'-DDD.....	8.5	.....	N.D.
4,4'-DDE.....	8.5	.....	N.D.
4,4'-DDT.....	8.5	.....	N.D.
Dieldrin.....	8.5	.....	N.D.
Endosulfan I.....	8.5	.....	N.D.
Endosulfan II.....	8.5	.....	N.D.
Endosulfan sulfate.....	34	.....	N.D.
Endrin.....	8.5	.....	N.D.
Endrin aldehyde.....	8.5	.....	N.D.
Heptachlor.....	8.5	.....	N.D.
Heptachlor epoxide.....	8.5	.....	N.D.
Methoxychlor.....	8.5	.....	N.D.
Toxaphene.....	340	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.7.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-1043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B37(S/25)(5-20-99)
 Lab Number: PIE01316

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	89%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Water, QST-B13(GW/60)(5-20-99)
 Lab Number: PIE01317

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/L}$ (ppb)			$\mu\text{g/L}$ (ppb)
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	41%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Water, QST-B12(GW/55)(5-20-99)
 Lab Number: PIE01308

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/L}$ (ppb)			$\mu\text{g/L}$ (ppb)
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	36%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B39(S/55)(5-20-99)
 Lab Number: PIE01309

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		
Aroclor 1016.....	85	.....	N.D.(C)
Aroclor 1221.....	85	.....	N.D.
Aroclor 1232.....	85	.....	N.D.
Aroclor 1242.....	85	.....	N.D.
Aroclor 1248.....	85	.....	N.D.
Aroclor 1254.....	85	.....	N.D.
Aroclor 1260.....	85	.....	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.7.

EL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 14814 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B12(S/45)(5-20-99)
 Lab Number: PIE01310

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aroclor 1016.....	50	.....	N.D.(C)
Aroclor 1221.....	50	.....	N.D.
Aroclor 1232.....	50	.....	N.D.
Aroclor 1242.....	50	.....	N.D.
Aroclor 1248.....	50	.....	N.D.
Aroclor 1254.....	50	.....	N.D.
Aroclor 1260.....	50	.....	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.



DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B12(S/34)(5-20-99)
 Lab Number: PIE01311

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.(C)
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	94%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/40)(5-20-99)
 Lab Number: PIE01313

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	112%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <15 of 62>

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B38(S/50)(5-20-99)
 Lab Number: PIE01314

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.(C)
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	84%

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B13(S/50)(5-20-99)
 Lab Number: PIE01315

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aroclor 1016.....	85	.....	N.D.(C)
Aroclor 1221.....	85	.....	N.D.
Aroclor 1232.....	85	.....	N.D.
Aroclor 1242.....	85	.....	N.D.
Aroclor 1248.....	85	.....	N.D.
Aroclor 1254.....	85	.....	N.D.
Aroclor 1260.....	85	.....	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.7.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	97%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B37(S/25)(5-20-99)
 Lab Number: PIE01316

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)			$\mu\text{g/Kg}$ (ppb)
Aroclor 1016.....	50	.....	N.D.(C)
Aroclor 1221.....	50	.....	N.D.
Aroclor 1232.....	50	.....	N.D.
Aroclor 1242.....	50	.....	N.D.
Aroclor 1248.....	50	.....	N.D.
Aroclor 1254.....	50	.....	N.D.
Aroclor 1260.....	50	.....	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	92%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooky Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 18525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1840
 4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 385-0043 FAX (480) 385-0851

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Water, QST-B13(GW/60)(5-20-99)
 Lab Number: PIE01317

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/L}$ (ppb)		
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	36%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <19 of 62>



Del Mar Analytical

ST Environmental
6 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Water, Trip Blank
Lab Number: PIE01307

Sampled: May 20, 1999
Received: May 20, 1999
Extracted: May 27, 1999
Analyzed: May 27, 1999
Revised: Jun 22, 1999

3852 Allon Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Calton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	97%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	96%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <20 of 62>

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Water, QST-B12(GW/55)(5-20-99)
 Lab Number: PIE01308

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	15	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	3.9	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	96%
Toluene-d8 (75-140).....	95%
4-Bromofluorobenzene (75-135).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-1044 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B39(S/55)(5-20-99)
 Lab Number: PIE01309

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	80%
Toluene-d8 (50-135).....	83%
4-Bromofluorobenzene (70-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

JT Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
Sample Descript: Soil, QST-B12(S/45)(5-20-99)
Lab Number: PIE01310

Sampled: May 20, 1999
Received: May 20, 1999
Extracted: May 21, 1999
Analyzed: May 26, 1999
Reported: Jun 2, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1843
3414 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9889
4830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	79%
Toluene-d8 (50-135).....	81%
4-Bromofluorobenzene (70-130).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 785-0851

Del Mar Analytical
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B12(S/34)(5-20-99)
 Lab Number: PIE01311

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	79%
Toluene-d8 (50-135).....	84%
4-Bromofluorobenzene (70-130).....	79%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <24 of 62>



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B12(S/50)(5-20-99)
 Lab Number: PIE01312

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	75%
Toluene-d8 (50-135).....	78%
4-Bromofluorobenzene (70-130).....	74%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <25 of 62>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/40)(5-20-99)
 Lab Number: PIE01313

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	80%
Toluene-d8 (50-135).....	84%
4-Bromofluorobenzene (70-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <26 of 62>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cushman Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B38(S/50)(5-20-99)
 Lab Number: PIE01314

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	78%
Toluene-d8 (50-135).....	83%
4-Bromofluorobenzene (70-130).....	78%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/50)(5-20-99)
 Lab Number: PIE01315

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	73%
Toluene-d8 (50-135).....	77%
4-Bromofluorobenzene (70-130).....	71%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1844
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

EST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B37(S/25)(5-20-99)
 Lab Number: PIE01316

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 2, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	73%
Toluene-d8 (50-135).....	78%
4-Bromofluorobenzene (70-130).....	74%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <29 of 62>



Del Mar Analytical

Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
Sample Descript: Water, QST-B13(GW/60)(5-20)
Lab Number: PIE01317

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

Sampled: May 20, 1999
Received: May 20, 1999
Extracted: May 27, 1999
Analyzed: May 27, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	130	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	87%
Toluene-d8 (75-140).....	89%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

JT Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
Sample Descript: Water, Trip Blank
Lab Number: PIE01318

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

Sampled: May 20, 1999
Received: May 20, 1999
Extracted: May 27, 1999
Analyzed: May 27, 1999
Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	88%
Toluene-d8 (75-140).....	99%
4-Bromofluorobenzene (75-135).....	94%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2352 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1328
 1014 E. Cooliv Dr., Suite A, Colton, CA 92324 (909) 370 4867 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795 0043 FAX (480) 795 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Water, QST-B12(GW/55)(5-20-99)
 Lab Number: PIE01308

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene..	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine..	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.(L)
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	66%
Phenol-d6 (40-115).....	68%
2,4,6-Tribromophenol (40-140).....	89%
Nitrobenzene-d5 (35-120).....	77%
2-Fluorobiphenyl (30-150).....	70%
Terphenyl-d14 (45-150).....	96%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B39(S/55)(5-20-99)
 Lab Number: PIE01309

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	75%
Phenol-d6 (35-110).....	78%
2,4,6-Tribromophenol (40-110).....	98%
Nitrobenzene-d5 (30-110).....	80%
2-Fluorobiphenyl (40-110).....	83%
Terphenyl-d14 (45-110).....	110%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B12(S/45)(5-20-99)
 Lab Number: PIE01310

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	58%
Phenol-d6 (35-110).....	57%
2,4,6-Tribromophenol (40-110).....	69%
Nitrobenzene-d5 (30-110).....	61%
2-Fluorobiphenyl (40-110).....	60%
Terphenyl-d14 (45-110).....	85%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779 1344 FAX (818) 779 1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9506 FAX (619) 505 9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B12(S/34)(5-20-99)
 Lab Number: PIE01311

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	67%
Phenol-d6 (35-110).....	67%
2,4,6-Tribromophenol (40-110).....	82%
Nitrobenzene-d5 (30-110).....	71%
2-Fluorobiphenyl (40-110).....	70%
Terphenyl-d14 (45-110).....	98%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/40)(5-20-99)
 Lab Number: PIE01313

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 25, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	72%
Phenol-d6 (35-110).....	69%
2,4,6-Tribromophenol (40-110).....	74%
Nitrobenzene-d5 (30-110).....	75%
2-Fluorobiphenyl (40-110).....	74%
Terphenyl-d14 (45-110).....	91%



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795 0043 FAX (480) 795 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B38(S/50)(5-20-99)
 Lab Number: PIE01314

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 25, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	69%
Phenol-d6 (35-110).....	68%
2,4,6-Tribromophenol (40-110).....	85%
Nitrobenzene-d5 (30-110).....	76%
2-Fluorobiphenyl (40-110).....	78%
Terphenyl-d14 (45-110).....	101%



Del Mar Analytical

2952 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolidge Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/50)(5-20-99)
 Lab Number: PIE01315

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 25, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	58%
Phenol-d6 (35-110).....	57%
2,4,6-Tribromophenol (40-110).....	81%
Nitrobenzene-d5 (30-110).....	59%
2-Fluorobiphenyl (40-110).....	58%
Terphenyl-d14 (45-110).....	82%

Robyn Rice
 Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B37(S/25)(5-20-99)
 Lab Number: PIE01316

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 25, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	64%
Phenol-d6 (35-110).....	68%
2,4,6-Tribromophenol (40-110).....	84%
Nitrobenzene-d5 (30-110).....	68%
2-Fluorobiphenyl (40-110).....	71%
Terphenyl-d14 (45-110).....	97%

Robyn Rice
 Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735 0043 FAX (480) 735 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Water, QST-B13(GW/60)(5-20-99)
 Lab Number: PIE01317

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene..	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine..	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.(L)
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	69%
Phenol-d6 (40-115).....	69%
2,4,6-Tribromophenol (40-140).....	88%
Nitrobenzene-d5 (35-120).....	83%
2-Fluorobiphenyl (30-150).....	81%
Terphenyl-d14 (45-150).....	101%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Water, QST-B12(GW/55)(5-20-99)
 Lab Number: PIE01308

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 24-26, 1999
 Analyzed: May 24-26, 1999
 Reported: Jun 2, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.(L)	05/24/99	05/24/99
Arsenic.....	EPA 200.7	0.050	0.40	05/24/99	05/24/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/24/99	05/24/99
Cadmium.....	EPA 200.7	0.0050	0.017	05/24/99	05/24/99
Chromium.....	EPA 200.7	0.010	0.40	05/24/99	05/24/99
Copper.....	EPA 200.7	0.020	1.9	05/24/99	05/24/99
Lead.....	EPA 200.7	0.050	0.39	05/24/99	05/24/99
Mercury.....	EPA 245.1	0.00020	0.0012	05/26/99	05/26/99
Nickel.....	EPA 200.7	0.050	1.8	05/24/99	05/26/99
Selenium.....	EPA 200.7	0.060	N.D.	05/24/99	05/24/99
Silver.....	EPA 200.7	0.050	N.D.	05/24/99	05/24/99
Thallium.....	EPA 200.7	0.050	0.10	05/24/99	05/24/99
Vanadium.....	EPA 200.7	0.050	0.52	05/24/99	05/24/99

L= Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B39(S/55)(5-20-99)
 Lab Number: PIE01309

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	1.0	05/27/99	05/28/99
Chromium.....	EPA 6010B	2.0	28	05/27/99	05/28/99
Copper.....	EPA 6010B	2.5	17	05/27/99	05/28/99
Lead.....	EPA 6010B	2.5	3.7	05/27/99	05/28/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	11	05/27/99	05/28/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/28/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/28/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
C.....	EPA 6010B	2.5	16	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B12(S/45)(5-20-99)
 Lab Number: PIE01310

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	1.1	05/27/99	05/28/99
Chromium.....	EPA 6010B	2.0	22	05/27/99	05/28/99
Copper.....	EPA 6010B	2.5	16	05/27/99	05/28/99
Lead.....	EPA 6010B	2.5	4.6	05/27/99	05/28/99
Mercury.....	EPA 7471A	0.020	0.021	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	12	05/27/99	05/28/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/28/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/28/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
TC.....	EPA 6010B	2.5	16	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution.
 Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1344 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 405, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B12(S/34)(5-20-99)
 Lab Number: PIE01311

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	1.4	05/27/99	05/28/99
Chromium.....	EPA 6010B	2.0	19	05/27/99	05/28/99
Copper.....	EPA 6010B	2.5	30	05/27/99	05/28/99
Lead.....	EPA 6010B	2.5	4.8	05/27/99	05/28/99
Mercury.....	EPA 7471A	0.020	0.029	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	19	05/27/99	05/28/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/28/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/28/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/28/99
Zinc.....	EPA 6010B	2.5	46	05/27/99	05/28/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution.
 Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2952 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1020
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B13(S/40)(5-20-99)
 Lab Number: PIE01313

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	1.1	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	14	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	9.3	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	3.4	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	12	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Zinc.....	EPA 6010B	2.5	18	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B38(S/50)(5-20-99)
 Lab Number: PIE01314

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	7.0	05/27/99	05/29/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	1.3	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	15	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	6.7	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	3.9	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	13	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Zinc.....	EPA 6010B	2.5	17	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution.
 Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1841
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030

Sample Descript: Soil, QST-B13(S/50)(5-20-99)
 Lab Number: PIE01315

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: May 27, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	6.0	05/27/99	05/29/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	0.98	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	26	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	42	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	3.0	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	N.D.	05/27/99	05/27/99
Nickel.....	EPA 6010B	2.5	11	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Zinc.....	EPA 6010B	2.5	31	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <47 of 62>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1220
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Soil, QST-B37(S/25)(5-20-99)
 Lab Number: PIE01316

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: 5/27-6/3, 1999
 Analyzed: 5/29-6/3, 1999
 Reported: Jun 2, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	6.5	05/27/99	05/29/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	0.96	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	26	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	20	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	3.9	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	N.D.	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	11	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Vanadium.....	EPA 6010B	2.5	35	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <48 of 62>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

DT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 669 9030
 Sample Descript: Water, QST-B13(GW/60)(5-20-99)
 Lab Number: PIE01317

Sampled: May 20, 1999
 Received: May 20, 1999
 Extracted: 5/26-6/1, 1999
 Analyzed: 5/27-6/1, 1999
 Reported: Jun 2, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Arsenic.....	EPA 200.7	0.050	0.074	05/26/99	05/27/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/26/99	05/27/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/26/99	05/27/99
Chromium.....	EPA 200.7	0.010	0.46	05/26/99	05/27/99
Copper.....	EPA 200.7	0.020	0.21	05/26/99	05/27/99
Lead.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Mercury.....	EPA 245.1	0.00020	0.00041	06/01/99	06/01/99
Nickel.....	EPA 200.7	0.050	0.22	05/26/99	05/27/99
Selenium.....	EPA 200.7	0.060	N.D.	05/26/99	05/27/99
Silver.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Thallium.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
.....	EPA 200.7	0.050	0.13	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <49 of 62>



Del Mar Analytical

2852 Allan Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1221
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 8, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	63%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9586 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0247 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 26, 1999
 Analyzed: May 29, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	90%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cochry Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		$\mu\text{g/Kg}$ (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	79%



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 24, 1999
 Analyzed: May 25, 1999
 Reported: Jun 8, 1999
 Matrix: Water

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	71%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g/Kg}$ (ppb)		
Aroclor 1016.....	50	.....	N.D.
Aroclor 1221.....	50	.....	N.D.
Aroclor 1232.....	50	.....	N.D.
Aroclor 1242.....	50	.....	N.D.
Aroclor 1248.....	50	.....	N.D.
Aroclor 1254.....	50	.....	N.D.
Aroclor 1260.....	50	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	71%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Del Mar Analytical
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	100%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Revised: Jun 22, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)


 Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	85%
Toluene-d8 (75-140).....	100%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1344 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 395-0043 FAX (480) 395-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 21, 1999
 Analyzed: May 25, 1999
 Reported: Jun 2, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropane.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	83%
Toluene-d8 (50-135).....	85%
4-Bromofluorobenzene (70-130).....	82%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01307.QST <57 of 62>

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 24, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene..	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine..	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	68%
Phenol-d6 (40-115).....	69%
2,4,6-Tribromophenol (40-140).....	83%
Nitrobenzene-d5 (35-120).....	77%
2-Fluorobiphenyl (30-150).....	77%
Terphenyl-d14 (45-150).....	101%

Robyn Rice
 Project Manager

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Method Blank

Extracted: May 24, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	80%
Phenol-d6 (35-110).....	85%
2,4,6-Tribromophenol (40-110).....	87%
Nitrobenzene-d5 (30-110).....	81%
2-Fluorobiphenyl (40-110).....	84%
Terphenyl-d14 (45-110).....	82%

Robyn Rice
 Project Manager

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 25, 1999
 Analyzed: May 26, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	80%
Phenol-d6 (35-110).....	82%
2,4,6-Tribromophenol (40-110).....	92%
Nitrobenzene-d5 (30-110).....	81%
2-Fluorobiphenyl (40-110).....	76%
Terphenyl-d14 (45-110).....	98%



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolwy Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

.T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: 5/24-6/1, 1999
 Analyzed: 5/24-6/1, 1999
 Reported: Jun 8, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 24-27, 1999
Arsenic.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 24-27, 1999
Beryllium.....	EPA 200.7	0.0050	N.D.	May 24-26, 1999	May 24-27, 1999
Cadmium.....	EPA 200.7	0.0050	N.D.	May 24-26, 1999	May 24-27, 1999
Chromium.....	EPA 200.7	0.010	N.D.	May 24-26, 1999	May 24-27, 1999
Copper.....	EPA 200.7	0.020	N.D.	May 24-26, 1999	May 24-27, 1999
Lead.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 24-27, 1999
Mercury.....	EPA 245.1	0.00020	N.D.	5/26-6/1, 1999	5/26-6/1, 1999
Nickel.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 26-27, 1999
Selenium.....	EPA 200.7	0.060	N.D.	May 24-26, 1999	May 24-27, 1999
Silver.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 24-27, 1999
Thallium.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 24-27, 1999
Zinc.....	EPA 200.7	0.050	N.D.	May 24-26, 1999	May 24-27, 1999

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: 5/27-6/3, 1999
 Analyzed: 5/27-6/3, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	May 28-29, 1999
Arsenic.....	EPA 6010B	5.0	N.D.	05/27/99	May 28-29, 1999
Beryllium.....	EPA 6010B	0.50	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	N.D.	05/27/99	May 28-29, 1999
Chromium.....	EPA 6010B	2.0	N.D.	05/27/99	May 28-29, 1999
Copper.....	EPA 6010B	2.5	N.D.	05/27/99	May 28-29, 1999
Lead.....	EPA 6010B	2.5	N.D.	05/27/99	May 28-29, 1999
Mercury.....	EPA 7471A	0.020	N.D.	5/27-6/3, 1999	5/27-6/3, 1999
Nickel.....	EPA 6010B	2.5	N.D.	05/27/99	May 28-29, 1999
Selenium.....	EPA 6010B	10	N.D.	05/27/99	May 28-29, 1999
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	May 28-29, 1999
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	May 28-29, 1999
Zinc.....	EPA 6010B	2.5	N.D.	05/27/99	May 28-29, 1999

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Water
 Instrument: GC

Date: 5/25/99
 Sample #: LCS/LCSD*
 Batch #: IE24PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
DDE	0	0.500	0.407	0.342	81%	68%	17%	40	55-125
DDD	0	0.500	0.431	0.381	86%	76%	12%	20	60-130
DDT	0	0.500	0.422	0.360	84%	72%	16%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Soil
 Instrument: GC

Date: 5/29/99
 Sample #: IE02645
 Batch #: IE26PE1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	55	20	72.9	89.0	90%	170%	20%	50	20-145
DDD	0	20	34.2	64.1	171%	321%	61%	30	50-130
DDT	130	20	130	164	0%	170%	23%	30	20-160

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD 8081

DATE: 5/29/99
 BATCH: IE26PE1S

Analyte

DDE
 DDD
 DDT

St	LCS	PR
<u>ppb</u>	<u>ppb</u>	<u>%</u>
20	20.8	104%
20	21.3	107%
20	22.3	112%

Definition of Terms:

- St. Standard Concentration
 LCS. Laboratory Control Sample Result
 PR. Percent Recovery of LCS; $(LCS/St) \times 100$

QA/QC CRITERIA: QA/QC is within acceptance limits.**Del Mar Analytical**



MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Soil
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD*
 Batch #: IF01PE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
DDE	0	20	17.0	16.7	85%	84%	2%	50	20-145
DDD	0	20	18.4	18.0	92%	90%	2%	30	50-130
DDT	0	20	18.6	18.4	93%	92%	1%	30	20-160

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.





Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 95044 (480) 795-0043 FAX (480) 785-0851

GC CALIBRATION CHECK CRITERIA

Method: 8081A
 QC Batch: E25 #31

Associated Samples: PIE01307

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
D-BHC	1	120
Endrin	1	125
DDD	1	125
Endosulfan II	1	116
Endosulfan Sulfate	1	128
Methoxychlor	1	123
Endrin Ketone	1	122

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result. All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result. An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

GC CALIBRATION CHECK CRITERIA

Method: 8081A
QC Batch: E25 #16

Associated Samples: PIE01307

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

<u>Compound</u>	<u>Footnote</u>	<u>% Recovery in Calibration Check</u>
Endrin	1	120
DDD	1	119
DDT	1	118
Endosulfan Sulfate	1	119
Methoxychlor	1	125

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result.
All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result.
An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 5/25/99
 Sample #: LCS/LCSD*
 Batch #: IE24PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
AR 1016	0	4.0	2.65	2.62	66%	66%	1%	≤ 50	60-140%
AR 1260	0	4.0	2.76	2.72	69%	68%	1%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC criteria was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 5/27/99
 Sample #: IE03235
 Batch #: IE26PE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
PCB 1016 (Arochlor)	0	160	162	180	101%	113%	11%	50	60-140
PCB 1260 (Arochlor)	0	160	180	198	113%	124%	10%	50	60-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Calton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD
 Batch #: IF01PE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
PCB 1016 (Arochlor)	0	160	127	138	79%	86%	8%	50	60-140
PCB 1260 (Arochlor)	0	160	123	130	77%	81%	6%	50	60-140

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/27/99
 Sample #: PIE01673
 Batch #: IE27021W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	21.0	22.0	84%	88%	5%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	20.0	24.0	80%	96%	18.2%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	24.0	24.0	96%	96%	0.0%	≤ 20	80-135%
Chloroform	6.0	25	31.0	30.0	100%	96%	3.3%	≤ 20	80-135%
1,2-Dichloroethane	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	80-130%
Benzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-135%
Trichloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-130%
Toluene	0.0	25	23.0	26.0	92%	104%	12.2%	≤ 20	75-135%
Tetrachloroethene	0.0	25	26.0	25.0	104%	100%	3.9%	≤ 20	70-135%
Chlorobenzene	0.0	25	27.0	26.0	108%	104%	3.8%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Soil
 Instrument: GCMS

Date: 05/26/99
 Sample #: PIE01382
 Batch #: IE21MS1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	500	363	323	73%	65%	11.7%	≤ 112	0-100%
1,1-Dichloroethene	0.0	500	495	478	99%	96%	3.5%	≤ 20	70-125%
1,1-Dichloroethane	0.0	500	464	466	93%	93%	0.4%	≤ 20	75-115%
Chloroform	0.0	500	471	466	94%	93%	1.1%	≤ 26	75-120%
1,2-Dichloroethane	0.0	500	409	393	82%	79%	4.0%	≤ 20	70-115%
Benzene	0.0	500	540	538	108%	108%	0.4%	≤ 20	80-120%
Trichloroethene	0.0	500	430	446	86%	89%	3.7%	≤ 20	75-120%
Toluene	0.0	500	505	512	101%	102%	1.4%	≤ 20	80-125%
Tetrachloroethene	0.0	500	403	410	81%	82%	1.7%	≤ 20	75-120%
Chlorobenzene	0.0	500	431	428	86%	86%	1%	≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

QA/QC Criteria..... All QA/QC recoveries were within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/28/99
 Sample #: LCS/LCSD*
 Batch #: IE24SE2W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.1	50	49	49	98%	98%	0%	15	40-110
2-Chlorophenol	0.0	50	45	45	90%	90%	0%	15	40-110
1,4-Dichlorobenzene	0.0	50	42	43	84%	86%	2%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50	54	54	108%	108%	0%	20	45-120
1,2,4-Trichlorobenzene	0.0	50	47	51	94%	102%	8%	15	44-110
2-Chloro-3-methylphenol	0.0	50	53	54	106%	108%	2%	20	50-115
Acenaphthene	0.0	50	51	54	102%	108%	6%	15	50-115
2,4-Dinitrotoluene	0.0	50	56	56	112%	112%	0%	15	55-120
4-Nitrophenol	0.0	50	54	52	108%	104%	4%	15	45-120
Pentachlorophenol	0.0	50	55	57	110%	114%	4%	20	50-125
Pyrene	0.0	50	51	55	102%	110%	8%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/25/99
 Sample #: IE02608
 Batch #: IE24SE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.1	50.0	34.0	32.0	68%	64%	6%	20	30-110
2-Chlorophenol	0.0	50.0	33.0	31.0	66%	62%	6%	25	30-110
1,4-Dichlorobenzene	0.0	50.0	28.0	26.0	56%	52%	7%	30	25-110
N-Nitroso-di-n-propylamine	0.0	50.0	33.0	34.0	66%	68%	3%	20	35-110
1,2,4-Trichlorobenzene	0.0	50.0	34.0	29.0	68%	58%	16%	25	30-110
Chloro-3-methylphenol	0.0	50.0	37.0	36.0	74%	72%	3%	25	40-110
Acenaphthene	0.1	50.0	39.0	35.0	78%	70%	11%	15	35-110
2,4-Dinitrotoluene	0.0	50.0	45.0	44.0	90%	88%	2%	20	35-110
4-Nitrophenol	0.0	50.0	39.0	30.0	78%	60%	26%	25	15-135
Pentachlorophenol	0.0	50.0	41.0	38.0	82%	76%	8%	30	30-115
Pyrene	0.1	50.0	48.0	50.0	96%	100%	4%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

A/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 8270

DATE: 5/25/99

Analyte

Analyte	St	R1	PR
	ppb	ppb	%
Phenol	50	38	76%
2-Chlorophenol	50	36	72%
1,4-Dichlorobenzene	50	35	70%
n-Nitroso-di-n-propylamine	50	40	80%
1,2,4-Trichlorobenzene	50	38	76%
4-Chloro-3-Methylphenol	50	46	92%
Acenaphthene	50	39	78%
2,4-Dinitrotoluene	50	43	86%
Nitrophenol	50	44	88%
1,2,4-Trichlorophenol	50	49	98%
1,2,4-Trichlorobenzene	50	48	96%

Definition of Terms:

St. Total of standard added to sample

R1. Standard Result

PR. Percent Recovery

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/27/99
 Sample #: IE02953
 Batch #: IE25SE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.0	50.0	44.0	41.0	88%	82%	7%	20	30-110
2-Chlorophenol	0.0	50.0	40.0	35.0	80%	70%	13%	25	30-110
1,4-Dichlorobenzene	0.0	50.0	33.0	31.0	66%	62%	6%	30	25-110
N-Nitroso-di-n-propylamine	0.0	50.0	47.0	42.0	94%	84%	11%	20	35-110
1,2,4-Trichlorobenzene	0.0	50.0	39.0	37.0	78%	74%	5%	25	30-110
Chloro-3-methylphenol	0.0	50.0	47.0	46.0	94%	92%	2%	25	40-110
Benzenaphthene	0.0	50.0	42.0	39.0	84%	78%	7%	15	35-110
2,4-Dinitrotoluene	0.0	50.0	45.0	43.0	90%	86%	5%	20	35-110
4-Nitrophenol	0.0	50.0	51.0	48.0	102%	96%	6%	25	15-135
Pentachlorophenol	0.0	50.0	49.0	41.0	98%	82%	18%	30	30-115
Pyrene	0.0	50.0	47.0	40.0	94%	80%	16%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC is within acceptance limits.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/24/99
 Sample #: PIE01390

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.22	1.21	122%	121%	0.8%	122%
Arsenic	0	1.0	1.10	1.09	110%	109%	0.9%	110%
Beryllium	0	1.0	1.04	1.06	104%	106%	1.9%	105%
Cadmium	0	1.0	0.940	0.949	94%	95%	1.0%	94%
Chromium	0	1.0	0.962	0.973	96%	97%	1.1%	97%
Copper	0.0614	1.0	1.10	1.12	104%	106%	1.8%	105%
Lead	0	1.0	1.01	0.998	101%	100%	1.2%	100%
Selenium	0	1.0	1.06	1.05	106%	105%	0.9%	106%
Silver	0	0.05	0.0534	0.0541	107%	108%	1.3%	108%
Thallium	0	1.0	0.936	0.928	94%	93%	0.9%	93%
ic	0.146	1.0	1.16	1.17	101%	102%	0.9%	102%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1048
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/27/99
 Sample #: PIE01576

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.15	1.17	115%	117%	1.7%	116%
Arsenic	0	1.0	1.02	1.04	102%	104%	1.9%	103%
Beryllium	0	1.0	1.05	1.05	105%	105%	0.0%	105%
Cadmium	0	1.0	0.997	1.02	100%	102%	2.3%	101%
Chromium	0	1.0	1.00	1.01	100%	101%	1.0%	101%
Copper	0	1.0	0.976	0.993	98%	99%	1.7%	98%
Lead	0	1.0	1.00	1.02	100%	102%	2.0%	101%
Nickel	0	1.0	0.972	0.985	97%	99%	1.3%	98%
Selenium	0	1.0	1.03	1.05	103%	105%	1.9%	104%
Silver	0	0.05	0.0536	0.0535	107%	107%	0.2%	107%
Sodium	0	1.0	0.978	0.976	98%	98%	0.2%	98%
Zinc	0	1.0	1.02	1.04	102%	104%	1.9%	103%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 06/01/99
 Sample #: PIE01961
 Batch #: IF01HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00516	0.00511	103%	102%	1.0%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limit.



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/26/99
 Sample #: PIE01158
 Batch #: IE26HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00455	0.00450	91%	90%	1.1%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

- QA/QC Criteria..... All QA/QC was within acceptance limit.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/28/99

Analyte	St	R1	PR
	ppm	ppm	%
Antimony	50.0	51	102%
Selenium	50.0	43.1	86%
Silver	50.0	48.9	98%
Thallium	50.0	43.6	87%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/28/99
 Sample #: PIE01425

Analyte	MEAN							
	R1 ppm	SP ppm	MS ppm	MSD ppm	PR1 %	PR2 %	RPD %	PR %
Antimony	3.44	50.0	31.1	30.7	55%	55%	1.3%	55%
Arsenic	7.0	50.0	49.4	49.1	85%	84%	0.6%	85%
Beryllium	0	50.0	38.6	38.4	77%	77%	0.5%	77%
Cadmium	2.40	50.0	40.9	41.0	77%	77%	0.2%	77%
Chromium	47.3	50.0	92.7	97.0	91%	99%	4.5%	95%
Copper	60.4	50.0	63.6	65.1	6%	9%	2.3%	8%
Lead	19.7	50.0	60.3	61.5	81%	84%	2.0%	82%
Selenium	0	50.0	27.6	29.5	55%	59%	6.7%	57%
Silver	0	50.0	41.9	40.1	84%	80%	4.4%	82%
Thallium	3.27	50.0	36.1	38.1	66%	70%	5.4%	68%
Zinc	84.8	50.0	105	109	40%	48%	3.7%	44%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 5/28/99

Analyte	St	R1	PR
<u> </u>	<u>ppm</u>	<u>ppm</u>	<u>%</u>
Selenium	50.0	43.6	87%

**Definition of Terms:**

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)





Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

DATE: 5/28/99

Analyte	St	R1	PR
	ppm	ppm	%
Antimony	50.0	52.6	105%
Copper	50.0	49.0	98%
Thallium	50.0	44.7	89%
Zinc	50.0	46.4	93%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 06/03/99
 Sample #: PIE01642
 Batch #: IF03HG1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0.053	0.333	0.330	0.332	83%	84%	1%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-1951

LCS DATA REPORT

METHOD: 7471A
 MATRIX: Soil

DATE: 6/3/99

Analyte	Sp	LCS	PR
	ppm	ppm	%
Mercury	0.00200	0.00200	100%

Definition of Terms:

- Sp..... Standard Concentration
- LCS..... Laboratory Control Sample Result
- PR..... Percent Recovery of LCS; (LCS/Sp) X 100

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 05/27/99
 Sample #: PIE01139
 Batch #: IE27HG1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0.049	0.333	0.357	0.358	92%	93%	0%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



June 3, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30342

Dear Ms. Rice:

Seven soil and two water samples for Project Number 'PIE0307.QST' were received May 24, 1999, in good condition. Written results are being provided on this June 3, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Water	PIE01308	79365w	05/20/99
Soil	PIE01309	79366s	05/20/99
Soil	PIE01310	79367s	05/20/99
Soil	PIE01311	79368s	05/20/99
Soil	PIE01313	79369s	05/20/99
Soil	PIE01314	79370s	05/20/99
Soil	PIE01315	79371s	05/20/99
Soil	PIE01316	79372s	05/20/99
Water	PIE01317	79373w	05/20/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141

Mar Analytical
100 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01308

Sample Collection Date: 5/20/99

ARF: 30342

APPL ID AP79365

CCG: \$8141W-990525A-16838

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/25/99	5/29/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Def	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/25/99	5/29/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Prowi	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	86.8	60-150	%	5/25/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	76.5	76-140	%	5/25/99	5/29/99

Run #: 528037
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

Printed: 6/1/99 3:14:55 PM

EPA 8141 OP Pesticides

Del Mar Analytical
 30 South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Robyn Rice
 Project: PIE0307.QST
 Sample ID: PIE01309
 Sample Collection Date: 5/20/99

ARF: 30342
 APPL ID AP79366
 CQG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/29/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	98.8	51-154	%	5/26/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	96.7	63-151	%	5/26/99	5/29/99

Run #: 528054
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Mar Analytical
100 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice
Project: PIE0307.QST
Sample ID: PIE01310
Sample Collection Date: 5/20/99

ARF: 30342
APPL ID AP79367
QCG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/29/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	93.1	51-154	%	5/26/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	88.7	63-151	%	5/26/99	5/29/99

Run #: 528055
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Mar Analytical
30 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice
Project: PIE0307.QST
Sample ID: PIE01311
Sample Collection Date: 5/20/99

ARF: 30342
APPL ID AP79368
QCG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/29/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	80.9	51-154	%	5/26/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	68.7	63-151	%	5/26/99	5/29/99

Run #: 528056
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Del Mar Analytical
10 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01313

Sample Collection Date: 5/20/99

ARF: 30342

APPL ID AP79369

QCG: S8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/29/99
EPA 8141	Boistar	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Fensulfotion	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	103	51-154	%	5/26/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	94.5	63-151	%	5/26/99	5/29/99

Run #: 528057
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

Printed: 6/1/99 12:44:25 PM

EPA 8141 OP Pesticides

Mel Mar Analytical
 30 South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01314

Sample Collection Date: 5/20/99

ARF: 30342

APPL ID AP79370

QCG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/29/99
EPA 8141	Boistar	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/29/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/29/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	99.7	51-154	%	5/26/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	95.0	63-151	%	5/26/99	5/29/99

Run #: 528058
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

Printed: 6/1/99 12:44:25 PM

EPA 8141 OP Pesticides

Mar Analytical
30 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01315

Sample Collection Date: 5/20/99

ARF: 30342

APPL ID AP79371

QCG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/30/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/30/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Surrogate: Tributylphosphate	83.1	51-154	%	5/26/99	5/30/99
EPA 8141	Surrogate: Triphenylphosphate	79.0	63-151	%	5/26/99	5/30/99

Run #: 528061
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

Printed: 6/1/99 12:44:25 PM

EPA 8141 OP Pesticides

Pl Mar Analytical
 J South 51st. St., Ste B-120
 Phoenix, AZ 85044

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01316

Sample Collection Date: 5/20/99

ARF: 30342

APPL ID AP79372

CCG: S8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/30/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/30/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Surrogate: Tributylphosphate	90.4	51-154	%	5/26/99	5/30/99
EPA 8141	Surrogate: Triphenylphosphate	88.1	63-151	%	5/26/99	5/30/99

Run #: 528062
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

Printed: 6/1/99 12:44:28 PM

EPA 8141

Del Mar Analytical
30 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01317

Sample Collection Date: 5/20/99

ARF: 30342

APPL ID AP79373

CGC: \$8141W-990525A-16838

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/25/99	5/29/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Def	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/25/99	5/29/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/25/99	5/29/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/25/99	5/29/99
EPA 8141	Surrogate: Tributylphosphate	72.3	60-150	%	5/25/99	5/29/99
EPA 8141	Surrogate: Triphenylphosphate	68.1 #	76-140	%	5/25/99	5/29/99

Recovery is outside QC limits.

Run #: 528038
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

Printed: 6/1/99 3:14:55 PM

EPA 8151 Herbicides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01308

Sample Collection Date: 5/20/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79365

QCG: \$8151-990525B-16863

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
EPA 8151	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Surrogate Recovery	100	61-120	%	5/25/99	6/1/99

Run #: 86
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01309

Sample Collection Date: 5/20/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79366

QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Surrogate recovery	134	93-141	%	5/25/99	5/27/99

Run #: 58
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

Printed: 8/14/99 11:58:41 AM

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120

Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01310

Sample Collection Date: 5/20/99

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

ARF: 30342

APPL ID AP79367

QCG: S8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Surrogate recovery	133	93-141	%	5/25/99	5/27/99

Run #: 59
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01311

Sample Collection Date: 5/20/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79368

QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Surrogate recovery	127	93-141	%	5/25/99	5/27/99

Run #: 60
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice
Project: PIE0307.QST
Sample ID: PIE01313
Sample Collection Date: 5/20/99

ARF: 30342
APPL ID AP79369
QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
EPA 8151	Surrogate recovery	126	93-141	%	5/25/99	5/27/99

Run #: 61
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Del Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01315

Sample Collection Date: 5/20/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79371

QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/28/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/28/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/28/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/28/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/28/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/28/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/28/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	Surrogate recovery	126	93-141	%	5/25/99	5/28/99

Run #: 63
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01314

Sample Collection Date: 5/20/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79370

QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/28/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/28/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/28/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/28/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/28/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/28/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/28/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	Surrogate recovery	126	93-141	%	5/25/99	5/28/99

Run #: 62
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

I Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01316

Sample Collection Date: 5/20/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79372

QCG: \$8151S-990525A-16823

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/25/99	5/28/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/25/99	5/28/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/25/99	5/28/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/28/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/28/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/25/99	5/28/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/25/99	5/28/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/28/99
EPA 8151	Surrogate recovery	123	93-141	%	5/25/99	5/28/99

Run #: 64
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE0307.QST

Sample ID: PIE01317

Sample Collection Date: 5/20/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30342

APPL ID AP79373

QCG: \$8151-990525B-16863

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
EPA 8151	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
EPA 8151	Surrogate Recovery	110	61-120	%	5/25/99	6/1/99

Run #: 87
Instrument: ECD01
Sequence: 990525 ..
Dilution Factor: 1
Initials: KW

Method Blank

EPA 8141 OP Pesticides

Blank Name/QCG: 990526S - 16828
 Batch ID: \$8141S-990526A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	5/26/99	5/29/99
BLANK	Bolstar	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Coumaphos	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Def	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Demeton-s	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Diazinon	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Dichlorvos	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Dimethoate	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Disulfoton	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	EPN	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Ethion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Ethoprop	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Fensulfothion	Not detected	250	ug/kg	5/26/99	5/29/99
BLANK	Fenthion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Malathion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Merphos	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Mevinphos	Not detected	350	ug/kg	5/26/99	5/29/99
BLANK	Naled	Not detected	250	ug/kg	5/26/99	5/29/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Phorate	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Prowl	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Ronnel	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Stirophos	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Sulfotep	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	TEPP	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Tokuthion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Trichloronate	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Trifluralin	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Surrogate: Tributylphosphate	101	51-154	%	5/26/99	5/29/99
BLANK	Surrogate: Triphenylphosphate	95.7	63-151	%	5/26/99	5/29/99

Run #: 528050
Instrument: NPD03
Sequence: 990528
Initials: FML

Laboratory Control Spike - LCS

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
 APPL Sample #: 990526AS LCS
 Date/Initials: 6/1/99 FML
 Extraction Date: 5/26/99
 Matrix Type: SOIL
 Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	83.3	*****	65.5	78.6
Diazinon	83.3	*****	97.8	117
Disulfoton	83.3	*****	69.1	82.9
Methyl parathion	83.3	*****	77.3	92.8
Stirophos	83.3	*****	85.6	103
Ethion	83.3	*****	71.5	85.8

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	167	*****	170	102
Triphenyl phosphat	167	*****	158	95.0

	Prim Col	Sec Col
	Spike	Spike
Analysis Date:	5/29/99	
Analysis Time:	8:01 PM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	51	
Extraction Ratio:	10/30	
Dilution Factor:	1	

Comments:

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990526A 79396S MS/MSD
Date/Initials: 6/1/99 FML
Extraction Date: 5/26/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	63.6	76.3	62.7	75.3	1.3
Diazinon	83.3	0.000	91.2	109	92.6	111	1.5
Disulfoton	83.3	0.000	70.9	85.1	62.4	74.8	13
Methyl parathion	83.3	0.000	68.1	81.7	71.4	85.7	4.7
Stirophos	83.3	0.000	82.1	98.5	84.2	101	2.6
Ethion	83.3	0.000	66.3	79.6	66.1	79.4	0.3

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	157	94.3	155	93.1
Triphenyl phosphatate	167	*****	148	88.6	147	88.4

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/30/99	5/29/99
Analysis Time:	5:18 AM	9:15 PM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	66	53
Extraction Ratio:	10/30	10/30
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank

EPA 8141

Blank Name/QCG: 990525W - 16838
 Batch ID: \$8141W-990525A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	5/25/99	5/29/99
BLANK	Bolstar	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Coumaphos	Not detected	1.0	ug/L	5/25/99	5/29/99
BLANK	Def	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Demeton-s	Not detected	1.0	ug/L	5/25/99	5/29/99
BLANK	Diazinon	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	5/25/99	5/29/99
BLANK	Dimethoate	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Disulfoton	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	EPN	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Ethion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Ethoprop	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	5/25/99	5/29/99
BLANK	Fenthion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Malathion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Merphos	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Mevinphos	Not detected	3.5	ug/L	5/25/99	5/29/99
BLANK	Naled	Not detected	2.5	ug/L	5/25/99	5/29/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Phorate	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Prowl	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Ronnel	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Stirophos	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Sulfotep	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Tepp	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Tokuthion	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Trichloronate	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Trifluralin	Not detected	0.50	ug/L	5/25/99	5/29/99
BLANK	Surrogate: Tributylphosphate	81.1	60-150	%	5/25/99	5/29/99
BLANK	Surrogate: Triphenylphosphate	74.6#	76-140	%	5/25/99	5/29/99

= Recovery is outside QC limits.

Run #: 528024
Instrument: NPD03
Sequence: 990528
Initials: FML

Laboratory Control Spike - LCS

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

EPA Method #: 8141
 APPL Sample #: **990525A 79402W MS-1**
 Date/Initials: 6/1/99 FML
 Extraction Date: 5/25/99
 Matrix Type: Water
 Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	2.50	*****	1.59	63.6
Diazinon	2.50	*****	2.47	98.6
Disulfoton	2.50	*****	1.43	57.4
Methyl parathion	2.50	*****	1.83	73.2
Stirophos	2.50	*****	2.06	82.3
Ethion	2.50	*****	1.80	71.8

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	5.00	*****	4.33	86.6
Triphenyl phosphatate	5.00	*****	4.06	81.2

	Prim Col	Sec Col
	Spike	Spike
Analysis Date:	5/29/99	
Analysis Time:	5:08 AM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	27	
Extraction Ratio:	10/1000	
Dilution Factor:	1	

Comments:

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990525AW LCS/LCSD
Date/Initials: 3/4/99 FML
Extraction Date: 2/24/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate *	2.50	0.00	1.39	55.4	0.95	37.8	38
Diazinon	2.50	0.00	2.26	90.5	2.31	92.3	1.9
Disulfoton *	2.50	0.00	1.32	52.6	1.03	41.0	25
Methyl parathion	2.50	0.00	1.67	66.9	1.71	68.3	2.0
Stirophos	2.50	0.00	1.85	74.0	1.97	79.0	6.4
Ethion	2.50	0.00	1.63	65.2	1.73	69.1	5.9

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.08	81.6	4.05	81.1
Triphenyl phosphate	5.00	*****	3.88	77.6	4.03	80.6

	Primary Column	
	Spike	Spk Dup
Analysis Date:	5/29/99	5/29/99
Analysis Time:	3:53 AM	4:30 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	25	26
Extraction Ratio:	10/1000	10/1000
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments: * Disulfoton and Phorate for the LCSD are out of QC limits.

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: 990525S - 16823
Batch ID: \$8151S-990525A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	5/25/99	5/27/99
BLANK	Dalapon	Not detected	2000	ug/kg	5/25/99	5/27/99
BLANK	2,4-DB	Not detected	400	ug/kg	5/25/99	5/27/99
BLANK	Dicamba	Not detected	40	ug/kg	5/25/99	5/27/99
BLANK	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/25/99	5/27/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	5/25/99	5/27/99
BLANK	MCPA	Not detected	40000	ug/kg	5/25/99	5/27/99
BLANK	MCPP	Not detected	40000	ug/kg	5/25/99	5/27/99
BLANK	2,4,5-T	Not detected	40	ug/kg	5/25/99	5/27/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	5/25/99	5/27/99
BLANK	Surrogate recovery	135	93-141	%	5/25/99	5/27/99

Run #: 50
Instrument: ECD01
Sequence: 990525
Initials: KW

Laboratory Control Spike Recovery
EPA 8151 HERBICIDE SOIL

APPL ID: 990525S-79337 LCS - 16823
Batch ID: S8151S-990525A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/kg	SPK Result ug/kg	SPK % Recovery	Recovery Limits
2,4,5-T	200	235	118	77-148
2,4,5-TP	200	216	108	87-149
2,4-D	200	281	141	90-181
Dicamba	200	238	119	63-149
Dichlorprop (2,4-DP)	200	198	99.0	91-183
Dinoseb (DNBP)	200	252	126	71-167
Surrogate recovery	600	788	131	93-141

Comments: _____

Primary	SPK
Extraction Date :	5/25/99
Analysis Date :	5/27/99
Instrument :	ECD01
Run :	51
Analyst :	KW

Matrix Spike Recoveries

EPA 8151 HERBICIDE SOIL

APPL ID: 990525S-79337 MS/MSD - 16823
 Batch ID: \$8151S-990525A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Lvl ug/kg	Matrix Result ug/kg	SPK Result ug/kg	DUP Result ug/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	200	ND	237	230	119	115	77-148	3.0	27
2,4,5-TP	200	ND	217	213	109	107	87-149	1.9	27
2,4-D	200	ND	286	274	143	137	90-181	4.3	27
Dicamba	200	ND	233	226	117	113	63-149	3.1	31
Dichlorprop (2,4-DP)	200	ND	198	195	99.0	97.5	91-183	1.5	37
Dinoseb (DNBP)	200	ND	239	230	120	115	71-167	3.8	NE
Surrogate recovery	600	NA	781	766	130	128	93-141		

IE = Not established.

Comments:

Primary	SPK	DUP
Extraction Date :	5/25/99	5/25/99
Analysis Date :	5/27/99	5/27/99
Instrument :	ECD01	ECD01
Run :	54	55
Analyst :	KW	

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990525W - 16863
Batch ID: \$8151-990525B

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/25/99	6/1/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/25/99	6/1/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/25/99	6/1/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/25/99	6/1/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/25/99	6/1/99
BLANK	MCPA	Not detected	100	ug/L	5/25/99	6/1/99
BLANK	MCPP	Not detected	100	ug/L	5/25/99	6/1/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/25/99	6/1/99
BLANK	Surrogate recovery	105	61-120	%	5/25/99	6/1/99

Run #: 79
Instrument: ECD01
Sequence: 990525
Initials: KW

Laboratory Control Spike Recoveries

EPA 8151 Herbicides

APPL ID: 990525W-79336 LCS/LCSD - 16863
 Batch ID: S8151-990525B

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.872	0.897	87.2	89.7	53-134	2.8	32
2,4,5-TP	1.00	0.799	0.814	79.9	81.4	60-118	1.9	24
2,4-D	1.00	1.08	1.11	108	111	44-155	2.7	15
Dicamba	1.00	0.918	0.934	91.8	93.4	48-102	1.7	24
Dichlorprop (2,4-DP)	1.00	0.735	0.746	73.5	74.6	37-146	1.5	18
Dinoseb (DNBP)	1.00	0.899	0.883	89.9	88.3	73-173	1.8	31

Surrogate: 2,4-DCAA	3.00	3.07	3.04	102	101	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/25/99	5/25/99
Analysis Date :	6/1/99	6/1/99
Instrument :	ECD01	ECD01
Run :	80	81
Analyst :	KW	

Matrix Spike Recovery

EPA 8151 Herbicides

APPL ID: 990525W-79336 MS - 16863
 Batch ID: \$8151-990525B

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Level ug/L	Matrix Result ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4,5-T	1.11	ND	1.05	94.6	53-134
2,4,5-TP	1.11	ND	0.931	83.9	60-118
2,4-D	1.11	ND	1.34	121	44-155
Dicamba	1.11	ND	0.863	77.7	48-102
Diclorprop (2,4-DP)	1.11	ND	1.01	91.0	37-146
Dinoseb (DNBP)	1.11	ND	1.02	91.9	73-173
<hr style="border-top: 1px dashed black;"/>					
Surrogate: 2,4-DCAA	3.33	NA	3.71	111	61-120
<hr style="border-top: 1px dashed black;"/>					

Comments: _____

Primary	SPK
Extraction Date :	5/25/99
Analysis Date :	6/1/99
Instrument :	ECD01
Run :	82
Analyst :	KW



June 7, 1999

Service Request No: K9902987

Robyn Rice
Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Re: PIE00585.QST

Dear Robyn:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 1999. For your reference, these analyses have been assigned our service request number K9902987.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 280.

Respectfully submitted,

Columbia Analytical Services, Inc.

Les Kennedy
Project Chemist

LK/td

Page 1 of 12

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11-25/99
Date Received: 5/13-28/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Result
PIE00588	K9902987-001	0.05	0.19
PIE00765	K9902987-002	0.05	0.21
PIE01311	K9902987-004	0.05	ND
PIE01312	K9902987-005	0.05	0.28
PIE01492	K9902987-006	0.05	0.12
PIE01493	K9902987-007	0.05	0.09
PIE01670	K9902987-008	0.05	0.09
Method Blank	K9902987-MB	0.05	ND

Approved By: _____

Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

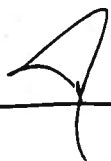
Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Sample Name	Lab Code	MRL	Result
PIE01220	K9902987-003	0.05	ND
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: _____

5/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11/99
Date Received: 5/13/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE00588	K9902987-001DUP	0.05	0.19	0.22	0.20	15

Approved By: _____



Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
LCS Matrix: Soil

Service Request: K9902987
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 5/26/99

Laboratory Control Sample Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Carbon, Total Organic	0.62	0.68	110	85-115

Approved By: _____

LCS/102194

02987WET.LJ1 - LCS 6/4/99

Date: 6/4/99

00006
Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE01220	K9902987-003DUP	0.05	ND	ND	ND	-

Approved By: _____



Date: 6/4/99

CHAIN OF CUSTODY FORM

Name/Address: STE ENVIRONMENTAL INC.
 2 N. 44TH ST, SUITE 110
 PHOENIX, AZ
Project/PO Number: 65185 ENVIRONMENTAL
 00991080

Client Manager: JOHN MILLER
Phone Number: (602) 241-1192
Client Rep: PATRICIA A DEKSAI
Fax Number: (602) 241-9250

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Analysis Required										Special Instructions	
						SOB	SOB	SOB	SOB	SOB	SOB	SOB	SOB	SOB	SOB		SOB
TRIP BLANK	ASX	VCA	1	5-11-99	HOI	/	/	/	/	/	/	/	/	/	/	/	
B12(6W/55)(5-20-99)	ASX	VAR	15	5-20-99 0:150	VCA HOI HOI HOI	/	/	/	/	/	/	/	/	/	/	/	
B39(S/55)(5-20-99)	SOIL	ENVIR PRES.	3	5-20-99 1910	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B12(S/45)(5-20-99)	SOIL	ENVIR PRES.	3	5-20-99 840	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B12(S/3A)(5-20-99)	SOIL	ENVIR PRES.	3	5-20-99 0310	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B12(S/50)(5-20-99)	SOIL	ENVIR PRES.	2	5-20-99 0310	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B13(S/16)(5-20-99)	SOIL	ENVIR PRES.	3	5-20-99 1915	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B36(S/50)(5-20-99)	SOIL	ENVIR PRES.	3	5-20-99 1215	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B13(S/40)(5-20-99)	SOIL	ENVIR PRES.	3	5-20-99 1440	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B37(S/25)(5-20-99)	SOIL	ENVIR PRES.	2	5-20-99 1200	ENVIR	/	/	/	/	/	/	/	/	/	/	/	
B13(6W/50)(5-20-99)	ASX	VAR	15	5-20-99 15:00	VCA HOI HOI HOI	/	/	/	/	/	/	/	/	/	/	/	
B13(6W/1A)	ASX	VAR	1	5-11-99	VCA	/	/	/	/	/	/	/	/	/	/	/	

Relinquished By: _____ **Date /Time:** _____ **Received by:** _____ **Date /Time:** _____ **Turnaround Time: (Check)**
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal _____

Relinquished By: _____ **Date /Time:** _____ **Received by:** _____ **Date /Time:** _____ **Sample Integrity: (Check)**
 intact _____ on ice _____

By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 6699030

Report Number: PIE01388

Sampled: May 21, 1999
 Received: May 21, 1999
 Extracted: May 21, 1999
 Analyzed: May 25-26, 1999
 Reported: Jun 1, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01388	EW-26-(S/10) -5-21-99	Soil	8260B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

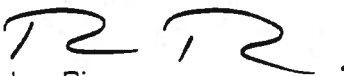
PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

EL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill 6699030
 Sample Descript: Soil, EW-26-(S/10)-5-21-99
 Lab Number: PIE01388

Sampled: May 21, 1999
 Received: May 21, 1999
 Extracted: May 21, 1999
 Analyzed: May 26, 1999
 Reported: Jun 1, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1,200	N.D.	1,3-Dichloropropane.....	120	N.D.
Benzene.....	120	N.D.	2,2-Dichloropropane.....	120	N.D.
Bromobenzene.....	300	N.D.	1,1-Dichloropropene.....	120	N.D.
Bromochloromethane.....	300	N.D.	cis-1,3-Dichloropropene.....	120	N.D.
Bromodichloromethane.....	120	N.D.	trans-1,3-Dichloropropene....	120	N.D.
Bromoform.....	300	N.D.	Ethylbenzene.....	120	N.D.
Bromomethane.....	300	N.D.	Hexachlorobutadiene.....	300	N.D.
2-Butanone (MEK).....	600	N.D.	2-Hexanone.....	600	N.D.
n-Butylbenzene.....	300	N.D.	Iodomethane.....	120	N.D.
sec-Butylbenzene.....	300	N.D.	Isopropylbenzene.....	120	N.D.
tert-Butylbenzene.....	300	N.D.	p-Isopropyltoluene.....	120	N.D.
Carbon Disulfide.....	300	N.D.	Methylene chloride.....	600	N.D.
Carbon tetrachloride.....	300	N.D.	4-Methyl-2-pentanone (MIBK).....	600	N.D.
Chlorobenzene.....	120	N.D.	Methyl-tert-butyl ether (MTBE).....	300	N.D.
Chloroethane.....	300	N.D.	Naphthalene.....	300	N.D.
2-Chloroethyl vinyl ether.....	300	N.D.	n-Propylbenzene.....	120	N.D.
Chloroform.....	120	N.D.	Styrene.....	120	N.D.
Chloromethane.....	300	N.D.	1,1,1,2-Tetrachloroethane....	300	N.D.
2-Chlorotoluene.....	300	N.D.	1,1,2,2-Tetrachloroethane....	120	N.D.
4-Chlorotoluene.....	300	N.D.	Tetrachloroethene.....	120	N.D.
Dibromochloromethane.....	120	N.D.	Toluene.....	120	N.D.
1,2-Dibromo-3-chloropropane.....	300	N.D.	1,2,3-Trichlorobenzene.....	300	N.D.
1,2-Dibromoethane (EDB).....	120	N.D.	1,2,4-Trichlorobenzene.....	300	N.D.
Dibromomethane.....	120	N.D.	1,1,1-Trichloroethane.....	120	N.D.
1,2-Dichlorobenzene.....	120	N.D.	1,1,2-Trichloroethane.....	120	N.D.
1,3-Dichlorobenzene.....	120	N.D.	Trichloroethene.....	120	N.D.
1,4-Dichlorobenzene.....	120	N.D.	Trichlorofluoromethane.....	300	N.D.
Dichlorodifluoromethane.....	300	N.D.	1,2,3-Trichloropropane.....	600	N.D.
1,1-Dichloroethane.....	120	N.D.	1,2,4-Trimethylbenzene.....	120	370
1,2-Dichloroethane.....	120	N.D.	1,3,5-Trimethylbenzene.....	120	140
1,1-Dichloroethene.....	300	N.D.	Vinyl acetate.....	300	N.D.
cis-1,2-Dichloroethene.....	120	N.D.	Vinyl chloride.....	300	N.D.
trans-1,2-Dichloroethene.....	120	N.D.	Xylenes (Total).....	360	N.D.
1,2-Dichloropropane.....	120	N.D.			

*Due to sample matrix effects, the surrogate recovery was outside acceptance limits.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.2.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	62%*
Toluene-d8 (50-135).....	67%*
4-Bromofluorobenzene (70-130).....	64%*



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 7830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 21, 1999
 Analyzed: May 25, 1999
 Reported: Jun 1, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene....	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	83%
Toluene-d8 (50-135).....	85%
4-Bromofluorobenzene (70-130).....	82%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Soil
 Instrument: GCMS

Date: 05/26/99
 Sample #: PIE01382
 Batch #: IE21MS1S

Acceptance Limits

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
Vinyl Chloride	0.0	500	363	323	73%	65%	11.7%	≤ 112	0-100%
1,1-Dichloroethene	0.0	500	495	478	99%	96%	3.5%	≤ 20	70-125%
1,1-Dichloroethane	0.0	500	464	466	93%	93%	0.4%	≤ 20	75-115%
Chloroform	0.0	500	471	466	94%	93%	1.1%	≤ 26	75-120%
1,2-Dichloroethane	0.0	500	409	393	82%	79%	4.0%	≤ 20	70-115%
Benzene	0.0	500	540	538	108%	108%	0.4%	≤ 20	80-120%
Trichloroethene	0.0	500	430	446	86%	89%	3.7%	≤ 20	75-120%
Toluene	0.0	500	505	512	101%	102%	1.4%	≤ 20	80-125%
Tetrachloroethene	0.0	500	403	410	81%	82%	1.7%	≤ 20	75-120%
Chlorobenzene	0.0	500	431	428	86%	86%	1%	≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

QA/QC Criteria..... All QA/QC was within acceptance limits.

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill/6699030
 Report Number: PIE01492

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: 5/26-6/3, 1999
 Analyzed: 5/27-6/3, 1999
 Reported: Jun 7-8, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01492	EW-26-(S/40) -5-24-99	Soil	8260B & Walkly Black Method
PIE01493	EW-26-(S/50) -5-24-99	Soil	8260B & Walkly Black Method
PIE01494	EW-25-(S/35) -5-24-99	Soil	8260B, 8270, 6010B, 7471A, 8081A, 8082, 8141A & 8151
PIE01495	EW-25-(S/45) -5-24-99	Soil	8260B, 8270, 6010B, 7471A, 8081A, 8082, 8141A & 8151

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. The TOC analysis was performed at Columbia Analytical Services. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Tilton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779 1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505 9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0851

Environmental
 160 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill/6699030

Sample Descript: Soil, EW-25-(S/35)-5-24-99
 Lab Number: PIE01494

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 27, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)			µg/Kg (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

*See Corrective Action Report.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):
Tetrachloro-m-xylene (30-130)..... *

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 405-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill/6699030
 Sample Descript: Soil, EW-25-(S/45)-5-24-99
 Lab Number: PIE01495

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 27, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)		
Aldrin.....	5.0		N.D.
alpha-BHC.....	5.0		N.D.
beta-BHC.....	5.0		N.D.
delta-BHC.....	10		N.D.
gamma-BHC (Lindane).....	5.0		N.D.
Chlordane.....	100		N.D.
4,4'-DDD.....	5.0		N.D.
4,4'-DDE.....	5.0		N.D.
4,4'-DDT.....	5.0		N.D.
Dieldrin.....	5.0		N.D.
Endosulfan I.....	5.0		N.D.
Endosulfan II.....	5.0		N.D.
Endosulfan sulfate.....	20		N.D.
Endrin.....	5.0		N.D.
Endrin aldehyde.....	5.0		N.D.
Heptachlor.....	5.0		N.D.
Heptachlor epoxide.....	5.0		N.D.
Methoxychlor.....	5.0		N.D.
Toxaphene.....	200		N.D.

*See Corrective Action Report.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):
Tetrachloro-m-xylene (30-130)..... *

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030
 Sample Descript: Soil, EW-25-(S/35)-5-24-99
 Lab Number: PIE01494

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

*See Corrective Action Report.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):
Decachlorobiphenyl (30-130)..... *

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030
 Sample Descript: Soil, EW-25-(S/45)-5-24-99
 Lab Number: PIE01495

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 1830 South 51st St., Suite B, 120, Phoenix, AZ 85044 (480) 385 0043 FAX (480) 385 0851

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

*See Corrective Action Report.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):
Decachlorobiphenyl (30-130)..... *

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



2952 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1020
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 770 1844 FAX (818) 770 1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 985 0043 FAX (480) 985 0851

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030
 Sample Descript: Soil, EW-26-(S/40)-5-24-99
 Lab Number: PIE01492

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 7, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1,100	N.D.	1,3-Dichloropropane.....	110	N.D.
Benzene.....	110	N.D.	2,2-Dichloropropane.....	110	N.D.
Bromobenzene.....	280	N.D.	1,1-Dichloropropene.....	110	N.D.
Bromochloromethane.....	280	N.D.	cis-1,3-Dichloropropene.....	110	N.D.
Bromodichloromethane.....	110	N.D.	trans-1,3-Dichloropropene...	110	N.D.
Bromoform.....	280	N.D.	Ethylbenzene.....	110	N.D.
Bromomethane.....	280	N.D.	Hexachlorobutadiene.....	280	N.D.
2-Butanone (MEK).....	550	N.D.	2-Hexanone.....	550	N.D.
n-Butylbenzene.....	280	N.D.	Iodomethane.....	110	N.D.
sec-Butylbenzene.....	280	N.D.	Isopropylbenzene.....	110	N.D.
tert-Butylbenzene.....	280	N.D.	p-Isopropyltoluene.....	110	N.D.
Carbon Disulfide.....	280	N.D.	Methylene chloride.....	550	N.D.
Carbon tetrachloride.....	280	N.D.	4-Methyl-2-pentanone (MIBK).....	550	N.D.
Chlorobenzene.....	110	N.D.	Methyl-tert-butyl ether (MTBE).....	280	N.D.
Chloroethane.....	280	N.D.	Naphthalene.....	280	N.D.
2-Chloroethyl vinyl ether.....	280	N.D.	n-Propylbenzene.....	110	N.D.
Chloroform.....	110	N.D.	Styrene.....	110	N.D.
Chloromethane.....	280	N.D.	1,1,1,2-Tetrachloroethane....	280	N.D.
2-Chlorotoluene.....	280	N.D.	1,1,2,2-Tetrachloroethane....	110	N.D.
4-Chlorotoluene.....	280	N.D.	Tetrachloroethene.....	110	N.D.
Dibromochloromethane.....	110	N.D.	Toluene.....	110	N.D.
1,2-Dibromo-3-chloropropane.....	280	N.D.	1,2,3-Trichlorobenzene.....	280	N.D.
1,2-Dibromoethane (EDB).....	110	N.D.	1,2,4-Trichlorobenzene.....	280	N.D.
Dibromomethane.....	110	N.D.	1,1,1-Trichloroethane.....	110	N.D.
1,2-Dichlorobenzene.....	110	N.D.	1,1,2-Trichloroethane.....	110	N.D.
1,3-Dichlorobenzene.....	110	N.D.	Trichloroethene.....	110	N.D.
1,4-Dichlorobenzene.....	110	N.D.	Trichlorofluoromethane.....	280	N.D.
Dichlorodifluoromethane.....	280	N.D.	1,2,3-Trichloropropane.....	550	N.D.
1,1-Dichloroethane.....	110	N.D.	1,2,4-Trimethylbenzene.....	110	N.D.
1,2-Dichloroethane.....	110	N.D.	1,3,5-Trimethylbenzene.....	110	N.D.
1,1-Dichloroethene.....	280	N.D.	Vinyl acetate.....	280	N.D.
cis-1,2-Dichloroethene.....	110	N.D.	Vinyl chloride.....	280	N.D.
trans-1,2-Dichloroethene.....	110	N.D.	Xylenes (Total).....	330	N.D.
1,2-Dichloropropane.....	110	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.1.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	72%
Toluene-d8 (50-135).....	75%
4-Bromofluorobenzene (70-130).....	71%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

IT Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mieher

Client Project ID: Estes Landfill/6699030

Sample Descript: Soil, EW-26-(S/50)-5-24-99
Lab Number: PIE01493

2852 Allen Ave., Irvine, CA 92606 (949) 261-0222 FAX (949) 261-0228
1014 E. Cowley Dr., Suite A, Colton, CA 92324 (909) 370-6667 FAX (909) 370-0046
18525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-8444 FAX (818) 770-8444
1484 Chesapeake Dr., Suite 308, San Diego, CA 92123 (619) 505-9896 FAX (619) 505-9899
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 24, 1999
Received: May 24, 1999
Extracted: May 26, 1999
Analyzed: May 27, 1999
Revised: Jun 29, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1,100	N.D.	1,3-Dichloropropane.....	110	N.D.
Benzene.....	110	N.D.	2,2-Dichloropropane.....	110	N.D.
Bromobenzene.....	280	N.D.	1,1-Dichloropropene.....	110	N.D.
Bromochloromethane.....	280	N.D.	cis-1,3-Dichloropropene.....	110	N.D.
Bromodichloromethane.....	110	N.D.	trans-1,3-Dichloropropene...	110	N.D.
Bromoform.....	280	N.D.	Ethylbenzene.....	110	N.D.
Bromomethane.....	280	N.D.	Hexachlorobutadiene.....	280	N.D.
2-Butanone (MEK).....	550	N.D.	2-Hexanone.....	550	N.D.
n-Butylbenzene.....	280	N.D.	Iodomethane.....	110	N.D.
sec-Butylbenzene.....	280	N.D.	Isopropylbenzene.....	110	N.D.
tert-Butylbenzene.....	280	N.D.	p-Isopropyltoluene.....	110	N.D.
Carbon Disulfide.....	280	N.D.	Methylene chloride.....	550	N.D.
Carbon tetrachloride.....	280	N.D.	4-Methyl-2-pentanone (MIBK).....	550	N.D.
Chlorobenzene.....	110	N.D.	Methyl-tert-butyl ether (MTBE).....	280	N.D.
Chloroethane.....	280	N.D.	Naphthalene.....	280	N.D.
2-Chloroethyl vinyl ether.....	280	N.D.	n-Propylbenzene.....	110	N.D.
Chloroform.....	110	N.D.	Styrene.....	110	N.D.
Chloromethane.....	280	N.D.	1,1,1,2-Tetrachloroethane....	280	N.D.
2-Chlorotoluene.....	280	N.D.	1,1,2,2-Tetrachloroethane....	110	N.D.
4-Chlorotoluene.....	280	N.D.	Tetrachloroethene.....	110	N.D.
Dibromochloromethane.....	110	N.D.	Toluene.....	110	N.D.
1,2-Dibromo-3-chloropropane....	280	N.D.	1,2,3-Trichlorobenzene.....	280	N.D.
1,2-Dibromoethane (EDB).....	110	N.D.	1,2,4-Trichlorobenzene.....	280	N.D.
Dibromomethane.....	110	N.D.	1,1,1-Trichloroethane.....	110	N.D.
1,2-Dichlorobenzene.....	110	N.D.	1,1,2-Trichloroethane.....	110	N.D.
1,3-Dichlorobenzene.....	110	N.D.	Trichloroethene.....	110	N.D.
1,4-Dichlorobenzene.....	110	N.D.	Trichlorofluoromethane.....	280	N.D.
Dichlorodifluoromethane.....	280	N.D.	1,2,3-Trichloropropane.....	550	N.D.
1,1-Dichloroethane.....	110	N.D.	1,2,4-Trimethylbenzene.....	110	N.D.
1,2-Dichloroethane.....	110	N.D.	1,3,5-Trimethylbenzene.....	110	N.D.
1,1-Dichloroethene.....	280	N.D.	Vinyl acetate.....	280	N.D.
cis-1,2-Dichloroethene.....	110	N.D.	Vinyl chloride.....	280	N.D.
trans-1,2-Dichloroethene.....	110	N.D.	Xylenes (Total).....	330	N.D.
1,2-Dichloropropane.....	110	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 1.1.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	89%
Toluene-d8 (50-135).....	90%
4-Bromofluorobenzene (70-130).....	87%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

PIE01492.QST <7 of 18>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 2484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0951

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill/6699030

Sample Descript: Soil, EW-25-(S/35)-5-24-99
 Lab Number: PIE01494

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 7, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane...	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane...	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane.....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	79%
Toluene-d8 (50-135).....	80%
4-Bromofluorobenzene (70-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01492.QST <8 of 18>



Del Mar Analytical

3T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: Estes Landfill/6699030
Sample Descript: Soil, EW-25-(S/45)-5-24-99
Lab Number: PIE01495

Sampled: May 24, 1999
Received: May 24, 1999
Extracted: May 26, 1999
Analyzed: May 27, 1999
Reported: Jun 7, 1999

2852 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Coolby Dr., Suite A Colton, CA 92324 (909) 370-4867 FAX (909) 370-1048
16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
3484 Chesapeake Dr., Suite 305 San Diego, CA 92123 (619) 505-8596 FAX (619) 505-9889
1830 South 21st St., Suite B-120 Phoenix, AZ 85044 (480) 955-0043 FAX (480) 955-0851

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	80%
Toluene-d8 (50-135).....	83%
4-Bromofluorobenzene (70-130).....	81%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2352 Allen Ave. Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cookley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 0144 FAX (818) 779 0143
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 9830 South First St., Suite B 120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785 0951

3T Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030
 Sample Descript: Soil, EW-25-(S/35)-5-24-99
 Lab Number: PIE01494

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 28, 1999
 Analyzed: May 29, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	250	N.D.	Dimethyl phthalate.....	250	N.D.
Acenaphthylene.....	250	N.D.	4,6-Dinitro-2-methylphenol.....	630	N.D.
Aniline.....	380	N.D.	2,4-Dinitrophenol.....	630	N.D.
Anthracene.....	250	N.D.	2,4-Dinitrotoluene.....	250	N.D.
Azobenzene.....	380	N.D.	2,6-Dinitrotoluene.....	250	N.D.
Benzidine.....	2,500	N.D.	Di-N-octyl phthalate.....	1,300	N.D.(L)
Benzoic Acid.....	1,300	N.D.	Fluoranthene.....	250	N.D.
Benzo(a)anthracene.....	250	N.D.	Fluorene.....	250	N.D.
Benzo(b)fluoranthene.....	500	N.D.	Hexachlorobenzene.....	250	N.D.
Benzo(k)fluoranthene.....	500	N.D.	Hexachlorobutadiene.....	250	N.D.
Benzo(g,h,i)perylene.....	380	N.D.	Hexachlorocyclopentadiene.....	1,300	N.D.
Benzo(a)pyrene.....	380	N.D.	Hexachloroethane.....	500	N.D.
Benzyl alcohol.....	500	N.D.	Indeno(1,2,3-cd)pyrene.....	500	N.D.
Bis(2-chloroethoxy)methane.....	250	N.D.	Isophorone.....	250	N.D.
Bis(2-chloroethyl)ether.....	250	N.D.	2-Methylnaphthalene.....	250	N.D.
Bis(2-chloroisopropyl)ether.....	250	N.D.	2-Methylphenol.....	380	N.D.
Bis(2-ethylhexyl)phthalate.....	2,500	N.D.	4-Methylphenol.....	380	N.D.
4-Bromophenyl phenyl ether.....	380	N.D.	Naphthalene.....	380	N.D.
Butyl benzyl phthalate.....	1,300	N.D.	2-Nitroaniline.....	500	N.D.
4-Chloroaniline.....	250	N.D.	3-Nitroaniline.....	500	N.D.
2-Chloronaphthalene.....	250	N.D.	4-Nitroaniline.....	1,300	N.D.
4-Chloro-3-methylphenol.....	250	N.D.	Nitrobenzene.....	1,300	N.D.
2-Chlorophenol.....	630	N.D.	2-Nitrophenol.....	250	N.D.
4-Chlorophenyl phenyl ether.....	250	N.D.	4-Nitrophenol.....	1,300	N.D.(L)
Chrysene.....	250	N.D.	N-Nitrosodiphenylamine.....	500	N.D.
Dibenz(a,h)anthracene.....	250	N.D.	N-Nitroso-di-N-propylamine.....	380	N.D.
Dibenzofuran.....	250	N.D.	Pentachlorophenol.....	1,300	N.D.
Di-N-butyl phthalate.....	630	N.D.	Phenanthrene.....	250	N.D.
1,3-Dichlorobenzene.....	250	N.D.	Phenol.....	380	N.D.
1,4-Dichlorobenzene.....	250	N.D.	Pyrene.....	380	N.D.
1,2-Dichlorobenzene.....	250	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
3,3-Dichlorobenzidine.....	1,300	N.D.	2,4,5-Trichlorophenol.....	380	N.D.
2,4-Dichlorophenol.....	250	N.D.	2,4,6-Trichlorophenol.....	380	N.D.
Diethyl phthalate.....	250	N.D.			
2,4-Dimethylphenol.....	630	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.5.

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	41%
Phenol-d6 (35-110).....	51%
2,4,6-Tribromophenol (40-110)	64%
Nitrobenzene-d5 (30-110).....	44%
2-Fluorobiphenyl (40-110).....	53%
Terphenyl-d14 (45-110).....	98%



Del Mar Analytical

Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Miehler

Client Project ID: Estes Landfill/6699030

Sample Descript: Soil, EW-25-(S/45)-5-24-99
Lab Number: PIE01495

Sampled: May 24, 1999
Received: May 24, 1999
Extracted: May 28, 1999
Analyzed: May 29, 1999
Reported: Jun 8, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1220
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9526 FAX (619) 505-9689
1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 385-1043 FAX (480) 385-0851

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.(L)
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.(L)
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	63%
Phenol-d6 (35-110).....	73%
2,4,6-Tribromophenol (40-110)	79%
Nitrobenzene-d5 (30-110).....	63%
2-Fluorobiphenyl (40-110).....	75%
Terphenyl-d14 (45-110).....	104%



Del Mar Analytical

T Environmental
426 N. 44th St., Suite 110
Phoenix, AZ 85008
Attention: John Mierher

Client Project ID: Estes Landfill/6699030

Sample Descript: Soil, EW-25-(S/35)-5-24-99
Lab Number: PIE01494

Sampled: May 24, 1999
Received: May 24, 1999
Extracted: 5/27-6/3, 1999
Analyzed: 5/29-6/3, 1999
Reported: Jun 7, 1999

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	17	05/27/99	05/29/99
Beryllium.....	EPA 6010B	5.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	1.1	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	52	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	15	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	4.1	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	0.026	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	13	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Tinc.....	EPA 6010B	2.5	17	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01492.QST <12 of 18>



Del Mar Analytical

2952 Alton Ave. Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1229
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 955 0043 FAX (480) 955 0851

DT Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: Estes Landfill/6699030
 Sample Descript: Soil, EW-25-(S/45)-5-24-99
 Lab Number: PIE01495

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: 5/27-6/3, 1999
 Analyzed: 5/29-6/3, 1999
 Reported: Jun 7, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	6.7	05/27/99	05/29/99
Beryllium.....	EPA 6010B	2.0*	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	0.81	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	21	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	15	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	3.9	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	N.D.	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	12	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Zinc.....	EPA 6010B	2.5	15	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 4.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 27, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)			µg/Kg (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	95%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 27, 1999
 Analyzed: May 28, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	107%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 7, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	89%
Toluene-d8 (50-135).....	89%
4-Bromofluorobenzene (70-130).....	87%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01492.QST <16 of 18>

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 28, 1999
 Analyzed: May 29, 1999
 Reported: Jun 8, 1999
 Matrix: Soil

2852 Alton Ave., Irvine, CA 92606 (949) 261 1022 FAX (949) 261 1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370 4667 FAX (909) 370 1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779 1844 FAX (818) 779 1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505 9596 FAX (619) 505 9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0143 FAX (480) 785 0851

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	52%
Phenol-d6 (35-110).....	58%
2,4,6-Tribromophenol (40-110).....	59%
Nitrobenzene-d5 (30-110).....	49%
2-Fluorobiphenyl (40-110).....	56%
Terphenyl-d14 (45-110).....	69%

AT Environmental
 726 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: 5/27-6/3, 1999
 Analyzed: 5/29-6/3, 1999
 Reported: Jun 7, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Arsenic.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Beryllium.....	EPA 6010B	0.50	N.D.	05/27/99	06/01/99
Cadmium.....	EPA 6010B	0.50	N.D.	05/27/99	05/29/99
Chromium.....	EPA 6010B	2.0	N.D.	05/27/99	05/29/99
Copper.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Lead.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Mercury.....	EPA 7471A	0.020	N.D.	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Selenium.....	EPA 6010B	10	N.D.	05/27/99	05/29/99
Silver.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99
Thallium.....	EPA 6010B	5.0	N.D.	05/27/99	05/29/99
Zinc.....	EPA 6010B	2.5	N.D.	05/27/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



2852 Alton Ave. Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030

Sample Descript: Soil, EW-25-(S/35)-5-24-99
 Lab Number: PIE01494

Sampled: May 24, 1999
 Received: May 24, 1999
 Extracted: May 27, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit		Sample Result
	µg/Kg (ppb)			µg/Kg (ppb)
Aldrin.....	5.0	.....	N.D.
alpha-BHC.....	5.0	.....	N.D.
beta-BHC.....	5.0	.....	N.D.
delta-BHC.....	10	.....	N.D.
gamma-BHC (Lindane).....	5.0	.....	N.D.
Chlordane.....	100	.....	N.D.
4,4'-DDD.....	5.0	.....	N.D.
4,4'-DDE.....	5.0	.....	N.D.
4,4'-DDT.....	5.0	.....	N.D.
Dieldrin.....	5.0	.....	N.D.
Endosulfan I.....	5.0	.....	N.D.
Endosulfan II.....	5.0	.....	N.D.
Endosulfan sulfate.....	20	.....	N.D.
Endrin.....	5.0	.....	N.D.
Endrin aldehyde.....	5.0	.....	N.D.
Heptachlor.....	5.0	.....	N.D.
Heptachlor epoxide.....	5.0	.....	N.D.
Methoxychlor.....	5.0	.....	N.D.
Toxaphene.....	200	.....	N.D.

*See Corrective Action Report.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	*

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Soil
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD*
 Batch #: IE27PE1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	20	17.6	18.5	88%	93%	5%	50	20-145
DDD	0	20	19.1	20.0	96%	100%	5%	30	50-130
DDT	0	20	19.0	20.4	95%	102%	7%	30	20-160

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



CORRECTIVE ACTION REPORT

Department: GC Date: 5/27/99
Method: 8081A / 8082 Matrix: Soil
Batch: IE27PE1S

Identification and Definition of Problem:

The surrogate, Decachlorobiphenyl, recovered ten times that of the expected recovery in samples PIE01494 and PIE01495.

Determination of the Cause of the Problem:

The Extraction technician inadvertently spiked the samples with a ten times more concentrated surrogate spiking solution than is normally used.

Corrective Action:

The samples were re-analyzed at a ten times dilution in order to confirm that the more concentrated spiking solution was used. The surrogate recoveries for the samples were within the 30-130% acceptance limits in the diluted run. All samples are non-detect and therefore are not impacted.

June Schaper: June Schaper
Quality Assurance Manager

Date: 6/10 199



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0041 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 5/28/99
 Sample #: IE03292
 Batch #: IE27PE1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
PCB 1016 (Arochlor)	0	160	88.6	83.6	55%	52%	6%	50	60-140
PCB 1260 (Arochlor)	1400	160	1080	1550	0%	94%	36%	50	60-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

LABORATORY CONTROL SAMPLE

EPA METHOD 8082

DATE: 5/28/99
 Sample: IE27PE1S

Analyte

St	LCS	PR
ppb	ppb	%

Aroclor 1016
 Aroclor 1260

160	115	72%
160	122	76%

Definition of Terms:

St. Standard Concentration

LCS. Laboratory Control Sample Result

PR. Percent Recovery of LCS; $(LCS/St) \times 100$

QA/QC CRITERIA: QA/QC is within acceptance limits.

Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Soil
 Instrument: GCMS

Date: 05/27/99
 Sample #: PIE01645
 Batch #: IE26MS1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	500	452	159	90%	32%	95.9%	≤ 112	0-100%
1,1-Dichloroethene	0.0	500	412	434	82%	87%	5.2%	≤ 20	70-125%
1,1-Dichloroethane	0.0	500	417	424	83%	85%	1.7%	≤ 20	75-115%
Chloroform	0.0	500	411	429	82%	86%	4.3%	≤ 26	75-120%
1,2-Dichloroethane	0.0	500	364	383	73%	77%	5.1%	≤ 20	70-115%
Benzene	0.0	500	462	482	92%	96%	4.2%	≤ 20	80-120%
1,1,2-Trichloroethene	0.0	500	379	403	76%	81%	6.1%	≤ 20	75-120%
Toluene	0.0	500	429	428	86%	86%	0.2%	≤ 20	80-125%
Tetrachloroethene	0.0	500	347	375	69%	75%	7.8%	≤ 20	75-120%
Chlorobenzene	0.0	500	378	402	76%	80%	6%	≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

A/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1220
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 18525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 8260B

DATE: 5/27/99

Analyte	St	R1	PR	QC Limits
	ppb	ppb	%	%
Vinyl Chloride	500	77	15%	0-110
1,1-Dichloroethene	500	407	81%	46-134
1,1-Dichloroethane	500	430	86%	62-122
Chloroform	500	444	89%	66-130
1,2-Dichloroethane	500	396	79%	61-121
Benzene	500	497	99%	68-128
Trichloroethene	500	400	80%	59-119
Toluene	500	451	90%	62-130
trachloroethene	500	389	78%	64-124
robenzene	500	419	84%	75-115

Definition of Terms:

St. Concentration standard added to sample

R1. Standard Result

PR. Percent Recovery

Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/29/99
 Sample #: IE03650
 Batch #: IE28SE1S

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.0	50.0	11.0	10.0	22%	20%	10%	20	30-110
2-Chlorophenol	0.0	50.0	12.0	11.0	24%	22%	9%	25	30-110
1,4-Dichlorobenzene	0.0	50.0	8.0	6.0	16%	12%	29%	30	25-110
N-Nitroso-di-n-propylamine	0.0	50.0	10.0	9.0	20%	18%	11%	20	35-110
1,2,4-Trichlorobenzene	0.0	50.0	8.0	8.0	16%	16%	0%	25	30-110
Chloro-3-methylphenol	0.0	50.0	11.0	10.0	22%	20%	10%	25	40-110
acenaphthene	0.1	50.0	9.0	9.0	18%	18%	0%	15	35-110
2,4-Dinitrotoluene	0.1	50.0	10.0	10.0	20%	20%	0%	20	35-110
4-Nitrophenol	0.1	50.0	14.0	14.0	28%	28%	0%	25	15-135
Pentachlorophenol	0.0	50.0	10.0	9.0	20%	18%	11%	30	30-115
Pyrene	0.2	50.0	20.0	21.0	40%	42%	5%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

Del Mar Analytical (AZ0426)

This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

3952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0051

LABORATORY CONTROL SAMPLE

EPA METHOD: 8270

DATE: 5/29/99

Analyte	St	R1	PR
	ppb	ppb	%
Phenol	50	38	76%
2-Chlorophenol	50	42	84%
1,4-Dichlorobenzene	50	28	56%
n-Nitroso-di-n-propylamine	50	47	94%
1,2,4-Trichlorobenzene	50	29	58%
4-Chloro-3-Methylphenol	50	41	82%
Acenaphthene	50	36	72%
2,4-Dinitrotoluene	50	39	78%
1-Nitrophenol	50	54	108%
1,2-Dichlorophenol	50	43	86%
1,3-Dichlorobenzene	50	45	90%

Definition of Terms:

St. Total of standard added to sample

R1..... Standard Result

PR..... Percent Recovery

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 5/28/99
 Sample #: PIE01417

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	50.0	29.9	35.0	60%	70%	15.7%	65%
Arsenic	0	50.0	45.9	47.4	92%	95%	3.2%	93%
Beryllium	0	50.0	41.2	42.4	82%	85%	2.9%	84%
Cadmium	1.44	50.0	42.6	42.6	82%	82%	0.0%	82%
Chromium	16.0	50.0	57.0	60.9	82%	90%	6.6%	86%
Copper	12.7	50.0	59.2	54.1	93%	83%	9.0%	88%
Lead	2.88	50.0	44.8	47.2	84%	89%	5.2%	86%
Nickel	15.9	50.0	55.6	56.7	79%	82%	2.0%	81%
Selenium	0	50.0	34.4	33.9	69%	68%	1.5%	68%
Silver	0	50.0	30.3	45.0	61%	90%	39.0%	75%
Thallium	0	50.0	35.7	40.7	71%	81%	13.1%	76%
Zinc	21.6	50.0	68.1	66.5	93%	90%	2.4%	91%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 75-125%

QA/QC Criteria: The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

DATE: 5/28/99

Analyte	St	R1	PR
	ppm	ppm	%
Antimony	50.0	51.0	102%
Selenium	50.0	43.1	86%
Silver	50.0	48.9	98%
Thallium	50.0	43.6	87%

Definition of Terms:

- St. Standard Concentration
- R1. Standard Result
- PR. Percent Recovery of R1; $(R1/St) \times 100$
- Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

3852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 06/03/99
 Sample #: PIE01642
 Batch #: IF03HG1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0.053	0.333	0.330	0.332	83%	84%	1%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 6525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 955-0043 FAX (480) 955-0851

LCS DATA REPORT

METHOD: 7471A
 MATRIX: Soil

DATE: 6/3/99

Analyte	Sp	LCS	PR
	ppm	ppm	%
Mercury	0.00200	0.00200	100%

Definition of Terms:

- Sp. Standard Concentration
- LCS. Laboratory Control Sample Result
- PR. Percent Recovery of LCS; $(LCS/Sp) \times 100$

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



June 3, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30363

Dear Ms. Rice:

Two soil samples for Project Number 'PIE01492.QST' were received May 26, 1999, in good condition. Written results are being provided on this June 3, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Soil	PIE01494	79463s	05/24/99
Soil	PIE01495	79464s	05/24/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141 OP Pesticides

Mar Analytical

9000 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE01492.QST

Sample ID: PIE01494

Sample Collection Date: 5/24/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30363

APPL ID AP79463

QCG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/30/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/30/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Surrogate: Tributylphosphate	53.9	51-154	%	5/26/99	5/30/99
EPA 8141	Surrogate: Triphenylphosphate	55.6 #	63-151	%	5/26/99	5/30/99

Recovery is outside QC limits.

Run #: 528069
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE01492.QST

Sample ID: PIE01495

Sample Collection Date: 5/24/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30363

APPL ID AP79464

CCG: \$8141S-990526A-16828

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	5/26/99	5/30/99
EPA 8141	Boistar	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Def	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	5/26/99	5/30/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	EPN	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ethioprop	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Malathion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Merphos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	5/26/99	5/30/99
EPA 8141	Naled	Not detected	250	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Phorate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Prowl	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	5/26/99	5/30/99
EPA 8141	Surrogate: Tributylphosphate	58.7	51-154	%	5/26/99	5/30/99
EPA 8141	Surrogate: Triphenylphosphate	59.5 #	63-151	%	5/26/99	5/30/99

= Recovery is outside QC limits.

Run #: 528070
Instrument: NPD03
Sequence: 990528
Dilution Factor: 1
Initials: FML

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE01492.QST

Sample ID: PIE01494

Sample Collection Date: 5/24/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30363

APPL ID AP79463

QCG: S8151S-990527A-16853

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/27/99	6/1/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/27/99	6/1/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/27/99	6/1/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/27/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/27/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/27/99	6/1/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/27/99	6/1/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/27/99	6/1/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/27/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/27/99	6/1/99
EPA 8151	Surrogate recovery	130	93-141	%	5/27/99	6/1/99

Run #: 75
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE01492.QST
Sample ID: PIE01495
Sample Collection Date: 5/24/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30363
APPL ID AP79464
QCG: S8151S-990527A-16853

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	5/27/99	6/1/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	5/27/99	6/1/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	5/27/99	6/1/99
EPA 8151	Dicamba	Not detected	40	ug/kg	5/27/99	6/1/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/27/99	6/1/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	5/27/99	6/1/99
EPA 8151	MCPA	Not detected	40000	ug/kg	5/27/99	6/1/99
EPA 8151	MCPP	Not detected	40000	ug/kg	5/27/99	6/1/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	5/27/99	6/1/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	5/27/99	6/1/99
EPA 8151	Surrogate recovery	131	93-141	%	5/27/99	6/1/99

Run #: 76
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

Method Blank

EPA 8141 OP Pesticides

Blank Name/QCG: 990526S - 16828
 Batch ID: S8141S-990526A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	5/26/99	5/29/99
BLANK	Bolstar	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Coumaphos	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Def	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Demeton-s	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Diazinon	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Dichlorvos	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Dimethoate	Not detected	100	ug/kg	5/26/99	5/29/99
BLANK	Disulfoton	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	EPN	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Ethion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Ethoprop	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Fensulfothion	Not detected	250	ug/kg	5/26/99	5/29/99
BLANK	Fenthion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Malathion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Merphos	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Mevinphos	Not detected	350	ug/kg	5/26/99	5/29/99
BLANK	Naled	Not detected	250	ug/kg	5/26/99	5/29/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Phorate	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Prowl	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Ronnel	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Stirophos	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Suffotep	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	TEPP	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Tokuthion	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Trichloronate	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Trifluralin	Not detected	50	ug/kg	5/26/99	5/29/99
BLANK	Surrogate: Tributylphosphate	101	51-154	%	5/26/99	5/29/99
BLANK	Surrogate: Triphenylphosphate	95.7	63-151	%	5/26/99	5/29/99

Run #: 528050
Instrument: NPD03
Sequence: 990528
Initials: FML

Laboratory Control Spike - LCS

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141

APPL Sample #: 990526AS LCS

Date/Initials: 6/1/99 FML

Extraction Date: 5/26/99

Matrix Type: SOIL

Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Phorate	83.3	*****	65.5	78.6
Diazinon	83.3	*****	97.8	117
Disulfoton	83.3	*****	69.1	82.9
Methyl parathion	83.3	*****	77.3	92.8
Stirophos	83.3	*****	85.6	103
Ethion	83.3	*****	71.5	85.8

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery
Tributyl phosphate	167	*****	170	102
Triphenyl phosphate	167	*****	158	95.0

	Prim Col	Sec Col
	Spike	Spike
Analysis Date:	5/29/99	
Analysis Time:	8:01 PM	
Instrument:	NPD03B	
Column:	DB-5	
Sample/Vial #:	51	
Extraction Ratio:	10/30	
Dilution Factor:	1	

Comments:

	Soil	Water
Phorate	26-98	22-96
Diazinon	61-139	57-130
Disulfoton	14-131	47-117
Meth Parathion	63-153	55-164
Stirophos	58-140	68-128
Ethion	66-131	65-134
Tributyl phosphate	51-154	60-150
Triphenyl phosphate	63-151	76-140

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990526A 79396S MS/MSD
Date/Initials: 6/1/99 FML
Extraction Date: 5/26/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	63.6	76.3	62.7	75.3	1.3
Diazinon	83.3	0.000	91.2	109	92.6	111	1.5
Disulfoton	83.3	0.000	70.9	85.1	62.4	74.8	13
Methyl parathion	83.3	0.000	68.1	81.7	71.4	85.7	4.7
Stirophos	83.3	0.000	82.1	98.5	84.2	101	2.6
Ethion	83.3	0.000	66.3	79.6	66.1	79.4	0.3

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	157	94.3	155	93.1
Triphenyl phosphate	167	*****	148	88.6	147	88.4

	Primary Column		Secondary Column	
	Spike	Spk Dup	Spike	Spk Dup
Analysis Date:	5/30/99	5/29/99		
Analysis Time:	5:18 AM	9:15 PM		
Instrument:	NPD03B	NPD03B		
Column:	DB-5	DB-5		
Sample/Vial #:	66	53		
Extraction Ratio:	10/30	10/30		
Dilution Factor:	1	1		

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: 990527S - 16853
Batch ID: \$8151S-990527A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	5/27/99	6/1/99
BLANK	Dalapon	Not detected	2000	ug/kg	5/27/99	6/1/99
BLANK	2,4-DB	Not detected	400	ug/kg	5/27/99	6/1/99
BLANK	Dicamba	Not detected	40	ug/kg	5/27/99	6/1/99
BLANK	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	5/27/99	6/1/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	5/27/99	6/1/99
BLANK	MCPA	Not detected	40000	ug/kg	5/27/99	6/1/99
BLANK	MCPP	Not detected	40000	ug/kg	5/27/99	6/1/99
BLANK	2,4,5-T	Not detected	40	ug/kg	5/27/99	6/1/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	5/27/99	6/1/99
BLANK	Surrogate recovery	128	93-141	%	5/27/99	6/1/99

Run #: 72
Instrument: ECD01
Sequence: 990525
Initials: KW

Laboratory Control Spike Recoveries
EPA 8151 HERBICIDE SOIL

APPL ID: 990527S-79463 LCS/LCSD - 16853
 Batch ID: S8151S-990527A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Compound Name	Spike Lvl ug/kg	SPK Result ug/kg	DUP Result ug/kg	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	200	218	230	109	115	77-148	5.4	27
2,4,5-TP	200	208	212	104	106	87-149	1.9	27
2,4-D	200	263	281	132	141	90-181	6.6	27
Dicamba	200	221	226	111	113	63-149	2.2	31
Dichlorprop (2,4-DP)	200	190	199	95.0	99.5	91-183	4.6	37
Dinoseb (DNBP)	200	236	243	118	122	71-167	2.9	NE
Surrogate recovery	600	774	780	129	130	93-141		

NE = Not established.

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/27/99	5/27/99
Analysis Date :	6/1/99	6/1/99
Instrument :	ECD01	ECD01
Run :	73	74
Analyst :	KW	



June 7, 1999

Service Request No: K9902987

Robyn Rice
Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Re: PIE00585.QST

Dear Robyn:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 1999. For your reference, these analyses have been assigned our service request number K9902987.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 280.

Respectfully submitted,

Columbia Analytical Services, Inc.

Les Kennedy
Project Chemist

LK/td

Page 1 of 12

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11-25/99
Date Received: 5/13-28/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Result
PIE00588	K9902987-001	0.05	0.19
PIE00765	K9902987-002	0.05	0.21
PIE01311	K9902987-004	0.05	ND
PIE01312	K9902987-005	0.05	0.28
PIE01492	K9902987-006	0.05	0.12
PIE01493	K9902987-007	0.05	0.09
PIE01670	K9902987-008	0.05	0.09
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: _____

6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

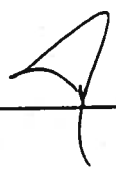
Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Sample Name	Lab Code	MRL	Result
PIE01220	K9902987-003	0.05	ND
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: _____

5/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11/99
Date Received: 5/13/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE00588	K9902987-001DUP	0.05	0.19	0.22	0.20	15

Approved By: _____



Date: _____

6/7/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
LCS Matrix: Soil

Service Request: K9902987
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 5/26/99

Laboratory Control Sample Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Carbon, Total Organic	0.62	0.68	110	85-115

Approved By: _____

LCS/102194

02987WET.LJ1 - LCS 6/4/99

Date: 6/4/99

00006
Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE01220	K9902987-003DUP	0.05	ND	ND	ND	-

Approved By: _____

Date: 6/4/99

ST Environmental
 6 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Report Number: PIE01575

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: 5/26-6/1, 1999
 Analyzed: 5/26-6/3, 1999
 Reported: Jun 8, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01575	Trip Blank	Water	8260B
PIE01576	QST-B46-(GW/50) 5-25-99	Water	8081A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All QA/QC met acceptance criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. Results are attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)


 Robyn Rice
 Project Manager

QST Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B46-(GW/50)-5-25-99
 Lab Number: PIE01576

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: May 27, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aldrin.....	0.10	N.D.
alpha-BHC.....	0.10	N.D.
beta-BHC.....	0.10	N.D.
delta-BHC.....	0.25	N.D.
gamma-BHC (Lindane).....	0.10	N.D.
Chlordane.....	2.0	N.D.
4,4'-DDD.....	0.10	N.D.
4,4'-DDE.....	0.10	N.D.
4,4'-DDT.....	0.10	N.D.
Dieldrin.....	0.10	N.D.
Endosulfan I.....	0.10	N.D.
Endosulfan II.....	0.10	N.D.
Endosulfan sulfate.....	0.50	N.D.
Endrin.....	0.10	N.D.
Endrin aldehyde.....	0.10	N.D.
Heptachlor.....	0.10	N.D.
Heptachlor epoxide.....	0.10	N.D.
Methoxychlor.....	0.10	N.D.
Toxaphene.....	4.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130)....	85%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolway Dr., Suite A, Colton, CA 92324 (909) 370-4687 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

ST Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B46-(GW/50)-5-25-99
 Lab Number: PIE01576

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.(C)
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

C= Continuing Calibration verification recovery was above the method control limits; Data not impacted.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	68%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

ST Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, Trip Blank
 Lab Number: PIE01575

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane.....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	91%
Toluene-d8 (75-140).....	93%
4-Bromofluorobenzene (75-135).....	94%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01575.QST <4 of 12>

Del Mar Analytical

Environmental
 100 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, QST-B46-(GW/50)-5-25-99
 Lab Number: PIE01576

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Revised: Jun 22, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	7.2	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	6.8	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	5.3	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

R.R.

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	91%
Toluene-d8 (75-140).....	90%
4-Bromofluorobenzene (75-135).....	91%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01575.QST <5 of 12>

Environmental
 3 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B46-(GW/50)-5-25-99
 Lab Number: PIE01576

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 8, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.(L)	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.(L)
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.(L)
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.(L)	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.(L)	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.(L)
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.(L)
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.(L)	2,4,6-Trichlorophenol.....	20	N.D.(L)
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recovers (Accept. Limits):	
2-Fluorophenol (40-110).....	74%
Phenol-d6 (40-115).....	77%
2,4,6-Tribromophenol (40-140).....	90%
Nitrobenzene-d5 (35-120).....	88%
2-Fluorobiphenyl (30-150).....	82%
Terphenyl-d14 (45-150).....	104%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

DT Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B46-(GW/50)-5-25-99
 Lab Number: PIE01576

Sampled: May 25, 1999
 Received: May 25, 1999
 Extracted: May 26, 1999
 Analyzed: May 26-27, 1999
 Reported: Jun 8, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/26/99	05/27/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/26/99	05/27/99
Chromium.....	EPA 200.7	0.010	N.D.	05/26/99	05/27/99
Copper.....	EPA 200.7	0.020	N.D.	05/26/99	05/27/99
Lead.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/26/99	05/26/99
Nickel.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Selenium.....	EPA 200.7	0.060	N.D.	05/26/99	05/27/99
Silver.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Thallium.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Zinc.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01575.QST <7 of 12>

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 27, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 8, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)		µg/L (ppb)
Aldrin.....	0.10		N.D.
alpha-BHC.....	0.10		N.D.
beta-BHC.....	0.10		N.D.
delta-BHC.....	0.25		N.D.
gamma-BHC (Lindane).....	0.10		N.D.
Chlordane.....	2.0		N.D.
4,4'-DDD.....	0.10		N.D.
4,4'-DDE.....	0.10		N.D.
4,4'-DDT.....	0.10		N.D.
Dieldrin.....	0.10		N.D.
Endosulfan I.....	0.10		N.D.
Endosulfan II.....	0.10		N.D.
Endosulfan sulfate.....	0.50		N.D.
Endrin.....	0.10		N.D.
Endrin aldehyde.....	0.10		N.D.
Heptachlor.....	0.10		N.D.
Heptachlor epoxide.....	0.10		N.D.
Methoxychlor.....	0.10		N.D.
Toxaphene.....	4.0		N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro- <i>m</i> -xylene (30-130).....	73%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Reported: Jun 8, 1999
 Matrix: Water

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit		Sample Result
	µg/L (ppb)			µg/L (ppb)
Aroclor 1016.....	1.0	.....	N.D.
Aroclor 1221.....	1.0	.....	N.D.
Aroclor 1232.....	1.0	.....	N.D.
Aroclor 1242.....	1.0	.....	N.D.
Aroclor 1248.....	1.0	.....	N.D.
Aroclor 1254.....	1.0	.....	N.D.
Aroclor 1260.....	1.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	75%

Del Mar Analytical
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Revised: Jun 22, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	2.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	85%
Toluene-d8 (75-140).....	100%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2952 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Cullton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 785-0851

Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 8, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	82%
Phenol-d6 (40-115).....	85%
2,4,6-Tribromophenol (40-140).....	88%
Nitrobenzene-d5 (35-120).....	88%
2-Fluorobiphenyl (30-150).....	89%
Terphenyl-d14 (45-150).....	108%

Robyn Rice
 Project Manager

DT Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 26, 1999
 Analyzed: May 26-27, 1999
 Reported: Jun 8, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/26/99	05/27/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/26/99	05/27/99
Chromium.....	EPA 200.7	0.010	N.D.	05/26/99	05/27/99
Copper.....	EPA 200.7	0.020	N.D.	05/26/99	05/27/99
Lead.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Mercury.....	EPA 245.1	0.00020	N.D.	05/26/99	05/26/99
Nickel.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Selenium.....	EPA 200.7	0.060	N.D.	05/26/99	05/27/99
Silver.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Thallium.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99
Zinc.....	EPA 200.7	0.050	N.D.	05/26/99	05/27/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 361-1022 FAX (949) 361-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Water
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD*
 Batch #: IE27PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	0.500	0.418	0.400	84%	80%	4%	40	55-125
DDD	0	0.500	0.450	0.425	90%	85%	6%	20	60-130
DDT	0	0.500	0.441	0.414	88%	83%	6%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cudley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 5/27/99
 Sample #: LCS/LCSD*
 Batch #: IE27PE1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
AR 1016	0	4.0	4.11	3.77	103%	94%	9%	≤ 50	60-140%
AR 1260	0	4.0	4.36	4.64	109%	116%	6%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/27/99
 Sample #: PIE01673
 Batch #: IE27021W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Vinyl Chloride	0.0	25	21.0	22.0	84%	88%	5%	≤ 20	45-170%
1,1-Dichloroethene	0.0	25	20.0	24.0	80%	96%	18.2%	≤ 20	70-130%
1,1-Dichloroethane	0.0	25	24.0	24.0	96%	96%	0.0%	≤ 20	80-135%
Chloroform	6.0	25	31.0	30.0	100%	96%	3.3%	≤ 20	80-135%
1,2-Dichloroethane	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	80-130%
Benzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-135%
Trichloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	75-130%
Toluene	0.0	25	23.0	26.0	92%	104%	12.2%	≤ 20	75-135%
Tetrachloroethene	0.0	25	26.0	25.0	104%	100%	3.9%	≤ 20	70-135%
Chlorobenzene	0.0	25	27.0	26.0	108%	104%	3.8%	≤ 20	75-125%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 05/03/99
 Sample #: LCS/LCSD*
 Batch #: IF01SE1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
Phenol	0.1	50	55	57	110%	114%	4%	15	40-110
2-Chlorophenol	0.0	50	51	53	102%	106%	4%	15	40-110
1,4-Dichlorobenzene	0.0	50	49	44	98%	88%	11%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50	60	64	120%	128%	6%	20	45-120
1,2,4-Trichlorobenzene	0.0	50	53	52	106%	104%	2%	15	44-110
2-Chloro-3-methylphenol	0.0	50	59	65	118%	130%	10%	20	50-115
Acenaphthene	0.1	50	60	58	120%	116%	3%	15	50-115
2,4-Dinitrotoluene	0.0	50	62	60	124%	120%	3%	15	55-120
4-Nitrophenol	0.0	50	62	60	124%	120%	3%	15	45-120
Pentachlorophenol	0.0	50	61	61	122%	122%	0%	20	50-125
Pyrene	0.1	50	58	57	116%	114%	2%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1)/SP) x 100
- PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) x 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) x 100
- Acceptance Limits..... Statistically determined on an annual basis.

/QC Criteria..... See Case Narrative.



MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/27/99
 Sample #: PIE01576

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.15	1.17	115%	117%	1.7%	116%
Arsenic	0	1.0	1.02	1.04	102%	104%	1.9%	103%
Beryllium	0	1.0	1.05	1.05	105%	105%	0.0%	105%
Cadmium	0	1.0	0.997	1.02	100%	102%	2.3%	101%
Chromium	0	1.0	1.00	1.01	100%	101%	1.0%	101%
Copper	0	1.0	0.976	0.993	98%	99%	1.7%	98%
Lead	0	1.0	1.00	1.02	100%	102%	2.0%	101%
Nickel	0	1.0	0.972	0.985	97%	99%	1.3%	98%
Selenium	0	1.0	1.03	1.05	103%	105%	1.9%	104%
Silver	0	0.05	0.0536	0.0535	107%	107%	0.2%	107%
Sodium	0	1.0	0.978	0.976	98%	98%	0.2%	98%
Zinc	0	1.0	1.02	1.04	102%	104%	1.9%	103%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 05/26/99
 Sample #: PIE01158
 Batch #: IE26HG1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00455	0.00450	91%	90%	1.1%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limit.



June 4, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30366

Dear Ms. Rice:

One water sample for Project Number 'PIE01576' was received May 27, 1999, in good condition. Written results are being provided on this June 4, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Water	PIE01576	79476w	05/25/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141

Del Mar Analytical
70 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE01575.QST

Sample ID: PIE01576

Sample Collection Date: 5/25/99

ARF: 30366

APPL ID AP79476

QCG: S8141W-990528C-16902

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	5/28/99	6/1/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	5/28/99	6/1/99
EPA 8141	Def	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	5/28/99	6/1/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	5/28/99	6/1/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	EPN	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Ethion	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	5/28/99	6/1/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Malathion	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Merphos	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	5/28/99	6/1/99
EPA 8141	Naled	Not detected	2.5	ug/L	5/28/99	6/1/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Phorate	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Prowl	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Tepp	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	5/28/99	6/1/99
EPA 8141	Surrogate: Tributylphosphate	85.2	60-150	%	5/28/99	6/1/99
EPA 8141	Surrogate: Triphenylphosphate	84.9	76-140	%	5/28/99	6/1/99

Run #: 27
Instrument: NPD03
Sequence: 990601
Dilution Factor: 1
Initials: FML

Printed: 6/3/99 4:46:53 PM

EPA 8151 Herbicides

Del Mar Analytical
330 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice
Project: PIE01575.QST
Sample ID: PIE01576
Sample Collection Date: 5/25/99

ARF: 30366
APPL ID AP79476
QCG: \$8151-990528A-16885

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	5/28/99	6/3/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	5/28/99	6/3/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	5/28/99	6/3/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	5/28/99	6/3/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/28/99	6/3/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/28/99	6/3/99
EPA 8151	MCPA	Not detected	100	ug/L	5/28/99	6/3/99
EPA 8151	MCPP	Not detected	100	ug/L	5/28/99	6/3/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	5/28/99	6/3/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	5/28/99	6/3/99
EPA 8151	Surrogate Recovery	105	61-120	%	5/28/99	6/3/99

Run #: 113
Instrument: ECD01
Sequence: 990525
Dilution Factor: 1
Initials: KW

Printed: 6/3/99 9:43:35 AM

Method Blank

EPA 8141

Blank Name/QCG: 990528W - 16902

Batch ID: S8141W-990528C

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	5/28/99	6/1/99
BLANK	Bolstar	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Coumaphos	Not detected	1.0	ug/L	5/28/99	6/1/99
BLANK	Def	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Demeton-s	Not detected	1.0	ug/L	5/28/99	6/1/99
BLANK	Diazinon	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	5/28/99	6/1/99
BLANK	Dimethoate	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Disulfoton	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	EPN	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Ethion	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Ethoprop	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	5/28/99	6/1/99
BLANK	Fenthion	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Malathion	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Merphos	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Mevinphos	Not detected	3.5	ug/L	5/28/99	6/1/99
BLANK	Naled	Not detected	2.5	ug/L	5/28/99	6/1/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Phorate	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Prowl	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Ronnel	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Stirophos	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Sulfotep	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Tepp	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Tokuthion	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Trichloronate	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Trifluralin	Not detected	0.50	ug/L	5/28/99	6/1/99
BLANK	Surrogate: Tributylphosphate	84.0	60-150	%	5/28/99	6/1/99
BLANK	Surrogate: Triphenylphosphate	80.3	76-140	%	5/28/99	6/1/99

Run #: 24
Instrument: NPD03
Sequence: 990601
Initials: FML

Printed: 6/3/99 4:47:09 PM

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990528AW LCS/LCSD
Date/Initials: 6/3/99 FML
Extraction Date: 5/28/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	2.50	0.00	1.59	63.7	1.56	62.3	2.2
Diazinon	2.50	0.00	2.32	92.9	2.40	96.1	3.4
Disulfoton	2.50	0.00	1.83	73.4	1.81	72.3	1.4
Methyl parathion	2.50	0.00	1.77	70.9	1.91	76.5	7.7
Stirophos	2.50	0.00	1.91	76.2	2.05	82.1	7.4
Ethion	2.50	0.00	1.79	71.5	1.92	76.9	7.2

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.14	82.9	4.20	83.9
Triphenyl phosphate	5.00	*****	4.06	81.2	4.19	83.8

	Primary Column	
	Spike	Spk Dup
Analysis Date:	6/2/99	6/2/99
Analysis Time:	2:58 AM	3:36 AM
Instrument:	NPD03A	NPD03A
Column:	DB-35	DB-35
Sample/Vial #:	25	26
Extraction Ratio:	10/1000	10/1000
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990528W - 16885
Batch ID: S8151-990528A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	5/28/99	6/3/99
BLANK	Dalapon	Not detected	1.0	ug/L	5/28/99	6/3/99
BLANK	2,4-DB	Not detected	1.0	ug/L	5/28/99	6/3/99
BLANK	Dicamba	Not detected	0.10	ug/L	5/28/99	6/3/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	5/28/99	6/3/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	5/28/99	6/3/99
BLANK	MCPA	Not detected	100	ug/L	5/28/99	6/3/99
BLANK	MCPP	Not detected	100	ug/L	5/28/99	6/3/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	5/28/99	6/3/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	5/28/99	6/3/99
BLANK	Surrogate recovery	106	61-120	%	5/28/99	6/3/99

Run #: 114
Instrument: ECD01
Sequence: 990525
Initials: KW

Printed: 6/3/99 11:39:49 AM

Laboratory Control Spike Recoveries

EPA 8151 Herbicides

APPL ID 990528W-79476 LCS/LCSD - 16885

Batch ID: S8151-990528A

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.964	1.01	96.4	101	53-134	4.7	32
2,4,5-TP	1.00	0.903	0.942	90.3	94.2	60-118	4.2	24
2,4-D	1.00	1.21	1.26	121	126	44-155	4.0	15
Dicamba	1.00	0.884	0.904	88.4	90.4	48-102	2.2	24
Dichlorprop (2,4-DP)	1.00	0.820	0.847	82.0	84.7	37-146	3.2	18
Dinoseb (DNBP)	1.00	0.958	1.01	95.8	101	73-173	5.3	31
Surrogate: 2,4-DCAA	3.00	3.33	3.33	111	111	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	5/28/99	5/28/99
Analysis Date :	6/3/99	6/3/99
Instrument :	ECD01	ECD01
Run :	115	116
Analyst :	KW	



Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1029
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1930 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030

Report Number: PIE01670

Sampled: May 25, 1999
 Received: May 26, 1999
 Extracted: May 26, 1999
 Analyzed: May 26, 1999
 Reported: Jun 9, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01670	EW-26-(S/122) -5-25-99	Soil	Walkly Black Method
PIE01671	EW-26-(GW/180) -5-26-99	Water	8021B

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

RR
 Robyn Rice
 Project Manager



Del Mar Analytical

1352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1029
 1014 E. Colony Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9669
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: Estes Landfill/6699030
 Sample Descript: Water, EW-26-(GW/180)-5-26-99
 Lab Number: PIE01671

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 26, 1999
 Analyzed: May 26, 1999
 Reported: May 27, 1999

HALOGENATED AND AROMATIC VOLATILES (EPA 8021B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Benzene.....	1.0	N.D.	Ethylbenzene.....	1.0	N.D.
Bromobenzene.....	2.0	N.D.	Hexachlorobutadiene.....	2.0	N.D.
Bromochloromethane.....	2.0	N.D.	Isopropylbenzene.....	2.0	N.D.
Bromodichloromethane.....	1.0	N.D.	p-isopropyltoluene.....	2.0	N.D.
Bromoform.....	1.0	N.D.	Methylene chloride.....	10	N.D.
Bromomethane.....	2.0	N.D.	Naphthalene.....	2.0	N.D.
n-Butylbenzene.....	2.0	N.D.	n-Propylbenzene.....	2.0	N.D.
sec-Butylbenzene.....	2.0	N.D.	Styrene.....	2.0	N.D.
tert-Butylbenzene.....	2.0	N.D.	1,1,1,2-Tetrachloroethane.....	2.0	N.D.
Carbon tetrachloride.....	1.0	N.D.	1,1,2,2-Tetrachloroethane.....	1.0	N.D.
Chlorobenzene.....	1.0	2.7	Tetrachloroethene.....	1.0	N.D.
Chloroethane.....	5.0	N.D.	Toluene.....	1.0	3.6
Chloroform.....	1.0	N.D.	1,2,3-Trichlorobenzene.....	2.0	N.D.
Chloromethane.....	2.0	N.D.	1,2,4-Trichlorobenzene.....	2.0	N.D.
2-Chlorotoluene.....	2.0	N.D.	1,1,1-Trichloroethane.....	1.0	N.D.
4-Chlorotoluene.....	2.0	N.D.	1,1,2-Trichloroethane.....	1.0	N.D.
Dibromochloromethane.....	1.0	N.D.	Trichloroethene.....	1.0	N.D.
1,2-Dibromo-3-chloropropane.....	2.0	N.D.	Trichlorofluoromethane.....	2.0	N.D.
1,2-Dibromoethane.....	2.0	N.D.	1,2,3-Trichloropropane.....	2.0	N.D.
Dibromomethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	2.5	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Vinyl chloride.....	2.0	10
1,4-Dichlorobenzene.....	2.0	N.D.	o-Xylene.....	1.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	m,p-Xylenes.....	2.0	N.D.
1,1-Dichloroethane.....	1.0	N.D.			
1,2-Dichloroethane.....	1.0	N.D.			
1,1-Dichloroethene.....	1.0	N.D.			
cis-1,2-Dichloroethene.....	1.0	28			
trans-1,2-Dichloroethene.....	1.0	N.D.			
1,2-Dichloropropane.....	1.0	N.D.			
1,3-Dichloropropane.....	2.0	N.D.			
2,2-Dichloropropane.....	2.0	N.D.			
1,1-Dichloropropene.....	2.0	N.D.			
cis-1,3-Dichloropropene.....	1.0	N.D.			
trans-1,3-Dichloropropene.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
1-Chloro-3-fluorobenzene (60-125).	102%
a,a,a-Trifluorotoluene (65-160).....	98%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

ST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 26, 1999
 Analyzed: May 26, 1999
 Reported: May 27, 1999
 Matrix: Water

HALOGENATED AND AROMATIC VOLATILES (EPA 8021B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Benzene.....	0.50	N.D.	Ethylbenzene.....	0.50	N.D.
Bromobenzene.....	1.0	N.D.	Hexachlorobutadiene.....	1.0	N.D.
Bromochloromethane.....	1.0	N.D.	Isopropylbenzene.....	1.0	N.D.
Bromodichloromethane.....	0.50	N.D.	p-Isopropyltoluene.....	1.0	N.D.
Bromoform.....	0.50	N.D.	Methylene chloride.....	5.0	N.D.
Bromomethane.....	1.0	N.D.	Naphthalene.....	1.0	N.D.
n-Butylbenzene.....	1.0	N.D.	n-Propylbenzene.....	1.0	N.D.
sec-Butylbenzene.....	1.0	N.D.	Styrene.....	1.0	N.D.
tert-Butylbenzene.....	1.0	N.D.	1,1,1,2-Tetrachloroethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.	1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.	Tetrachloroethene.....	0.50	N.D.
Chloroethane.....	2.5	N.D.	Toluene.....	0.50	N.D.
Chloroform.....	0.50	N.D.	1,2,3-Trichlorobenzene.....	1.0	N.D.
Chloromethane.....	1.0	N.D.	1,2,4-Trichlorobenzene.....	1.0	N.D.
o-Chlorotoluene.....	1.0	N.D.	1,1,1-Trichloroethane.....	0.50	N.D.
4-Chlorotoluene.....	1.0	N.D.	1,1,2-Trichloroethane.....	0.50	N.D.
Dibromochloromethane.....	0.50	N.D.	Trichloroethene.....	0.50	N.D.
1,2-Dibromo-3-chloropropane.....	1.0	N.D.	Trichlorofluoromethane.....	1.0	N.D.
1,2-Dibromoethane.....	1.0	N.D.	1,2,3-Trichloropropane.....	1.0	N.D.
Dibromomethane.....	1.0	N.D.	1,2,4-Trimethylbenzene.....	1.0	N.D.
1,2-Dichlorobenzene.....	1.0	N.D.	1,3,5-Trimethylbenzene.....	1.0	N.D.
1,3-Dichlorobenzene.....	1.0	N.D.	Vinyl chloride.....	1.0	N.D.
1,4-Dichlorobenzene.....	1.0	N.D.	o-Xylene.....	0.50	N.D.
Dichlorodifluoromethane.....	2.5	N.D.	m,p-Xylenes.....	1.0	N.D.
1,1-Dichloroethane.....	0.50	N.D.			
1,2-Dichloroethane.....	0.50	N.D.			
1,1-Dichloroethene.....	0.50	N.D.			
cis-1,2-Dichloroethene.....	0.50	N.D.			
trans-1,2-Dichloroethene.....	0.50	N.D.			
1,2-Dichloropropane.....	0.50	N.D.			
1,3-Dichloropropane.....	1.0	N.D.			
2,2-Dichloropropane.....	1.0	N.D.			
1,1-Dichloropropene.....	1.0	N.D.			
cis-1,3-Dichloropropene.....	0.50	N.D.			
trans-1,3-Dichloropropene.....	1.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene (60-125).	103%
aaa-Trifluorotoluene (65-160).....	97%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



MS/MSD DATA REPORT

EPA Method: 8021B
 Matrix: Water
 Instrument: GC

Date: 05/26/99
 Sample #: Blank
 Batch #: IE265A1W

Acceptance Limits

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Benzene	0.0	5.0	4.91	4.87	98%	97%	1%	≤ 30	75-135
Chloroform	0.0	5.0	5.19	4.74	104%	95%	9%	≤ 30	75-130
1,1-Dichloroethane	0.0	5.0	6.47	6.14	129%	123%	5%	≤ 30	75-140
1,2-Dichloroethane	0.0	5.0	5.22	5.28	104%	106%	1%	≤ 30	80-140
1,1-Dichloroethene	0.0	5.0	6.33	5.98	127%	120%	6%	≤ 30	75-130
Tetrachloroethene	0.0	5.0	5.47	5.47	109%	109%	0%	≤ 30	80-125
Toluene	0.0	5.0	4.98	4.98	100%	100%	0%	≤ 30	75-130
Trichloroethene	0.0	5.0	5.23	5.42	105%	108%	4%	≤ 30	70-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.



Del Mar Analytical

GC CALIBRATION CHECK CRITERIA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1023
 1014 E. Cooley Dr., Suite A, Citton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 785 0851

Method: 8021B
 Mid-Point: 1
 QC Batch: IE265A1W

Associated Samples: PIE01671

Per Method 8000B of SW-846, the percent recovery of the calibration checks for GC analyses must be within $\pm 15\%$ from the true value ($\pm 20\%$ for the light gases) for each individual compound or the average % recovery of all compounds in the calibration check solution must be within $\pm 15\%$ recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside of the $\pm 15\%$ criteria, however the average % recovery of all compounds in the calibration check solution was within $\pm 15\%$, thus meeting the overall calibration check criteria.

Compound	Footnote	% Recovery in Calibration Check
Chloroethane	1	123
Chloromethane	1	179
1,2-Dibromo-3-chloropropane	2	78
Dichlorodifluoromethane	2	69
Hexachlorobutadiene	1	134
p-Isopropyltoluene	1	120
Methylene chloride	1	134
Styrene	2	62

¹ The calibration demonstrated a high bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible high bias in the result. All samples that were ND for this compound were unaffected and reported unqualified.

² The calibration demonstrated a low bias for this compound. Any sample with a positive result for this compound was flagged to indicate a possible low bias in the result. An additional check sample at the reporting limit was analyzed. All samples less than the amount found in the reporting limit check sample for this compound were unaffected and reported, unqualified, as ND.



June 7, 1999

Service Request No: K9902987

Robyn Rice
Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Re: PIE00585.QST

Dear Robyn:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 1999. For your reference, these analyses have been assigned our service request number K9902987.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 280.

Respectfully submitted,

Columbia Analytical Services, Inc.

Les Kennedy
Project Chemist

LK/td

Page 1 of 12

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11-25/99
Date Received: 5/13-28/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Result
PIE00588	K9902987-001	0.05	0.19
PIE00765	K9902987-002	0.05	0.21
PIE01311	K9902987-004	0.05	ND
PIE01312	K9902987-005	0.05	0.28
PIE01492	K9902987-006	0.05	0.12
PIE01493	K9902987-007	0.05	0.09
PIE01670	K9902987-008	0.05	0.09
Method Blank	K9902987-MB	0.05	ND

Approved By: _____

Date: 6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Sample Name	Lab Code	MRL	Result
PIE01220	K9902987-003	0.05	ND
Method Blank	K9902987-MB	0.05	ND

Approved By: _____



Date: _____

6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Soil

Service Request: K9902987
Date Collected: 5/11/99
Date Received: 5/13/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE00588	K9902987-001DUP	0.05	0.19	0.22	0.20	15

Approved By: _____



Date: _____

6/4/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
LCS Matrix: Soil

Service Request: K9902987
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 5/26/99

Laboratory Control Sample Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Carbon, Total Organic	0.62	0.68	110	85-115

Approved By: _____

LCS/102194

02987WET.LJ1 - LCS 6/4/99



Date: _____

6/4/99

00006
Page No.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Del Mar Analytical
Project: PIE00585.QST
Sample Matrix: Water

Service Request: K9902987
Date Collected: 5/19/99
Date Received: 5/21/99
Date Extracted: NA
Date Analyzed: 5/26/99

Duplicate Summary
Carbon, Total Organic
Walkly Black OSU Method
Units: PERCENT
As Received Basis

Sample Name	Lab Code	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference
PIE01220	K9902987-003DUP	0.05	ND	ND	ND	-

Approved By: _____

Date: 6/4/99

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Report Number: PIE01672

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: 5/26-6/3, 1999
 Analyzed: 5/27-6/7, 1999
 Reported: Jun 9, 1999

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	EPA ANALYSES
PIE01672	Trip Blank	Water	8260B
PIE01673	QST-B50(GW/45) (5-26-99)	Water	8281A, 8082, 8260B, 8270, 200.7, 245.1, 8141A & 8151
PIE01674	EW-24(S/40) (5-26-99)	Soil	8281A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151
PIE01675	EW-24(S/50) (5-26-99)	Soil	8281A, 8082, 8260B, 8270, 6010B, 7471A, 8141A & 8151

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: All Analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The 8141A & 8151 analysis was performed at APPL. Results are Attached.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)



Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

3T Environmental
 26 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B50(GW/45)(5-26-99)
 Lab Number: PIE01673

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 2, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 9, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3510/8081A)

Analyte	Reporting Limit		Sample Result
	µg/L	(ppb)	
Aldrin.....	0.10	.....	N.D.
alpha-BHC.....	0.10	.....	N.D.
beta-BHC.....	0.10	.....	N.D.
delta-BHC.....	0.25	.....	N.D.
gamma-BHC (Lindane).....	0.10	.....	N.D.
Chlordane.....	2.0	.....	N.D.
4,4'-DDD.....	0.10	.....	N.D.
4,4'-DDE.....	0.10	.....	N.D.
4,4'-DDT.....	0.10	.....	N.D.
Dieldrin.....	0.10	.....	N.D.
Endosulfan I.....	0.10	.....	N.D.
Endosulfan II.....	0.10	.....	N.D.
Endosulfan sulfate.....	0.50	.....	N.D.
Endrin.....	0.10	.....	N.D.
Endrin aldehyde.....	0.10	.....	N.D.
Heptachlor.....	0.10	.....	N.D.
Heptachlor epoxide.....	0.10	.....	N.D.
Methoxychlor.....	0.10	.....	N.D.
Toxaphene.....	4.0	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	55%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

3952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9889
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

IT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, EW-24(S/40)(5-26-99)
 Lab Number: PIE01674

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 9, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	76%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Del Mar Analytical
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, EW-24(S/50)(5-26-99)
 Lab Number: PIE01675

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 9, 1999

ORGANOCHLORINE PESTICIDES by GC (EPA 3550/8081A)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Dieldrin.....	5.0	N.D.
Dieldrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	68%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



2852 Alton Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1238
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9586 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

3T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B50(GW/45)(5-26-99)
 Lab Number: PIE01673

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 2, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 9, 1999

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	30%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Allan Ave., Irvine, CA 92608 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, EW-24(S/40)(5-26-99)
 Lab Number: PIE01674

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 9, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit		Sample Result
	$\mu\text{g}/\text{Kg}$ (ppb)		
Aroclor 1016.....	50	.....	N.D.
Aroclor 1221.....	50	.....	N.D.
Aroclor 1232.....	50	.....	N.D.
Aroclor 1242.....	50	.....	N.D.
Aroclor 1248.....	50	.....	N.D.
Aroclor 1254.....	50	.....	N.D.
Aroclor 1260.....	50	.....	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	104%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01672.QST <6 of 27>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, EW-24(S/50)(5-26-99)
 Lab Number: PIE01675

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 9, 1999

POLYCHLORINATED BIPHENYLS (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130),.....	112%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1226
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Water, Trip Blank
 Lab Number: PIE01672

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Reported: Jun 9, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	5.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	82%
Toluene-d8 (75-140).....	87%
4-Bromofluorobenzene (75-135).....	88%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01672 QST <8 of 27>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B50(GW/45)(5-26-99)
 Lab Number: PIE01673

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Reported: Jun 9, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	6.3	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	6.0	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane...	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane...	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	4.9	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	5.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	89%
Toluene-d8 (75-140).....	93%
4-Bromofluorobenzene (75-135).....	94%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical

PIE01672.QST <9 of 27>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, EW-24(S/40)(5-26-99)
 Lab Number: PIE01674

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 9, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	96%
Toluene-d8 (50-135).....	98%
4-Bromofluorobenzene (70-130).....	96%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be

PIE01674 OCT 21 1999



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1226
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, EW-24(S/50)(5-26-99)
 Lab Number: PIE01675

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 9, 1999

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

L MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125)....	89%
Toluene-d8 (50-135).....	93%
4-Bromofluorobenzene (70-130)....	88%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be used for any other purpose without the express consent of Del Mar Analytical.

PIE01675 QST 111 of 275



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B50(GW/45)(5-26-99)
 Lab Number: PIE01673

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 9, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.(L)	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.(L)
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzydine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.(L)
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.(L)
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.(L)	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	300	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.(L)	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.(L)
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.(L)
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.(L)
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.(L)	2,4,6-Trichlorophenol.....	20	N.D.(L)
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	69%
Phenol-d6 (40-115).....	71%
2,4,6-Tribromophenol (40-140)	86%
Nitrobenzene-d5 (35-120).....	75%
2-Fluorobiphenyl (30-150).....	73%
Terphenyl-d14 (45-150).....	111%

Robyn Rice
 Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieber

Client Project ID: ESTES Landfill 6699030

Sample Descript: Soil, EW-24(S/40)(5-26-99)
 Lab Number: PIE01674

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 28, 1999
 Analyzed: May 29, 1999
 Reported: Jun 9, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
Benzyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.(L)
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	82%
Phenol-d6 (35-110).....	84%
2,4,6-Tribromophenol (40-110)	82%
Nitrobenzene-d5 (30-110).....	71%
2-Fluorobiphenyl (40-110).....	80%
Terphenyl-d14 (45-110).....	105%

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Allon Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B 120, Phoenix, AZ 85044 (480) 955-0043 FAX (480) 955-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, EW-24(S/50)(5-26-99)
 Lab Number: PIE01675

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: May 28, 1999
 Analyzed: May 29, 1999
 Reported: Jun 9, 1999

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	200	N.D.	Dimethyl phthalate.....	200	N.D.
Acenaphthylene.....	200	N.D.	4,6-Dinitro-2-methylphenol.....	500	N.D.
Aniline.....	300	N.D.	2,4-Dinitrophenol.....	500	N.D.
Anthracene.....	200	N.D.	2,4-Dinitrotoluene.....	200	N.D.
Azobenzene.....	300	N.D.	2,6-Dinitrotoluene.....	200	N.D.
Benzidine.....	2,000	N.D.	Di-N-octyl phthalate.....	1,000	N.D.
Benzoic Acid.....	1,000	N.D.	Fluoranthene.....	200	N.D.
Benzo(a)anthracene.....	200	N.D.	Fluorene.....	200	N.D.
Benzo(b)fluoranthene.....	400	N.D.	Hexachlorobenzene.....	200	N.D.
Benzo(k)fluoranthene.....	400	N.D.	Hexachlorobutadiene.....	200	N.D.
Benzo(g,h,i)perylene.....	300	N.D.	Hexachlorocyclopentadiene.....	1,000	N.D.
Benzo(a)pyrene.....	300	N.D.	Hexachloroethane.....	400	N.D.
zyl alcohol.....	400	N.D.	Indeno(1,2,3-cd)pyrene.....	400	N.D.
Bis(2-chloroethoxy)methane.....	200	N.D.	Isophorone.....	200	N.D.
Bis(2-chloroethyl)ether.....	200	N.D.	2-Methylnaphthalene.....	200	N.D.
Bis(2-chloroisopropyl)ether.....	200	N.D.	2-Methylphenol.....	300	N.D.
Bis(2-ethylhexyl)phthalate.....	2,000	N.D.	4-Methylphenol.....	300	N.D.
4-Bromophenyl phenyl ether.....	300	N.D.	Naphthalene.....	300	N.D.
Butyl benzyl phthalate.....	1,000	N.D.	2-Nitroaniline.....	400	N.D.
4-Chloroaniline.....	200	N.D.	3-Nitroaniline.....	400	N.D.
2-Chloronaphthalene.....	200	N.D.	4-Nitroaniline.....	1,000	N.D.
4-Chloro-3-methylphenol.....	200	N.D.	Nitrobenzene.....	1,000	N.D.
2-Chlorophenol.....	500	N.D.	2-Nitrophenol.....	200	N.D.
4-Chlorophenyl phenyl ether.....	200	N.D.	4-Nitrophenol.....	1,000	N.D.(L)
Chrysene.....	200	N.D.	N-Nitrosodiphenylamine.....	400	N.D.
Dibenz(a,h)anthracene.....	200	N.D.	N-Nitroso-di-N-propylamine.....	300	N.D.
Dibenzofuran.....	200	N.D.	Pentachlorophenol.....	1,000	N.D.
Di-N-butyl phthalate.....	500	N.D.	Phenanthrene.....	200	N.D.
1,3-Dichlorobenzene.....	200	N.D.	Phenol.....	300	N.D.
1,4-Dichlorobenzene.....	200	N.D.	Pyrene.....	300	N.D.
1,2-Dichlorobenzene.....	200	N.D.	1,2,4-Trichlorobenzene.....	200	N.D.
3,3-Dichlorobenzidine.....	1,000	N.D.	2,4,5-Trichlorophenol.....	300	N.D.
2,4-Dichlorophenol.....	200	N.D.	2,4,6-Trichlorophenol.....	300	N.D.
Diethyl phthalate.....	200	N.D.			
2,4-Dimethylphenol.....	500	N.D.			

L=Laboratory Control Sample recovery was above the method control limits; Data not impacted.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	80%
Phenol-d6 (35-110).....	80%
2,4,6-Tribromophenol (40-110)	79%
Nitrobenzene-d5 (30-110).....	65%
2-Fluorobiphenyl (40-110).....	76%
Terphenyl-d14 (45-110).....	98%



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Water, QST-B50(GW/45)(5-26-99)
 Lab Number: PIE01673

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: 5/28-6/2, 1999
 Analyzed: 5/29-6/2, 1999
 Reported: Jun 9, 1999

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/28/99	05/29/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/28/99	05/29/99
Chromium.....	EPA 200.7	0.010	N.D.	05/28/99	05/29/99
Copper.....	EPA 200.7	0.020	N.D.	05/28/99	05/29/99
Lead.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Mercury.....	EPA 245.1	0.00020	N.D.	06/02/99	06/02/99
Nickel.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Selenium.....	EPA 200.7	0.060	N.D.	05/28/99	05/29/99
Silver.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Thallium.....	EPA 200.7	0.050	N.D.	05/28/99	06/01/99
.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1028
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, EW-24(S/40)(5-26-99)
 Lab Number: PIE01674

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 2-3, 1999
 Analyzed: Jun 3-7, 1999
 Reported: Jun 9, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	06/02/99	06/03/99
Arsenic.....	EPA 6010B	5.0	7.9	06/02/99	06/03/99
Beryllium.....	EPA 6010B	5.0*	N.D.	06/02/99	06/07/99
Cadmium.....	EPA 6010B	0.50	1.2	06/02/99	06/03/99
Chromium.....	EPA 6010B	2.0	33	06/02/99	06/03/99
Copper.....	EPA 6010B	2.5	36	06/02/99	06/03/99
Lead.....	EPA 6010B	2.5	6.3	06/02/99	06/03/99
Mercury.....	EPA 7471A	0.020	N.D.	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	21	06/02/99	06/03/99
Selenium.....	EPA 6010B	10	N.D.	06/02/99	06/03/99
Silver.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99
Thallium.....	EPA 6010B	5.0	N.D.	06/02/99	06/03/99
IC.....	EPA 6010B	2.5	30	06/02/99	06/03/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785 0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Client Project ID: ESTES Landfill 6699030
 Sample Descript: Soil, EW-24(S/50)(5-26-99)
 Lab Number: PIE01675

Sampled: May 26, 1999
 Received: May 26, 1999
 Extracted: Jun 2-3, 1999
 Analyzed: Jun 3-7, 1999
 Reported: Jun 9, 1999

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	06/02/99	06/03/99
Arsenic.....	EPA 6010B	5.0	11	06/02/99	06/03/99
Beryllium.....	EPA 6010B	5.0*	N.D.	06/02/99	06/07/99
Cadmium.....	EPA 6010B	0.50	0.83	06/02/99	06/03/99
Chromium.....	EPA 6010B	2.0	16	06/02/99	06/03/99
Copper.....	EPA 6010B	2.5	64	06/02/99	06/03/99
Lead.....	EPA 6010B	2.5	5.6	06/02/99	06/03/99
Mercury.....	EPA 7471A	0.020	N.D.	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	14	06/02/99	06/03/99
Selenium.....	EPA 6010B	10	N.D.	06/02/99	06/03/99
Silver.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99
Thallium.....	EPA 6010B	5.0	6.0	06/02/99	06/03/99
ic.....	EPA 6010B	2.5	73	06/02/99	06/03/99

Analytes reported as N.D. were not present at or above the reporting limit. *Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 2, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 9, 1999
 Matrix: Water

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aldrin.....	0.10	N.D.
alpha-BHC.....	0.10	N.D.
beta-BHC.....	0.10	N.D.
delta-BHC.....	0.25	N.D.
gamma-BHC (Lindane).....	0.10	N.D.
Chlordane.....	2.0	N.D.
4,4'-DDD.....	0.10	N.D.
4,4'-DDE.....	0.10	N.D.
4,4'-DDT.....	0.10	N.D.
Dieldrin.....	0.10	N.D.
Endosulfan I.....	0.10	N.D.
Endosulfan II.....	0.10	N.D.
Endosulfan sulfate.....	0.50	N.D.
Endrin.....	0.10	N.D.
Endrin aldehyde.....	0.10	N.D.
Heptachlor.....	0.10	N.D.
Heptachlor epoxide.....	0.10	N.D.
Methoxychlor.....	0.10	N.D.
Toxaphene.....	4.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	63%



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 9, 1999
 Matrix: Soil

ORGANOCHLORINE PESTICIDES (EPA 8081A)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	10	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	5.0	N.D.
4,4'-DDE.....	5.0	N.D.
4,4'-DDT.....	5.0	N.D.
Dieldrin.....	5.0	N.D.
Endosulfan I.....	5.0	N.D.
Endosulfan II.....	5.0	N.D.
Endosulfan sulfate.....	20	N.D.
Endrin.....	5.0	N.D.
Endrin aldehyde.....	5.0	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	5.0	N.D.
Toxaphene.....	200	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Tetrachloro-m-xylene (30-130).....	79%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01672.QST <19 of 27>



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Extracted: Jun 2, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 9, 1999
 Matrix: Water

Method Blank

POLYCHLORINATED BIPHENYLS by GC (EPA 3510/8082)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Aroclor 1016.....	1.0	N.D.
Aroclor 1221.....	1.0	N.D.
Aroclor 1232.....	1.0	N.D.
Aroclor 1242.....	1.0	N.D.
Aroclor 1248.....	1.0	N.D.
Aroclor 1254.....	1.0	N.D.
Aroclor 1260.....	1.0	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept Limits):	
Decachlorobiphenyl (30-130).....	80%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 18525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 1, 1999
 Analyzed: Jun 2, 1999
 Reported: Jun 9, 1999
 Matrix: Soil

POLYCHLORINATED BIPHENYLS by GC (EPA 3550/8082)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Aroclor 1016.....	50	N.D.
Aroclor 1221.....	50	N.D.
Aroclor 1232.....	50	N.D.
Aroclor 1242.....	50	N.D.
Aroclor 1248.....	50	N.D.
Aroclor 1254.....	50	N.D.
Aroclor 1260.....	50	N.D.

Analysis completed at Del Mar Analytical-Irvine (AZ0428)

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recovers (Accept Limits):	
Decachlorobiphenyl (30-130).....	100%



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Cullton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 27, 1999
 Analyzed: May 27, 1999
 Reported: Jun 9, 1999
 Matrix: Water

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acetone.....	20	N.D.	1,3-Dichloropropane.....	2.0	N.D.
Benzene.....	2.0	N.D.	2,2-Dichloropropane.....	2.0	N.D.
Bromobenzene.....	5.0	N.D.	1,1-Dichloropropene.....	2.0	N.D.
Bromochloromethane.....	5.0	N.D.	cis-1,3-Dichloropropene.....	2.0	N.D.
Bromodichloromethane.....	2.0	N.D.	trans-1,3-Dichloropropene...	2.0	N.D.
Bromoform.....	5.0	N.D.	Ethylbenzene.....	2.0	N.D.
Bromomethane.....	5.0	N.D.	Hexachlorobutadiene.....	5.0	N.D.
2-Butanone (MEK).....	10	N.D.	2-Hexanone.....	10	N.D.
n-Butylbenzene.....	5.0	N.D.	Iodomethane.....	2.0	N.D.
sec-Butylbenzene.....	5.0	N.D.	Isopropylbenzene.....	2.0	N.D.
tert-Butylbenzene.....	5.0	N.D.	p-Isopropyltoluene.....	2.0	N.D.
Carbon Disulfide.....	5.0	N.D.	Methylene chloride.....	10	N.D.
Carbon tetrachloride.....	5.0	N.D.	4-Methyl-2-pentanone (MIBK).....	10	N.D.
Chlorobenzene.....	2.0	N.D.	Methyl-tert-butyl ether (MTBE).....	5.0	N.D.
Chloroethane.....	5.0	N.D.	Naphthalene.....	5.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.	n-Propylbenzene.....	2.0	N.D.
Chloroform.....	2.0	N.D.	Styrene.....	2.0	N.D.
Chloromethane.....	5.0	N.D.	1,1,1,2-Tetrachloroethane....	5.0	N.D.
2-Chlorotoluene.....	5.0	N.D.	1,1,2,2-Tetrachloroethane....	2.0	N.D.
4-Chlorotoluene.....	5.0	N.D.	Tetrachloroethene.....	2.0	N.D.
Dibromochloromethane.....	2.0	N.D.	Toluene.....	2.0	N.D.
1,2-Dibromo-3-chloropropane....	5.0	N.D.	1,2,3-Trichlorobenzene.....	5.0	N.D.
1,2-Dibromoethane (EDB).....	2.0	N.D.	1,2,4-Trichlorobenzene.....	5.0	N.D.
Dibromomethane.....	2.0	N.D.	1,1,1-Trichloroethane.....	2.0	N.D.
1,2-Dichlorobenzene.....	2.0	N.D.	1,1,2-Trichloroethane.....	2.0	N.D.
1,3-Dichlorobenzene.....	2.0	N.D.	Trichloroethene.....	2.0	N.D.
1,4-Dichlorobenzene.....	2.0	N.D.	Trichlorofluoromethane.....	5.0	N.D.
Dichlorodifluoromethane.....	5.0	N.D.	1,2,3-Trichloropropane.....	10	N.D.
1,1-Dichloroethane.....	2.0	N.D.	1,2,4-Trimethylbenzene.....	2.0	N.D.
1,2-Dichloroethane.....	2.0	N.D.	1,3,5-Trimethylbenzene.....	2.0	N.D.
1,1-Dichloroethene.....	5.0	N.D.	Vinyl acetate.....	5.0	N.D.
cis-1,2-Dichloroethene.....	2.0	N.D.	Vinyl chloride.....	5.0	N.D.
trans-1,2-Dichloroethene.....	2.0	N.D.	Xylenes (Total).....	10	N.D.
1,2-Dichloropropane.....	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-160).....	85%
Toluene-d8 (75-140).....	100%
4-Bromofluorobenzene (75-135).....	93%

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1043
 4484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: May 26, 1999
 Analyzed: May 27, 1999
 Reported: Jun 9, 1999
 Matrix: Soil

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acetone.....	1000	N.D.	1,3-Dichloropropane.....	100	N.D.
Benzene.....	100	N.D.	2,2-Dichloropropane.....	100	N.D.
Bromobenzene.....	250	N.D.	1,1-Dichloropropene.....	100	N.D.
Bromochloromethane.....	250	N.D.	cis-1,3-Dichloropropene.....	100	N.D.
Bromodichloromethane.....	100	N.D.	trans-1,3-Dichloropropene...	100	N.D.
Bromoform.....	250	N.D.	Ethylbenzene.....	100	N.D.
Bromomethane.....	250	N.D.	Hexachlorobutadiene.....	250	N.D.
2-Butanone (MEK).....	500	N.D.	2-Hexanone.....	500	N.D.
n-Butylbenzene.....	250	N.D.	Iodomethane.....	100	N.D.
sec-Butylbenzene.....	250	N.D.	Isopropylbenzene.....	100	N.D.
tert-Butylbenzene.....	250	N.D.	p-Isopropyltoluene.....	100	N.D.
Carbon Disulfide.....	250	N.D.	Methylene chloride.....	500	N.D.
Carbon tetrachloride.....	250	N.D.	4-Methyl-2-pentanone (MIBK).....	500	N.D.
Chlorobenzene.....	100	N.D.	Methyl-tert-butyl ether (MTBE).....	250	N.D.
Chloroethane.....	250	N.D.	Naphthalene.....	250	N.D.
2-Chloroethyl vinyl ether.....	250	N.D.	n-Propylbenzene.....	100	N.D.
Chloroform.....	100	N.D.	Styrene.....	100	N.D.
Chloromethane.....	250	N.D.	1,1,1,2-Tetrachloroethane....	250	N.D.
2-Chlorotoluene.....	250	N.D.	1,1,2,2-Tetrachloroethane....	100	N.D.
4-Chlorotoluene.....	250	N.D.	Tetrachloroethene.....	100	N.D.
Dibromochloromethane.....	100	N.D.	Toluene.....	100	N.D.
1,2-Dibromo-3-chloropropane....	250	N.D.	1,2,3-Trichlorobenzene.....	250	N.D.
1,2-Dibromoethane (EDB).....	100	N.D.	1,2,4-Trichlorobenzene.....	250	N.D.
Dibromomethane.....	100	N.D.	1,1,1-Trichloroethane.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,1,2-Trichloroethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Trichloroethene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Trichlorofluoromethane.....	250	N.D.
Dichlorodifluoromethane.....	250	N.D.	1,2,3-Trichloropropane.....	500	N.D.
1,1-Dichloroethane.....	100	N.D.	1,2,4-Trimethylbenzene.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.	1,3,5-Trimethylbenzene.....	100	N.D.
1,1-Dichloroethene.....	250	N.D.	Vinyl acetate.....	250	N.D.
cis-1,2-Dichloroethene.....	100	N.D.	Vinyl chloride.....	250	N.D.
trans-1,2-Dichloroethene.....	100	N.D.	Xylenes (Total).....	300	N.D.
1,2-Dichloropropane.....	100	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (70-125).....	89%
Toluene-d8 (50-135).....	89%
4-Bromofluorobenzene (70-130).....	87%

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01672.QST <23 of 27>



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

JT Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 1, 1999
 Analyzed: Jun 3, 1999
 Reported: Jun 9, 1999
 Matrix: Water

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)	Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Acenaphthene.....	10	N.D.	Dimethyl phthalate.....	10	N.D.
Acenaphthylene.....	10	N.D.	4,6-Dinitro-2-methylphenol...	40	N.D.
Aniline.....	10	N.D.	2,4-Dinitrophenol.....	100	N.D.
Anthracene.....	10	N.D.	2,4-Dinitrotoluene.....	10	N.D.
Azobenzene*.....	20	N.D.	2,6-Dinitrotoluene.....	10	N.D.
Benzidine.....	100	N.D.	Di-N-octyl phthalate.....	40	N.D.
Benzoic Acid.....	100	N.D.	Fluoranthene.....	10	N.D.
Benzo(a)anthracene.....	10	N.D.	Fluorene.....	10	N.D.
Benzo(b)fluoranthene.....	10	N.D.	Hexachlorobenzene.....	10	N.D.
Benzo(k)fluoranthene.....	10	N.D.	Hexachlorobutadiene.....	10	N.D.
Benzo(g,h,i)perylene.....	10	N.D.	Hexachlorocyclopentadiene.....	40	N.D.
Benzo(a)pyrene.....	10	N.D.	Hexachloroethane.....	10	N.D.
Benzyl alcohol.....	20	N.D.	Indeno(1,2,3-cd)pyrene.....	20	N.D.
Bis(2-chloroethoxy)methane.....	10	N.D.	Isophorone.....	10	N.D.
Bis(2-chloroethyl)ether.....	10	N.D.	2-Methylnaphthalene.....	10	N.D.
Bis(2-chloroisopropyl)ether.....	10	N.D.	2-Methylphenol.....	10	N.D.
Bis(2-ethylhexyl)phthalate.....	100	N.D.	4-Methylphenol.....	10	N.D.
4-Bromophenyl phenyl ether.....	10	N.D.	Naphthalene.....	10	N.D.
Butyl benzyl phthalate.....	20	N.D.	2-Nitroaniline.....	20	N.D.
4-Chloroaniline.....	10	N.D.	3-Nitroaniline.....	20	N.D.
2-Chloronaphthalene.....	10	N.D.	4-Nitroaniline.....	100	N.D.
4-Chloro-3-methylphenol.....	20	N.D.	Nitrobenzene.....	40	N.D.
2-Chlorophenol.....	10	N.D.	2-Nitrophenol.....	10	N.D.
4-Chlorophenyl phenyl ether.....	10	N.D.	4-Nitrophenol.....	100	N.D.
Chrysene.....	10	N.D.	N-Nitrosodiphenylamine.....	10	N.D.
Dibenz(a,h)anthracene.....	20	N.D.	N-Nitroso-di-N-propylamine.....	10	N.D.
Dibenzofuran.....	10	N.D.	Pentachlorophenol.....	40	N.D.
Di-N-butyl phthalate.....	20	N.D.	Phenanthrene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.	Phenol.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.	Pyrene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.	1,2,4-Trichlorobenzene.....	10	N.D.
3,3-Dichlorobenzidine.....	40	N.D.	2,4,5-Trichlorophenol.....	20	N.D.
2,4-Dichlorophenol.....	10	N.D.	2,4,6-Trichlorophenol.....	20	N.D.
Diethyl phthalate.....	10	N.D.			
2,4-Dimethylphenol.....	20	N.D.			

*Azobenzene is a breakdown product of 1,2-Diphenylhydrazine

Analytes reported as N.D. were not present at or above the reporting limit.

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (40-110).....	82%
Phenol-d6 (40-115).....	85%
2,4,6-Tribromophenol (40-140).....	88%
Nitrobenzene-d5 (35-120).....	88%
2-Fluorobiphenyl (30-150).....	89%
Terphenyl-d14 (45-150).....	108%



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 3830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

AST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Miehler

Method Blank

Extracted: May 28, 1999
 Analyzed: May 29, 1999
 Reported: Jun 9, 1999
 Matrix: Soil

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Acenaphthene.....	100	N.D.	Dimethyl phthalate.....	100	N.D.
Acenaphthylene.....	100	N.D.	4,6-Dinitro-2-methylphenol.....	250	N.D.
Aniline.....	150	N.D.	2,4-Dinitrophenol.....	250	N.D.
Anthracene.....	100	N.D.	2,4-Dinitrotoluene.....	100	N.D.
Azobenzene.....	150	N.D.	2,6-Dinitrotoluene.....	100	N.D.
Benzidine.....	1,000	N.D.	Di-N-octyl phthalate.....	500	N.D.
Benzoic Acid.....	500	N.D.	Fluoranthene.....	100	N.D.
Benzo(a)anthracene.....	100	N.D.	Fluorene.....	100	N.D.
Benzo(b)fluoranthene.....	200	N.D.	Hexachlorobenzene.....	100	N.D.
Benzo(k)fluoranthene.....	200	N.D.	Hexachlorobutadiene.....	100	N.D.
Benzo(g,h,i)perylene.....	150	N.D.	Hexachlorocyclopentadiene.....	500	N.D.
Benzo(a)pyrene.....	150	N.D.	Hexachloroethane.....	200	N.D.
Benzyl alcohol.....	200	N.D.	Indeno(1,2,3-cd)pyrene.....	200	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.	Isophorone.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.	2-Methylnaphthalene.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.	2-Methylphenol.....	150	N.D.
Bis(2-ethylhexyl)phthalate.....	1,000	N.D.	4-Methylphenol.....	150	N.D.
4-Bromophenyl phenyl ether.....	150	N.D.	Naphthalene.....	150	N.D.
Butyl benzyl phthalate.....	500	N.D.	2-Nitroaniline.....	200	N.D.
4-Chloroaniline.....	100	N.D.	3-Nitroaniline.....	200	N.D.
2-Chloronaphthalene.....	100	N.D.	4-Nitroaniline.....	500	N.D.
4-Chloro-3-methylphenol.....	100	N.D.	Nitrobenzene.....	500	N.D.
2-Chlorophenol.....	250	N.D.	2-Nitrophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.	4-Nitrophenol.....	500	N.D.
Chrysene.....	100	N.D.	N-Nitrosodiphenylamine.....	200	N.D.
Dibenz(a,h)anthracene.....	100	N.D.	N-Nitroso-di-N-propylamine.....	150	N.D.
Dibenzofuran.....	100	N.D.	Pentachlorophenol.....	500	N.D.
Di-N-butyl phthalate.....	250	N.D.	Phenanthrene.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.	Phenol.....	150	N.D.
1,4-Dichlorobenzene.....	100	N.D.	Pyrene.....	150	N.D.
1,2-Dichlorobenzene.....	100	N.D.	1,2,4-Trichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.	2,4,5-Trichlorophenol.....	150	N.D.
2,4-Dichlorophenol.....	100	N.D.	2,4,6-Trichlorophenol.....	150	N.D.
Diethyl phthalate.....	100	N.D.			
2,4-Dimethylphenol.....	250	N.D.			

Analysis completed at Del Mar Analytical-IRVINE (AZ0428)
 Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Surrogate Standard Recoveries (Accept. Limits):	
2-Fluorophenol (25-110).....	52%
Phenol-d6 (35-110).....	58%
2,4,6-Tribromophenol (40-110).....	59%
Nitrobenzene-d5 (30-110).....	49%
2-Fluorobiphenyl (40-110).....	56%
Terphenyl-d14 (45-110).....	69%



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

QST Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: 5/28-6/2, 1999
 Analyzed: 5/29-6/2, 1999
 Reported: Jun 9, 1999
 Matrix: Water

TOTAL RECOVERABLE METALS

Analyte	EPA Method	Reporting Limit mg/L (ppm)	Sample Result mg/L (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Arsenic.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Beryllium.....	EPA 200.7	0.0050	N.D.	05/28/99	05/29/99
Cadmium.....	EPA 200.7	0.0050	N.D.	05/28/99	05/29/99
Chromium.....	EPA 200.7	0.010	N.D.	05/28/99	05/29/99
Copper.....	EPA 200.7	0.020	N.D.	05/28/99	05/29/99
Lead.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Mercury.....	EPA 245.1	0.00020	N.D.	06/02/99	06/02/99
Nickel.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Selenium.....	EPA 200.7	0.060	N.D.	05/28/99	05/29/99
Silver.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99
Thallium.....	EPA 200.7	0.050	N.D.	05/28/99	06/01/99
Vanadium.....	EPA 200.7	0.050	N.D.	05/28/99	05/29/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 2830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-1043 FAX (480) 785-0851

T Environmental
 426 N. 44th St., Suite 110
 Phoenix, AZ 85008
 Attention: John Mieher

Method Blank

Extracted: Jun 2-3, 1999
 Analyzed: Jun 3-7, 1999
 Reported: Jun 9, 1999
 Matrix: Soil

TOTAL METALS

Analyte	EPA Method	Reporting Limit mg/Kg (ppm)	Sample Result mg/Kg (ppm)	Date Extracted	Date Analyzed
Antimony.....	EPA 6010B	5.0	N.D.	06/02/99	06/03/99
Arsenic.....	EPA 6010B	5.0	N.D.	06/02/99	06/03/99
Beryllium.....	EPA 6010B	0.50	N.D.	06/02/99	06/07/99
Cadmium.....	EPA 6010B	0.50	N.D.	06/02/99	06/03/99
Chromium.....	EPA 6010B	2.0	N.D.	06/02/99	06/03/99
Copper.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99
Lead.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99
Mercury.....	EPA 7471A	0.020	N.D.	06/03/99	06/03/99
Nickel.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99
Selenium.....	EPA 6010B	10	N.D.	06/02/99	06/03/99
Silver.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99
Thallium.....	EPA 6010B	5.0	N.D.	06/02/99	06/03/99
Zinc.....	EPA 6010B	2.5	N.D.	06/02/99	06/03/99

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Robyn Rice
 Project Manager

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

PIE01672.QST <27 of 27>

MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Water
 Instrument: GC

Date: 6/3/99
 Sample #: LCS/LCSD*
 Batch #: IF02PE1W

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
								%	%
DDE	0	0.500	0.414	0.482	83%	96%	15%	40	55-125
DDD	0	0.500	0.455	0.479	91%	96%	5%	20	60-130
DDT	0	0.500	0.479	0.500	96%	100%	4%	20	55-145

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



Del Mar Analytical

3852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Calton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8081A
 Matrix: Soil
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD*
 Batch #: IF01PE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
DDE	0	20	17.0	16.7	85%	84%	2%	50	20-145
DDD	0	20	18.4	18.0	92%	90%	2%	30	50-130
DDT	0	20	18.6	18.4	93%	92%	1%	30	20-160

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.

Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Water
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD*
 Batch #: IF02PE1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
AR 1016	0	4.0	3.04	3.69	76%	92%	19%	≤ 50	60-140%
AR 1260	0	4.0	3.43	4.09	86%	102%	18%	≤ 50	60-140%

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC criteria was within acceptance limits.





Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8082 (PCB's only)
 Matrix: Soil
 Instrument: GC

Date: 6/2/99
 Sample #: LCS/LCSD*
 Batch #: IF01PE1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
PCB 1016 (Arochlor)	0	160	127	138	79%	86%	8%	50	60-140
PCB 1260 (Arochlor)	0	160	123	130	77%	81%	6%	50	60-140

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426) This analysis was performed at Del Mar Analytical-Irvine (AZ0428).



MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Water
 Instrument: GCMS

Date: 05/27/99
 Sample #: PIE01673
 Batch #: IE27021W

Acceptance Limits

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>RPD</u>	<u>PR1/PR2</u>
	ppb	ppb	ppb	ppb	%	%	%	%	%
Vinyl Chloride	0.0	25	21.0	22.0	84%	88%	5%	≤ 20	50-128
1,1-Dichloroethene	0.0	25	20.0	24.0	80%	96%	18.2%	≤ 20	69-119
1,1-Dichloroethane	0.0	25	24.0	24.0	96%	96%	0.0%	≤ 20	69-113
Chloroform	6.0	25	31.0	30.0	100%	96%	3.3%	≤ 20	23-191
1,2-Dichloroethane	0.0	25	25.0	24.0	100%	96%	4.1%	≤ 20	61-122
Benzene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	80-115
Trichloroethene	0.0	25	25.0	25.0	100%	100%	0.0%	≤ 20	60-142
Toluene	0.0	25	23.0	26.0	92%	104%	12.2%	≤ 20	69-136
Tetrachloroethene	0.0	25	26.0	25.0	104%	100%	3.9%	≤ 20	49-155
Chlorobenzene	0.0	25	27.0	26.0	108%	104%	3.8%	≤ 20	72-121

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

EPA Method: 8260B
 Matrix: Soil
 Instrument: GCMS

Date: 05/27/99
 Sample #: PIE01645
 Batch #: IE26MS1S

Acceptance Limits

Analyte	R1 ppb	Sp ppb	MS ppb	MSD ppb	PR1 %	PR2 %	RPD %
Vinyl Chloride	0.0	500	452	159	90%	32%	95.9%
1,1-Dichloroethene	0.0	500	412	434	82%	87%	5.2%
1,1-Dichloroethane	0.0	500	417	424	83%	85%	1.7%
Chloroform	0.0	500	411	429	82%	86%	4.3%
1,2-Dichloroethane	0.0	500	364	383	73%	77%	5.1%
nzene	0.0	500	462	482	92%	96%	4.2%
Trichloroethene	0.0	500	379	403	76%	81%	6.1%
Toluene	0.0	500	429	428	86%	86%	0.2%
Tetrachloroethene	0.0	500	347	375	69%	75%	7.8%
Chlorobenzene	0.0	500	378	402	76%	80%	6%

RPD %	PR1/PR2 %
≤ 112	0-100%
≤ 20	70-125%
≤ 20	75-115%
≤ 26	75-120%
≤ 20	70-115%
≤ 20	80-120%
≤ 20	75-120%
≤ 20	80-125%
≤ 20	75-120%
≤ 20	75-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Determined by Control Charts

4/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4867 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 8260B

DATE: 5/27/99

Analyte	St	R1	PR	QC Limits
	ppb	ppb	%	%
Vinyl Chloride	500	77	15%	0-110
1,1-Dichloroethene	500	407	81%	46-134
1,1-Dichloroethane	500	430	86%	62-122
Chloroform	500	444	89%	66-130
1,2-Dichloroethane	500	396	79%	61-121
Benzene	500	497	99%	68-128
Trichloroethene	500	400	80%	59-119
Toluene	500	451	90%	62-130
tetrachloroethene	500	389	78%	64-124
o-xylene	500	419	84%	75-115

Definition of Terms:

St. Concentration standard added to sample

R1..... Standard Result

PR..... Percent Recovery

Del Mar Analytical



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolby Dr., Suite A, Calton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 8270
 Matrix: Water
 Instrument: GCMS

Date: 06/03/99
 Sample #: LCS/LCSD*
 Batch #: IF01SE1W

Acceptance Limits

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppb	ppb	ppb	ppb	%	%	%	<u>RPD</u>	<u>PR1/PR2</u>
Phenol	0.1	50	55	57	110%	114%	4%	15	40-110
2-Chlorophenol	0.0	50	51	53	102%	106%	4%	15	40-110
1,4-Dichlorobenzene	0.0	50	49	44	98%	88%	11%	15	35-110
N-Nitroso-di-n-propylamine	0.0	50	60	64	120%	128%	6%	20	45-120
1,2,4-Trichlorobenzene	0.0	50	53	52	106%	104%	2%	15	44-110
Chloro-3-methylphenol	0.0	50	59	65	118%	130%	10%	20	50-115
Acenaphthene	0.1	50	60	58	120%	116%	3%	15	50-115
2,4-Dinitrotoluene	0.0	50	62	60	124%	120%	3%	15	55-120
4-Nitrophenol	0.0	50	62	60	124%	120%	3%	15	45-120
Pentachlorophenol	0.0	50	61	61	122%	122%	0%	20	50-125
Pyrene	0.1	50	58	57	116%	114%	2%	25	70-120

*LCS/LCSD performed in lieu of MS/MSD due to insufficient amount of sample provided.

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- ✓QC Criteria..... See Case Narrative.



MS/MSD DATA REPORT

EPA Method: 8270B
 Matrix: Soil
 Instrument: GCMS

Date: 05/29/99
 Sample #: IE03650
 Batch #: IE28SE1S

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	RPD	PR1/PR2
								%	%
Phenol	0.0	50.0	11.0	10.0	22%	20%	10%	20	30-110
2-Chlorophenol	0.0	50.0	12.0	11.0	24%	22%	9%	25	30-110
1,4-Dichlorobenzene	0.0	50.0	8.0	6.0	16%	12%	29%	30	25-110
N-Nitroso-di-n-propylamine	0.0	50.0	10.0	9.0	20%	18%	11%	20	35-110
1,2,4-Trichlorobenzene	0.0	50.0	8.0	8.0	16%	16%	0%	25	30-110
Chloro-3-methylphenol	0.0	50.0	11.0	10.0	22%	20%	10%	25	40-110
Acenaphthene	0.1	50.0	9.0	9.0	18%	18%	0%	15	35-110
2,4-Dinitrotoluene	0.1	50.0	10.0	10.0	20%	20%	0%	20	35-110
4-Nitrophenol	0.1	50.0	14.0	14.0	28%	28%	0%	25	15-135
Pentachlorophenol	0.0	50.0	10.0	9.0	20%	18%	11%	30	30-115
Pyrene	0.2	50.0	20.0	21.0	40%	42%	5%	25	30-140

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

A/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Coolley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11 Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 5/28/99
 Sample #: PIE01663

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony	0	1.0	1.08	1.05	108%	105%	2.8%	107%
Arsenic	0	1.0	1.00	0.988	100%	99%	1.2%	99%
Beryllium	0	1.0	1.00	0.978	100%	98%	2.2%	99%
Cadmium	0	1.0	0.973	0.951	97%	95%	2.3%	96%
Chromium	0	1.0	0.974	0.959	97%	96%	1.6%	97%
Copper	0.655	1.0	1.71	1.67	106%	102%	2.4%	104%
Lead	0	1.0	0.970	0.944	97%	94%	2.7%	96%
Nickel	0.323	1.0	1.27	1.25	95%	93%	1.6%	94%
Selenium	0	1.0	0.970	0.947	97%	95%	2.4%	96%
Silver	0.0469	0.05	0.110	0.110	126%	126%	0.0%	126%
Zinc	0.0131	1.0	1.04	1.02	103%	101%	1.9%	102%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD/2)) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1844
 1484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0951

MS/MSD DATA REPORT

METHOD: 200.7
 INSTRUMENT: ICP
 MATRIX: Water

Date: 6/1/99
 Sample #: PIE01663

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Thallium	0	1.0	0.851	0.884	85%	88%	3.8%	87%

Definition of terms:

- R1..... Result of Sample Analysis
- SP..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
- PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
- RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
- Acceptance Limits RPD: < or = 20%
- MS/MSD: 70-130%

QA/QC CRITERIA: All QA/QC was within acceptance limits.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1943
 1484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 245.1
 Matrix: Water
 Instrument: N/A

Date: 06/02/99
 Sample #: PIE01975
 Batch #: IF02HG1W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Acceptance Limits	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0	0.00500	0.00482	0.00469	96%	94%	2.7%	≤ 20	70-130%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.
- QA/QC Criteria..... All QA/QC was within acceptance limit.



Del Mar Analytical

3952 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1229
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 95044 (480) 795-0043 FAX (480) 795-0851

MS/MSD DATA REPORT

METHOD: 6010B
 INSTRUMENT: ICP
 MATRIX: Soil

Date: 6/3/99
 Sample #: PIE01423

Analyte	MEAN							
	R1	SP	MS	MSD	PR1	PR2	RPD	PR
	ppm	ppm	ppm	ppm	%	%	%	%
Antimony*	0	50.0	29.7	26.6	59%	53%	11.0%	56%
Arsenic*	11.2	50.0	50.1	45.3	78%	68%	10.1%	73%
Beryllium	0	50.0	45.1	39.4	90%	79%	13.5%	85%
Cadmium	1.66	50.0	45.1	39.9	87%	76%	12.2%	82%
Chromium	35.2	50.0	82.9	75.1	95%	80%	9.9%	88%
Copper*	25.1	50.0	60.7	54.3	71%	58%	11.1%	65%
Lead	15.6	50.0	59.9	54.5	89%	78%	9.4%	83%
Nickel*	25.6	50.0	67.5	65.3	84%	79%	3.3%	82%
Selenium*	0	50.0	38.3	33.6	77%	67%	13.1%	72%
Silver	0	50.0	45.6	40.1	91%	80%	12.8%	86%
Thallium	6.70	50.0	49.4	44.3	85%	75%	10.9%	80%
Zinc**	64.4	50.0	88.9	81.7	49%	35%	8.4%	42%

Definition or Terms:

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration Added to Sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1) / SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1) / SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits RPD: $< \text{ or } = 20\%$
 MS/MSD: 75-125%

QA/QC Criteria: *The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.

**Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See LCS for batch validation.



Del Mar Analytical

2852 Allen Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 770-1844 FAX (818) 770-1843
 3484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0041 FAX (480) 795-0851

LABORATORY CONTROL SAMPLE

EPA METHOD: 6010B
INSTRUMENT: ICP
MATRIX: Soil

DATE: 6/3/99

Analyte	St	R1	PR
	ppm	ppm	%
Antimony	50.0	51.3	103%
Arsenic	50.0	47.2	94%
Copper	50.0	49.5	99%
Nickel	50.0	47.4	95%
Selenium	50.0	44.0	88%
Zinc	50.0	46.0	92%

Definition of Terms:

St. Standard Concentration

R1. Standard Result

PR. Percent Recovery of R1; $(R1/St) \times 100$

Acceptance Limits LCS: 80-120%

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical (AZ0426)



Del Mar Analytical

1852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 3484 Chasapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method: 7471A
 Matrix: Soil
 Instrument: N/A

Date: 06/03/99
 Sample #: PIE01642
 Batch #: IF03HG1S

Analyte	<u>R1</u>	<u>Sp</u>	<u>MS</u>	<u>MSD</u>	<u>PR1</u>	<u>PR2</u>	<u>RPD</u>	<u>Acceptance Limits</u>	
	ppm	ppm	ppm	ppm	%	%	%	RPD	PR1/PR2
Mercury	0.053	0.333	0.330	0.332	83%	84%	1%	≤ 20	85-115%

Definition of Terms

- R1..... Result of Sample Analysis
- Sp..... Spike Concentration added to sample
- MS..... Matrix Spike Result
- MSD..... Matrix Spike Duplicate Result
- PR1..... Percent Recovery of MS; $((MS-R1)/SP) \times 100$
- PR2..... Percent Recovery of MSD; $((MSD-R1)/SP) \times 100$
- RPD..... Relative Percent Difference; $((MS-MSD)/(MS+MSD)/2) \times 100$
- Acceptance Limits..... Statistically determined on an annual basis.

QA/QC Criteria..... The MS/MSD recoveries and/or RPD were outside of acceptance limits due to sample matrix effects. See LCS for batch validation.



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 16525 Sherman Way, Suite C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
 484 Chesapeake Dr., Suite 305, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
 1830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 795-0043 FAX (480) 795-0851

LCS DATA REPORT

METHOD: 7471A
 MATRIX: Soil

DATE: 6/3/99

Analyte	Sp	LCS	PR
	ppm	ppm	%
Mercury	0.00200	0.00200	100%

Definition of Terms:

- Sp. Standard Concentration
- LCS. Laboratory Control Sample Result
- PR. Percent Recovery of LCS; (LCS/Sp) X 100

QA/QC CRITERIA: All QA/QC was within acceptance limits.

Del Mar Analytical



June 10, 1999

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, Arizona 85044
Attn: Robyn Rice

Report of Laboratory Results: ARF number: 30389

Dear Ms. Rice:

One water and two soil samples for Project Number 'PIE01672.QST' were received May 28, 1999, in good condition. Written results are being provided on this June 10, 1999, for the requested analyses. All holding times were met. No unusual problems or complications were encountered with this sample set.

Sample Table

Sample Description	Del Mar ID	APPL Inc. ID	Sample Date
Water	PIE01673	79561w	05/26/99
Soil	PIE01674	79562s	05/26/99
Soil	PIE01675	79563s	05/26/99

If you have any questions or require further information, please contact us at your convenience. Thank you for choosing APPL, Inc.

Sincerely,

Mike Ray, Laboratory Director
APPL, Inc.

MR/mr
Enclosure
cc: File

EPA 8141

Jl Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE01672.QST

Sample ID: PIE01673

Sample Collection Date: 5/26/99

ARF: 30389

APPL ID AP79561

QCG: \$8141W-990601A-16982

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	5.0	ug/L	6/1/99	6/3/99
EPA 8141	Bolstar	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Chlorpyrifos	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Coumaphos	Not detected	1.0	ug/L	6/1/99	6/3/99
EPA 8141	Def	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Demeton-s	Not detected	1.0	ug/L	6/1/99	6/3/99
EPA 8141	Diazinon	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Dichlorvos	Not detected	1.0	ug/L	6/1/99	6/3/99
EPA 8141	Dimethoate	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Disulfoton	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	EPN	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Ethion	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Ethoprop	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Fensulfothion	Not detected	2.5	ug/L	6/1/99	6/3/99
EPA 8141	Fenthion	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Malathion	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Merphos	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Mevinphos	Not detected	3.5	ug/L	6/1/99	6/3/99
EPA 8141	Naled	Not detected	2.5	ug/L	6/1/99	6/3/99
EPA 8141	Parathion, ethyl	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Parathion, methyl	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Phorate	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Prowl	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Ronnel	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Stirophos	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Sulfotep	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Tepp	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Tokuthion	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Trichloronate	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Trifluralin	Not detected	0.50	ug/L	6/1/99	6/3/99
EPA 8141	Surrogate: Tributylphosphate	87.7	60-150	%	6/1/99	6/3/99
EPA 8141	Surrogate: Triphenylphosphate	85.1	76-140	%	6/1/99	6/3/99

Run #: 71
Instrument: NPD03
Sequence: 990601
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

CSI Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Attn: Robyn Rice

Project: PIE01672.QST

Sample ID: PIE01674

Sample Collection Date: 5/26/99

ARF: 30389

APPL ID AP79562

QCG: \$8141S-990602AS-17002

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	6/2/99	6/4/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Def	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	EPN	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Ethion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	6/2/99	6/4/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Malathion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Merphos	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	6/2/99	6/4/99
EPA 8141	Naled	Not detected	250	ug/Kg	6/2/99	6/4/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Phorate	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Prowl	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Surrogate: Tributylphosphate	88.1	51-154	%	6/2/99	6/4/99
EPA 8141	Surrogate: Triphenylphosphate	86.3	63-151	%	6/2/99	6/4/99

Run #: 46
Instrument: NPD03
Sequence: 990603
Dilution Factor: 1
Initials: FML

EPA 8141 OP Pesticides

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE01672.QST

Sample ID: PIE01675

Sample Collection Date: 5/26/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30389

APPL ID AP79563

CCG: \$8141S-990602AS-17002

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8141	Azinphosmethyl	Not detected	500	ug/Kg	6/2/99	6/4/99
EPA 8141	Bolstar	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Chlorpyrifos	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Coumaphos	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Def	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Demeton-s	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Diazinon	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Dichlorvos	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Dimethoate	Not detected	100	ug/Kg	6/2/99	6/4/99
EPA 8141	Disulfoton	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	EPN	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Ethion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Ethoprop	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Fensulfothion	Not detected	250	ug/Kg	6/2/99	6/4/99
EPA 8141	Fenthion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Malathion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Merphos	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Mevinphos	Not detected	350	ug/Kg	6/2/99	6/4/99
EPA 8141	Naled	Not detected	250	ug/Kg	6/2/99	6/4/99
EPA 8141	Parathion, ethyl	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Parathion, methyl	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Phorate	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Prowl	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Ronnel	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Stirophos	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Tokuthion	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Trichloronate	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Trifluralin	Not detected	50	ug/Kg	6/2/99	6/4/99
EPA 8141	Surrogate: Tributylphosphate	87.8	51-154	%	6/2/99	6/4/99
EPA 8141	Surrogate: Triphenylphosphate	87.7	63-151	%	6/2/99	6/4/99

Run #: 49
Instrument: NPD03
Sequence: 990603
Dilution Factor: 1
Initials: FML

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE01672.QST

Sample ID: PIE01674

Sample Collection Date: 5/26/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30389

APPL ID AP79562

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	6/2/99	6/6/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	6/2/99	6/6/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	6/2/99	6/6/99
EPA 8151	Dicamba	Not detected	40	ug/kg	6/2/99	6/6/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	6/2/99	6/6/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	6/2/99	6/6/99
EPA 8151	MCPA	Not detected	40000	ug/kg	6/2/99	6/6/99
EPA 8151	MCPP	Not detected	40000	ug/kg	6/2/99	6/6/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	6/2/99	6/6/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	6/2/99	6/6/99
EPA 8151	Surrogate recovery	105	93-141	%	6/2/99	6/6/99

Run #: 49
Instrument: ECD01
Sequence: 990605
Dilution Factor: 1
Initials: KW

EPA 8151 HERBICIDE SOIL

Mar Analytical

9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice

Project: PIE01672.QST

Sample ID: PIE01675

Sample Collection Date: 5/26/99

APPL Inc.

4203 West Swift Avenue
Fresno, CA 93722

ARF: 30389

APPL ID AP79563

QCG: \$8151S-990602A-16959

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	200	ug/kg	6/2/99	6/6/99
EPA 8151	Dalapon	Not detected	2000	ug/kg	6/2/99	6/6/99
EPA 8151	2,4-DB	Not detected	400	ug/kg	6/2/99	6/6/99
EPA 8151	Dicamba	Not detected	40	ug/kg	6/2/99	6/6/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	6/2/99	6/6/99
EPA 8151	Dinoseb (DNBP)	Not detected	100	ug/kg	6/2/99	6/6/99
EPA 8151	MCPA	Not detected	40000	ug/kg	6/2/99	6/6/99
EPA 8151	MCPP	Not detected	40000	ug/kg	6/2/99	6/6/99
EPA 8151	2,4,5-T	Not detected	40	ug/kg	6/2/99	6/6/99
EPA 8151	2,4,5-TP	Not detected	40	ug/kg	6/2/99	6/6/99
EPA 8151	Surrogate recovery	121	93-141	%	6/2/99	6/6/99

Run #: 50
Instrument: ECD01
Sequence: 990605
Dilution Factor: 1
Initials: KW

EPA 8151 Herbicides

. Mar Analytical
9830 South 51st. St., Ste B-120
Phoenix, AZ 85044

Attn: Robyn Rice
Project: PIE01672.QST
Sample ID: PIE01673
Sample Collection Date: 5/26/99

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

ARF: 30389
APPL ID AP79561
QCG: S8151-990601A-16994

Method	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
EPA 8151	2,4-D	Not detected	0.50	ug/L	6/1/99	6/7/99
EPA 8151	Dalapon	Not detected	1.0	ug/L	6/1/99	6/7/99
EPA 8151	2,4-DB	Not detected	1.0	ug/L	6/1/99	6/7/99
EPA 8151	Dicamba	Not detected	0.10	ug/L	6/1/99	6/7/99
EPA 8151	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	6/1/99	6/7/99
EPA 8151	Dinoseb (DNBP)	Not detected	0.25	ug/L	6/1/99	6/7/99
EPA 8151	MCPA	Not detected	100	ug/L	6/1/99	6/7/99
EPA 8151	MCPP	Not detected	100	ug/L	6/1/99	6/7/99
EPA 8151	2,4,5-T	Not detected	0.10	ug/L	6/1/99	6/7/99
EPA 8151	2,4,5-TP	Not detected	0.10	ug/L	6/1/99	6/7/99
EPA 8151	Surrogate Recovery	96.3	61-120	%	6/1/99	6/7/99

Run #: 81
Instrument: ECD01
Sequence: 990605 . .
Dilution Factor: 1
Initials: KW

Method Blank

EPA 8141

Blank Name/QCG: 990601W - 16982
 Batch ID: \$8141W-990601A

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	5.0	ug/L	6/1/99	6/3/99
BLANK	Bolstar	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Chlorpyrifos	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Coumaphos	Not detected	1.0	ug/L	6/1/99	6/3/99
BLANK	Def	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Demeton-s	Not detected	1.0	ug/L	6/1/99	6/3/99
BLANK	Diazinon	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Dichlorvos	Not detected	1.0	ug/L	6/1/99	6/3/99
BLANK	Dimethoate	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Disulfoton	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	EPN	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Ethion	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Ethoprop	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Fensulfothion	Not detected	2.5	ug/L	6/1/99	6/3/99
BLANK	Fenthion	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Malathion	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Merphos	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Mevinphos	Not detected	3.5	ug/L	6/1/99	6/3/99
BLANK	Naled	Not detected	2.5	ug/L	6/1/99	6/3/99
BLANK	Parathion, ethyl	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Parathion, methyl	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Phorate	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Prowl	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Ronnel	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Stirophos	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Sulfotep	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Tepp	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Tokuthion	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Trichloronate	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Trifluralin	Not detected	0.50	ug/L	6/1/99	6/3/99
BLANK	Surrogate: Tributylphosphate	80.5	60-150	%	6/1/99	6/3/99
BLANK	Surrogate: Triphenylphosphate	76.3	76-140	%	6/1/99	6/3/99

Run #: 68
 Instrument: NPD03
 Sequence: 990601
 Initials: FML

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990601AW LCS/LCSD
Date/Initials: 3/4/99 FML
Extraction Date: 2/24/99
Matrix Type: Water
Units: ug/L

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	2.50	0.00	1.47	59.0	1.61	64.5	9.0
Diazinon	2.50	0.00	2.33	93.1	2.63	105	12
Disulfoton	2.50	0.00	1.83	73.3	1.82	72.9	0.6
Methyl parathion	2.50	0.00	1.81	72.6	2.04	81.5	12
Stirophos	2.50	0.00	1.96	78.2	2.27	90.9	15
Ethion	2.50	0.00	1.65	65.9	1.82	72.8	9.9

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	5.00	*****	4.04	80.9	4.32	86.4
Triphenyl phosphate	5.00	*****	3.90	78.0	4.39	87.9

	Primary Column	
	Spike	Spk Dup
Analysis Date:	6/3/99	6/3/99
Analysis Time:	6:59 AM	7:37 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	69	70
Extraction Ratio:	10/1000	10/1000
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8141 OP Pesticides

Blank Name/QCG: 990602S - 17002
 Batch ID: S8141S-990602AS

APPL Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	Azinphosmethyl	Not detected	500	ug/kg	6/2/99	6/4/99
BLANK	Bolstar	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Chlorpyrifos	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Coumaphos	Not detected	100	ug/kg	6/2/99	6/4/99
BLANK	Def	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Demeton-s	Not detected	100	ug/kg	6/2/99	6/4/99
BLANK	Diazinon	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Dichlorvos	Not detected	100	ug/kg	6/2/99	6/4/99
BLANK	Dimethoate	Not detected	100	ug/kg	6/2/99	6/4/99
BLANK	Disulfoton	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	EPN	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Ethion	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Ethoprop	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Fensulfothion	Not detected	250	ug/kg	6/2/99	6/4/99
BLANK	Fenthion	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Malathion	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Merphos	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Mevinphos	Not detected	350	ug/kg	6/2/99	6/4/99
BLANK	Naled	Not detected	250	ug/kg	6/2/99	6/4/99
BLANK	Parathion, ethyl	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Parathion, methyl	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Phorate	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Prowl	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Ronnel	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Stirophos	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Sulfotep	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	TEPP	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Tokuthion	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Trichloronate	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Trifluralin	Not detected	50	ug/kg	6/2/99	6/4/99
BLANK	Surrogate: Tributylphosphate	85.4	51-154	%	6/2/99	6/4/99
BLANK	Surrogate: Triphenylphosphate	84.6	63-151	%	6/2/99	6/4/99

Run #: 30
 Instrument: NPD03
 Sequence: 990603
 Initials: FML

Matrix / Control Spike Recoveries

ORGANOPHOSPHORUS PESTICIDES

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA Method #: 8141
APPL Sample #: 990602A LCS/LCSD
Date/Initials: 6/4/99 RLB
Extraction Date: 6/2/99
Matrix Type: SOIL
Units: ug/kg

Compound Name (Limits = See below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery	%RPD (See below)
Phorate	83.3	0.000	57.4	68.9	58.9	70.6	2.6
Diazinon	83.3	0.000	84.6	101	84.2	101	0.4
Disulfoton	83.3	0.000	67.9	81.5	68.5	82.3	0.9
Methyl parathion	83.3	0.000	67.1	80.5	67.2	80.7	0.2
Stirophos	83.3	0.000	75.8	90.9	77.3	92.8	2.0
Ethion	83.3	0.000	64.2	77.0	63.7	76.4	0.8

Surrogate (see below)	Spike Level	Matrix Results	Spike Results	Spk % Recovery	Spk Dup Results	Spk Dup % Recovery
Tributyl phosphate	167	*****	146	87.7	148	88.6
Triphenyl phosphatate	167	*****	146	87.7	140	83.8

	Primary Column	
	Spike	Spk Dup
Analysis Date:	6/4/99	6/4/99
Analysis Time:	10:05 AM	10:43 AM
Instrument:	NPD03B	NPD03B
Column:	DB-5	DB-5
Sample/Vial #:	31	32
Extraction Ratio:	10/30	10/30
Dilution Factor:	1	1

Secondary Column	
Spike	Spk Dup

Comments:

	Soil	Water	Soil RPD	Water RPD
Phorate	26-98	22-96	21	24
Diazinon	61-139	57-130	24	21
Disulfoton	14-131	47-117	26	22
Meth Parathion	63-153	55-164	19	24
Stirophos	58-140	68-128	21	25
Ethion	66-131	65-134	36	20
Tributyl phosphate	51-154	60-150	NA	NA
Triphenyl phosphate	63-151	76-140	NA	NA

Method Blank
EPA 8151 HERBICIDE SOIL

Blank Name/QCG: 990602S - 16959
Batch ID: S8151S-990602A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	200	ug/kg	6/2/99	6/6/99
BLANK	Dalapon	Not detected	2000	ug/kg	6/2/99	6/6/99
BLANK	2,4-DB	Not detected	400	ug/kg	6/2/99	6/6/99
BLANK	Dicamba	Not detected	40	ug/kg	6/2/99	6/6/99
BLANK	Dichlorprop (2,4-DP)	Not detected	200	ug/kg	6/2/99	6/6/99
BLANK	Dinoseb (DNBP)	Not detected	100	ug/kg	6/2/99	6/6/99
BLANK	MCPA	Not detected	40000	ug/kg	6/2/99	6/6/99
BLANK	MCPP	Not detected	40000	ug/kg	6/2/99	6/6/99
BLANK	2,4,5-T	Not detected	40	ug/kg	6/2/99	6/6/99
BLANK	2,4,5-TP	Not detected	40	ug/kg	6/2/99	6/6/99
BLANK	Surrogate recovery	114	93-141	%	6/2/99	6/6/99

Run #: 44
Instrument: ECD01
Sequence: 990605
Initials: KW

Printed: 6/7/99 11:53:19 AM

Laboratory Control Spike Recoveries HERBICIDE ANALYSIS

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 990602A LCS-1

Date/Initials: 6/7/99 KW

Extraction Date: 6/2/99

Matrix Type: Soil

Units: µg/kg

Compound Name Limits = ()	Spike Level		LCS Results	LCS % Recovery	
Dicamba (63-149)	200		208	104%	
Dichloroprop (91-183)	200		203	102%	
2,4-D (90-181)	200		253	127%	
Silvex (87-149)	200		192	96.0%	
2,4,5-T (77-148)	200		211	106%	
Dinoseb (71-167)	200		209	105%	

Surrogate Limits = ()	Spike Level		LCS Results	LCS % Recovery	
2,4-DCAA (93-141)	600		699	117%	

	Primary Spike
Analysis Date:	6/6/99
Analysis Time:	6:04 PM
Instrument:	ECD01
Column:	DB-5
Sample/Vial #:	45
Extraction Ratio:	10/5X2/2
Dilution Factor:	1

Confirmation Spike

Comments:

Matrix Control Spike Recoveries HERBICIDE ANALYSIS

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 79573S MS-1/MSD-1

Operator/Initials: 6/7/99 KW

Extraction Date: 6/2/99

Matrix Type: Soil

Units: µg/kg

Compound Name Limit = ()	Spike Level	Matrix Result µg/kg	MS Results	MS % Recovery	MSD Results	MSD % Recovery	% RPD	RPD Limit
Dicamba (63-149)	200	0.00	208	104%	214	107%	2.8%	24
Dichloroprop (91-183)	200	0.00	191	95.5%	203	102%	6.1%	18
2,4-D (90-181)	200	0.00	238	119%	246	123%	3.3%	15
Silvex (87-149)	200	0.00	176	88.0%	184	92.0%	4.4%	24
2,4,5-T (77-148)	200	0.00	189	94.5%	198	99.0%	4.7%	32
Dinoseb (71-167)	200	0.00	187	93.5%	197	98.5%	5.2%	31

Surrogate Limit = ()	Spike Level	Matrix Result µg/kg	MS Results	MS % Recovery	MSD Results	MSD % Recovery
2,4-DCAA (93-141)	600	0.000	678	113%	697	116%

	Primary Column	
	MS	MSD
Analysis Date:	6/6/99	6/6/99
Analysis Time:	6:41 PM	7:19 PM
Instrument:	ECD01A	ECD01A
Column:	DB-5	DB-5
Sample/Vial #:	46	47
Extraction Ratio:	10/5X2/2	10/5X2/2
Dilution Factor:	1	1

Confirmation	
MS	MSD

Method Blank
EPA 8151 Herbicides

Blank Name/QCG: 990601W - 16994
Batch ID: S8151-990601A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Sample Type	Analyte	Result	PQL	Units	Extraction Date	Analysis Date
BLANK	2,4-D	Not detected	0.50	ug/L	6/1/99	6/7/99
BLANK	Dalapon	Not detected	1.0	ug/L	6/1/99	6/7/99
BLANK	2,4-DB	Not detected	1.0	ug/L	6/1/99	6/7/99
BLANK	Dicamba	Not detected	0.10	ug/L	6/1/99	6/7/99
BLANK	Dichlorprop (2,4-DP)	Not detected	0.50	ug/L	6/1/99	6/7/99
BLANK	Dinoseb (DNBP)	Not detected	0.25	ug/L	6/1/99	6/7/99
BLANK	MCPA	Not detected	100	ug/L	6/1/99	6/7/99
BLANK	MCPP	Not detected	100	ug/L	6/1/99	6/7/99
BLANK	2,4,5-T	Not detected	0.10	ug/L	6/1/99	6/7/99
BLANK	2,4,5-TP	Not detected	0.10	ug/L	6/1/99	6/7/99
BLANK	Surrogate recovery	93.6	61-120	%	6/1/99	6/7/99

Run #: 77
Instrument: ECD01
Sequence: 990605
Initials: KW

Laboratory Control Spike Recoveries

EPA 8151 Herbicides

APPL ID 990601W-79561 LCS/LCSD - 16994

Batch ID: S8151-990601A

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2,4,5-T	1.00	0.850	0.828	85.0	82.8	53-134	2.6	32
2,4,5-TP	1.00	0.770	0.751	77.0	75.1	60-118	2.5	24
2,4-D	1.00	1.08	1.04	108	104	44-155	3.8	15
Dicamba	1.00	0.936	0.904	93.6	90.4	48-102	3.5	24
Dichlorprop (2,4-DP)	1.00	0.712	0.696	71.2	69.6	37-146	2.3	18
Dinoseb (DNBP)	1.00	0.848	0.831	84.8	83.1	73-173	2.0	31
Surrogate: 2,4-DCAA	3.00	2.97	2.88	99.0	96.0	61-120		

Comments: _____

Primary	SPK	DUP
Extraction Date :	6/1/99	6/1/99
Analysis Date :	6/7/99	6/7/99
Instrument :	ECD01	ECD01
Run :	78	79
Analyst :	KW	

Matrix Spike Recovery
EPA 8151 Herbicides

APPL ID 990601W-79561 MS - 16994
Batch ID: S8151-990601A

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Compound Name	Spike Level ug/L	Matrix Result ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4,5-T	0.962	ND	0.772	80.2	53-134
2,4,5-TP	0.962	ND	0.720	74.8	60-118
2,4-D	0.962	ND	0.991	103	44-155
Dicamba	0.962	ND	0.842	87.5	48-102
Dichlorprop (2,4-DP)	0.962	ND	0.671	69.8	37-146
Dinoseb (DNBP)	0.962	ND	0.799	83.1	73-173
Surrogate: 2,4-DCAA	2.89	NA	2.70	93.4	61-120

Comments:

Primary	SPK
Extraction Date :	6/1/99
Analysis Date :	6/7/99
Instrument :	ECD01
Run :	80
Analyst :	KW

CHAIN OF CUSTODY FORM

Quote #: _____ Page 1 of 1

Client Name/Address: GST CALIBRATION LAB, INC. 926 N. 44TH ST, SUITE 100 TUCUMCUM, AZ			Project/PO Number: IS16 (ANAL) 100 1001000			Analysis Required												
Project Manager: <u>Scott Turner</u>			Phone Number: <u>(602) 241-1000</u>			[Faint grid for analysis required]												
Sampler: <u>Scott Turner</u>			Fax Number:															
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives													Special Instructions
1001000	AC	WVA	1	5/25/04	None													
EW-21(5/4/04)	AC	WVA	13	5/25/04	None													
EW-21(5/4/04)	AC	WVA	1	5/25/04	None													
EW-24(5/26/04)	AC	WVA	1	5/26/04	None													
Relinquished By: <u>[Signature]</u>			Date /Time: _____			Received by: _____			Date /Time: _____			Turnaround Time (Check) same day _____ 72 hours _____ 24 hours _____ 5 days _____ 48 hours _____ normal _____						
Relinquished By: _____			Date /Time: _____			Received by: _____			Date /Time: _____									
Relinquished By: _____			Date /Time: _____			Received in Lab by: _____			Date /Time: _____									Sample Integrity (Check) intact _____ on ice _____

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.