



Analytical Technologies, Inc.

2113 S. 48th Street Suite 107 Tempe, AZ 85282 (602) 438-1530

OCTOBER 12, 1988

KLEINFELDER AND ASSOCIATES
4920 E. McDOWELL ROAD
SUITE 101
PHOENIX, AZ 85008

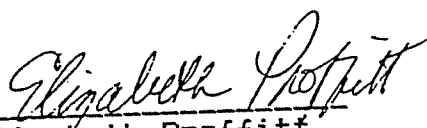
Accession: 809028

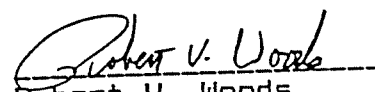
Date Received: 9/6/88

Attention: RON TURNER

Project: 52-1015-01

RECEIVED
OCT 13 1988
KLEINFELDER
PHOENIX


Elizabeth Proffitt
Project Manager


Robert V. Woods
Laboratory Manager

RVW/jlf

Note: Samples will be disposed of within
30 days unless otherwise notified.

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141



Analytical Technologies, Inc

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

DATE RECEIVED : 09/06/88

REPORT DATE : 10/12/88

ATI I.D. : 809028

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	(A-1-1) 13add	AQUEOUS	09/06/88
02	(A-1-2) 13dad	AQUEOUS	09/06/88
03	(A-1-2) 13dad (DUPL)	AQUEOUS	09/06/88
04	(A-1-2) 21add	AQUEOUS	09/06/88

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	4

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



Analytical Technologies, Inc

GENERAL CHEMISTRY RESULTS

ATI I.D. : 809028

DATE RECEIVED : 09/06/88

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

REPORT DATE : 10/12/88

PARAMETER	UNITS	01	02	03	04
CARBONATE	MG/L	<1	<1	<1	<1
BICARBONATE	MG/L	422	294	295	126
HYDROXIDE	MG/L	<1	<1	<1	<1
TOTAL ALKALINITY (AS CaCO3)	MG/L	422	294	295	126
CHLORIDE	MG/L	304	248	258	316
CONDUCTIVITY, (UMHOS/CM)		1720	1320	1330	1070
FLUORIDE	MG/L	0.90	0.26	0.24	0.26
NITRATE AS NITROGEN	MG/L	7.6	2.3	2.3	0.37
PH	UNITS	7.6	7.4	7.4	7.8
SULFATE	MG/L	138	131	131	42
TOTAL DISSOLVED SOLIDS	MG/L	1180	920	926	718



Analytical Technologies, Inc

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : KLEINFELDER
 PROJECT # : 52-1015-01
 PROJECT NAME : (NONE)

ATI I.D. : 809028

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CARBONATE	MG/L	80902105	<1	<1	NA	NA	NA	NA
BICARBONATE	MG/L		136	134	1	NA	NA	NA
HYDROXIDE	MG/L		<1	<1	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		136	134	1	NA	NA	NA
CHLORIDE	MG/L	80902804	316	317	0	828	500	102
CONDUCTIVITY (UMHOMS/CM)		80902101	571	585	2	NA	NA	NA
FLUORIDE	MG/L	80902804	0.26	0.26	0	1.17	1.00	91
NITRATE AS NITROGEN	MG/L	80903408	0.94	0.91	3	1.75	1.0	90
PH	UNITS	80902105	7.7	7.7	0	NA	NA	NA
SULFATE	MG/L	80902101	71	71	0	269	200	99
TOTAL DISSOLVED SOLIDS	MG/L	80903406	710	700	1	NA	NA	NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



METALS RESULTS

ATI I.D. : 809028

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

DATE RECEIVED : 09/06/88

REPORT DATE : 10/12/88

PARAMETER	UNITS	01	02	03	04
SILVER	MG/L	-	-	-	<0.010
ARSENIC	MG/L	-	-	-	<0.005
BARIUM	MG/L	-	-	-	0.07
CALCIUM	MG/L	40	69	69	35
CADMIUM	MG/L	-	-	-	<0.003
CHROMIUM	MG/L	-	-	-	<0.02
COPPER	MG/L	<0.010	<0.010	<0.010	<0.010
IRON	MG/L	<0.030	<0.030	<0.030	<0.030
HARDNESS	MG/L	188	292	291	213
MERCURY	MG/L	-	-	-	<0.0002
POTASSIUM	MG/L	4.7	5.8	5.8	5.0
MAGNESIUM	MG/L	21.5	29.0	28.8	30.5
MANGANESE	MG/L	<0.010	0.027	0.026	0.014
SODIUM	MG/L	348	198	201	153
LEAD	MG/L	-	-	-	<0.002
SELENIUM	MG/L	-	-	-	<0.005
ZINC	MG/L	0.035	0.011	<0.010	0.049



CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

ATI I.D. : 809028

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER	MG/L	80903504	<0.010	<0.010	NA	1.00	1.000	100
ARSENIC	MG/L	80807502	0.046	0.047	2	0.095	0.050	98
BARIUM	MG/L	80900901	0.19	0.21	10	20.9	20.00	104
CALCIUM	MG/L	80903503	59	59	0	151	100	92
CADMIUM	MG/L	80903504	<0.003	<0.003	NA	0.486	0.500	97
CHROMIUM	MG/L	80903504	<0.02	<0.02	NA	1.94	2.000	97
COPPER	MG/L	80903504	<0.010	<0.010	NA	1.02	1.000	102
IRON	MG/L	80903504	0.160	0.165	3	2.08	2.000	96
HARDNESS	MG/L	80902801	NA	NA	NA	NA	NA	NA
MERCURY	MG/L	80903403	<0.0002	<0.0002	NA	0.0051	0.0050	102
POTASSIUM	MG/L	80902804	5.0	5.1	2	24.7	20.00	99
MAGNESIUM	MG/L	80903401	39.3	39.6	0.8	88.4	50.00	97
MANGANESE	MG/L	80903504	0.048	0.049	2	2.10	2.000	103
SODIUM	MG/L	80903402	186	186	0	577	400.0	98
LEAD	MG/L	80907804	0.061	0.056	9	0.161	0.10	100
SELENIUM	MG/L	80903403	<0.005	<0.005	NA	0.044	0.050	88
ZINC	MG/L	80902801	0.035	0.034	3	0.582	0.500	109

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80902801

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : (A-1-1) 13add
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/06/88
DATE RECEIVED : 09/06/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/13/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	95
BROMOFLUOROBENZENE (%)	90



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80902802

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1010-01
PROJECT NAME : (NONE)
CLIENT I.D. : (A-1-2)13dad
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/06/88
DATE RECEIVED : 09/06/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/13/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
BENZENE	0.6
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	2.0
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	0.6
1,2-DICHLOROETHENE (TOTAL)	0.4
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	0.3
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	0.8
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	0.4
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	91
BROMOFLUOROBENZENE (%)	85



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80902803

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-1
PROJECT NAME : (NONE)
CLIENT I.D. : (A-1-2)13dad (DUPL)
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/06/88
DATE RECEIVED : 09/06/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/13/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS RESULTS

BENZENE	0.6
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	2.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	0.6
1,2-DICHLOROETHENE (TOTAL)	0.6
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	0.8
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	0.4
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	95
BROMOFLUOROBENZENE (%)	77



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80902804

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : (A-1-2) 21add
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/06/88
DATE RECEIVED : 09/06/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/14/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	0.7
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	0.8
ORTHO & PARA XYLENE	0.6

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	89
BROMOFLUOROBENZENE (%)	91



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : REAGENT BLANK

ATI I.D. : 809028
DATE EXTRACTED : 09/13/88
DATE ANALYZED : 09/13/88
UNITS : UG/L
DILUTION FACTOR : N/A

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	6.7
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	87
BROMOFLUOROBENZENE (%)	88



GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT	: KLEINFELDER	ATI I.D.	: 809028
PROJECT #	: 52-1015-01	DATE EXTRACTED	: 09/14/88
PROJECT NAME	: (NONE)	DATE ANALYZED	: 09/14/88
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	4.9
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	89
BROMOFLUOROBENZENE (%)	86

Chain of Custody

DATE 07/08/2018 PAGE 1 OF 1

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Analytical**Technologies**, Inc.

2113 S. 48th Street Suite 107 Tempe, AZ 85282 (602) 438-1530

OCTOBER 7, 1988

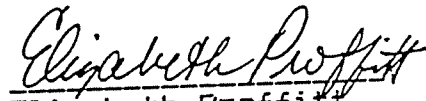
KLEINFELDER & ASSOCIATES
4920 E. McDOWELL ROAD
SUITE 101
PHOENIX, AZ 85008

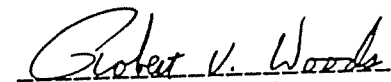
Accession: 809034

Date Received: 9/7/88

Attention: RON TURNER

Project: ADEQ K-2 52-1015-01


Elizabeth Proffitt
Project Manager


Robert V. Woods
Laboratory Manager

RVW/clf

Note: Samples will be disposed of within
30 days unless otherwise notified.

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141



Analytical Technologies, Inc

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01

DATE RECEIVED : 09/07/88

REPORT DATE : 10/10/88

ATI I.D. : 809034

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	(A-1-2) 1cac	AQUEOUS	09/07/88
02	(A-1-2) 1bdb	AQUEOUS	09/07/88
03	(A-1-2) 1bdb (DUPL)	AQUEOUS	09/07/88
04	(A-1-3) 18bbc	AQUEOUS	09/07/88
05	(A-1-2) 17add	AQUEOUS	09/07/88
06	(A-1-2) 19ccc	AQUEOUS	09/07/88
07	RINSATE #1	AQUEOUS	09/07/88
08	(A-1-2) 24baa#5	AQUEOUS	09/07/88
09	TRIP BLANK	AQUEOUS	09/07/88

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	9

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



GENERAL CHEMISTRY RESULTS

ATI I.D. : 809034

DATE RECEIVED : 09/07/88

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01

REPORT DATE : 10/10/88

PARAMETER	UNITS	01	02	03	04	05
CARBONATE	MG/L	<1	<1	<1	<1	<1
BICARBONATE	MG/L	180	194	193	256	254
HYDROXIDE	MG/L	<1	<1	<1	<1	<1
TOTAL ALKALINITY (AS CaCO ₃)	MG/L	180	194	193	256	254
CHLORIDE	MG/L	316	321	321	171	269
CONDUCTIVITY, (UMHOS/CM)		1200	1280	1290	980	1240
FLUORIDE	MG/L	0.29	0.27	0.26	0.31	0.34
NITRATE AS NITROGEN	MG/L	1.5	3.4	3.3	2.6	4.8
PH	UNITS	7.7	7.7	7.7	7.6	7.4
SULFATE	MG/L	61	71	68	69	102
TOTAL DISSOLVED SOLIDS	MG/L	836	864	858	664	878



Analytical Technologies, Inc

GENERAL CHEMISTRY RESULTS

ATI I.D. : 809034

DATE RECEIVED : 09/07/88

CLIENT : KLEINFELDER

PROJECT # : ADEQ K-2

PROJECT NAME : 52-1015-01

REPORT DATE : 10/10/88

PARAMETER	UNITS	06	08
CARBONATE	MG/L	<1	<1
BICARBONATE	MG/L	242	324
HYDROXIDE	MG/L	<1	<1
TOTAL ALKALINITY (AS CaCO_3)	MG/L	242	324
CHLORIDE	MG/L	196	290
CONDUCTIVITY, (UMHOS/CM)		980	1420
FLUORIDE	MG/L	0.32	0.29
NITRATE AS NITROGEN	MG/L	0.13	0.94
PH	UNITS	7.5	7.0
SULFATE	MG/L	82	79
TOTAL DISSOLVED SOLIDS	MG/L	710	938



Analytical Technologies, Inc

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01

ATI I.D. : 809034

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CARBONATE	MG/L	80903406	<1	<1	NA	NA	NA	NA
BICARBONATE	MG/L		242	244	1	NA	NA	NA
HYDROXIDE	MG/L		<1	<1	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		242	244	1	NA	NA	NA
CHLORIDE	MG/L	80903408	290	290	0	778	500	98
CONDUCTIVITY (UMHOMS/CM)		80902101	571	585	2	NA	NA	NA
FLUORIDE	MG/L	80903408	0.29	0.29	0	1.17	1.00	88
NITRATE AS NITROGEN	MG/L	80903408	0.94	0.91	3	1.75	1.0	90
PH	UNITS	80903406	7.5	7.5	0	NA	NA	NA
SULFATE	MG/L	80903401	61	61	0	165	100	104
TOTAL DISSOLVED SOLIDS	MG/L	80903406	710	700	1	NA	NA	NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

METALS RESULTS

ATI I.D. : 809034

DATE RECEIVED : 09/07/88

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01

REPORT DATE : 10/10/88

PARAMETER	UNITS	01	02	03	04	05
SILVER	MG/L	-	<0.010	<0.010	-	-
ARSENIC	MG/L	-	<0.005	<0.005	-	-
BARIUM	MG/L	-	0.15	0.12	-	-
CALCIUM	MG/L	63	52	56	40	59
CADMIUM	MG/L	-	0.004	0.004	-	-
CHROMIUM	MG/L	-	<0.02	<0.02	-	-
COPPER	MG/L	<0.010	<0.010	<0.010	<0.010	<0.010
IRON	MG/L	<0.030	0.033	0.035	<0.030	<0.030
HARDNESS	MG/L	319	290	301	176	259
MERCURY	MG/L	-	<0.0002	<0.0002	-	-
POTASSIUM	MG/L	5.1	4.2	4.2	4.3	5.0
MAGNESIUM	MG/L	39.3	39.0	39.2	18.4	27.1
MANGANESE	MG/L	<0.010	<0.010	<0.010	<0.010	<0.010
SODIUM	MG/L	160	186	176	166	197
LEAD	MG/L	-	<0.002	<0.002	-	-
SELENIUM	MG/L	-	<0.005	<0.005	-	-
ZINC	MG/L	<0.010	<0.010	<0.010	<0.010	<0.010



Analytical Technologies, Inc

METALS RESULTS

ATI I.D. : 809034

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01

DATE RECEIVED : 09/07/88

REPORT DATE : 10/10/88

PARAMETER	UNITS	06	08
SILVER	MG/L	-	<0.010
ARSENIC	MG/L	-	0.015
BARIUM	MG/L	-	0.10
CALCIUM	MG/L	37	81
CADMIUM	MG/L	-	0.010
CHROMIUM	MG/L	-	<0.02
COPPER	MG/L	<0.010	0.017
IRON	MG/L	0.062	0.414
HARDNESS	MG/L	163	337
MERCURY	MG/L	-	<0.0002
POTASSIUM	MG/L	4.1	7.8
MAGNESIUM	MG/L	17.1	32.8
MANGANESE	MG/L	<0.010	0.074
SODIUM	MG/L	178	197
LEAD	MG/L	-	<0.002
SELENIUM	MG/L	-	<0.005
ZINC	MG/L	0.025	0.047



Analytical Technologies, Inc

METALS - QUALITY CONTROL

CLIENT : KLEINFELDER
 PROJECT # : ADEQ K-2
 PROJECT NAME : 52-1015-01

ATI I.D. : 809034

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER	MG/L	80903504	<0.010	<0.010	NA	1.00	1.000	100
ARSENIC	MG/L	80807502	0.046	0.047	2	0.095	0.050	98
BARIUM	MG/L	80907801	<0.06	<0.06	NA	1.04	1.00	104
CALCIUM	MG/L	80903503	59	59	0	151	100	92
CADMIUM	MG/L	80903504	<0.003	<0.003	NA	0.486	0.500	97
CHROMIUM	MG/L	80903504	<0.02	<0.02	NA	1.94	2.000	97
COPPER	MG/L	80903504	<0.010	<0.010	NA	1.02	1.000	102
IRON	MG/L	80903504	0.160	0.165	3	2.08	2.000	96
HARDNESS	MG/L	80902801	NA	NA	NA	NA	NA	NA
MERCURY	MG/L	80903403	<0.0002	<0.0002	NA	0.0051	0.0050	102
POTASSIUM	MG/L	80902804	5.0	5.1	2	24.7	20.00	99
MAGNESIUM	MG/L	80903401	39.3	39.6	0.8	88.4	50.00	97
MANGANESE	MG/L	80903504	0.048	0.049	2	2.10	2.000	103
SODIUM	MG/L	80903402	186	186	0	577	400.0	98
LEAD	MG/L	80810016	<0.002	<0.002	NA	STDA	CC=	.999
SELENIUM	MG/L	80903403	<0.005	<0.005	NA	0.044	0.050	88
ZINC	MG/L	80902801	0.035	0.034	3	0.582	0.500	109

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903401

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-2)1cac
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	1.1
TOLUENE	0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	1.3
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	0.6
ORTHO & PARA XYLENE	0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	91
BROMOFLUOROBENZENE (%)	103



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903402

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-2)1bdb
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	1.8
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	0.6
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	0.3
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	102
BROMOFLUOROBENZENE (%)	104



GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903403

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-2) 1bdb (DUPL)
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS

RESULTS

BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	1.3
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	0.5
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	90
BROMOFLUOROBENZENE (%)	95



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903404

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-3)18bbc
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	0.8
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	7.8
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	8.8
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	99
BROMOFLUOROBENZENE (%)	97



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903405

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-2)17add
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	0.7
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	89
BROMOFLUOROBENZENE (%)	83



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903406

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-2)19cdc
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/8
DATE RECEIVED : 09/07/8
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/8
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.5
ETHYLBENZENE	<2.0
METHYLENE CHLORIDE	<0.2
1,1,2,2-TETRACHLOROETHANE	0.2
TETRACHLOROETHENE	<0.5
TOLUENE	0.9
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	0.5
TRICHLOROETHENE	<2.0
TRICHLOROFLUOROMETHANE	<0.2
VINYL CHLORIDE	<0.5
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	95
BROMOFLUOROBENZENE (%)	91



GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903407

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : RINSATE #1
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
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BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	93
BROMOFLUOROBENZENE (%)	83



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903408

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : (A-1-2)24baa#5
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS RESULTS

BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<0.5
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	83
BROMOFLUOROBENZENE (%)	72



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80903409

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : TRIP BLANK
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/07/88
DATE RECEIVED : 09/07/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/14/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	17.6 B
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	85
BROMOFLUOROBENZENE (%)	75



GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

ATI I.D. : 809034
DATE EXTRACTED : 09/14/88
DATE ANALYZED : 09/14/88
UNITS : UG/L
DILUTION FACTOR : N/A

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : REAGENT BLANK

COMPOUNDS	RESULTS
-----------	---------

BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	4.9
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	89
BROMOFLUOROBENZENE (%)	86



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : ADEQ K-2
PROJECT NAME : 52-1015-01
CLIENT I.D. : REAGENT BLANK

ATI I.D. : 809034
DATE EXTRACTED : 09/15/88
DATE ANALYZED : 09/15/88
UNITS : UG/L
DILUTION FACTOR : N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	8.3
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	94
BROMOFLUOROBENZENE (%)	88

Chain of Custody

DATE 9/1/88 PAGE 1 OF 1

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Analytical**Technologies, Inc.**

2113 S. 48th Street Suite 107 Tempe, AZ 85282 (602) 438-1530

OCTOBER 12, 1988

KLEINFELDER AND ASSOCIATES
4920 E. McDOWELL ROAD
SUITE 101
PHOENIX, AZ 85008

RECEIVED
OCT 13 1988

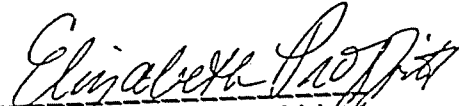
KLEINFELDER
PHOENIX

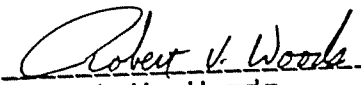
Accession: 809064

Date Received: 9/12/88

Attention: RON TURNER

Project: 52-1015-01


Elizabeth Proffitt
Project Manager


Robert V. Woods
Laboratory Manager

RVW/jlf

Note: Samples will be disposed of within
30 days unless otherwise notified.

Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141



Analytical Technologies, Inc

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

DATE RECEIVED : 09/12/88

REPORT DATE : 10/12/88

ATI I.D. : 809064

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	SITE #30	SOIL	09/12/88
02	SAMPLE #4	AQUEOUS	09/12/88
03	DUPLICATE #4	AQUEOUS	09/12/88
04	SITE #9	SOIL	09/12/88
05	SITE #11	SOIL	09/12/88
06	SITE #12	SOIL	09/12/88
07	SITE #13	SOIL	09/12/88
08	DUPLICATE B	SOIL	09/12/88
09	SITE #24	SOIL	09/12/88
10	TRIP BLANK	AQUEOUS	09/12/88

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	7
AQUEOUS	3

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



Analytical Technologies, Inc

GENERAL CHEMISTRY RESULTS

ATI I.D. : 809064

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

DATE RECEIVED : 09/12/88

REPORT DATE : 10/12/88

PARAMETER	UNITS	02	03
CARBONATE	MG/L	<1	<1
BICARBONATE	MG/L	144	152
HYDROXIDE	MG/L	<1	<1
TOTAL ALKALINITY (AS CaCO ₃)	MG/L	144	152
CHLORIDE	MG/L	339	363
CONDUCTIVITY, (UMHOS/CM)		1360	1370
FLUORIDE	MG/L	0.35	0.35
NITRATE AS. NITROGEN	MG/L	4.0	4.1
PH	UNITS	7.9	7.9
SULFATE	MG/L	85	88
TOTAL DISSOLVED SOLIDS	MG/L	888	880



Analytical Technologies, Inc

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

ATI I.D. : 809064

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CARBONATE	MG/L	80911502	<1	<1	NA	NA	NA	NA
BICARBONATE	MG/L		400	400	0	NA	NA	NA
HYDROXIDE	MG/L		<1	<1	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		400	400	0	NA	NA	NA
CHLORIDE	MG/L	80902804	316	317	0	828	500	102
CONDUCTIVITY (UMHOMS/CM)		80903503	780	766	2	NA	NA	NA
FLUORIDE	MG/L	80905607	0.39	0.40	2	1.28	1.00	89
NITRATE AS. NITROGEN	MG/L	80911801	2.1	2.1	0	4.1	2.0	100
PH	UNITS	80914902	8.1	8.1	0	NA	NA	NA
SULFATE	MG/L	80906301	1.7	1.7	0	23	20	107
TOTAL DISSOLVED SOLIDS	MG/L	80906303	104	122	16	NA	NA	NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



Analytical Technologies, Inc

METALS RESULTS

ATI I.D. : 809064

DATE RECEIVED : 09/12/88

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

REPORT DATE : 10/12/88

PARAMETER	UNITS	02	03
CALCIUM	MG/L	40	39
COPPER	MG/L	0.023	0.040
IRON	MG/L	0.130	0.154
HARDNESS	MG/L	223	221
POTASSIUM	MG/L	4.7	4.8
MAGNESIUM	MG/L	29.8	30.1
MANGANESE	MG/L	<0.010	<0.010
SODIUM	MG/L	219	218
ZINC	MG/L	0.011	0.028



Analytical Technologies, Inc

METALS RESULTS

ATI I.D. : 809064

DATE RECEIVED : 09/12/88

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)

REPORT DATE : 10/12/88

PARAMETER	UNITS	01	07	08
SILVER (IN EP TOX)	MG/L	0.012	0.012	0.011
ARSENIC (IN EP TOX)	MG/L	0.032	0.020	0.022
BARIUM (IN EP TOX)	MG/L	0.62	0.72	0.72
CADMIUM (IN EP TOX)	MG/L	0.011	0.016	0.016
CHROMIUM (IN EP TOX)	MG/L	<0.02	<0.02	<0.02
MERCURY (IN EP TOX)	MG/L	<0.0002	<0.0002	<0.0002
LEAD (IN EP TOX)	MG/L	0.15	0.14	0.17
SELENIUM (IN EP TOX)	MG/L	<0.005	<0.005	<0.005



Analytical Technologies, Inc

METALS - QUALITY CONTROL

CLIENT : KLEINFELDER
 PROJECT # : 52-1015-01
 PROJECT NAME : (NONE)

ATI I.D. : 809064

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER (IN EP TOX)	MG/L	80905406	0.025	0.024	4	1.04	1.000	102
ARSENIC (IN EP TOX)	MG/L	80906401	0.032	0.032	0	STDA	CC=	.99
BARIUM (IN EP TOX)	MG/L	80905406	0.85	0.86	1	22.38	20.00	108
CALCIUM	MG/L	80906402	40	40	0	95	50.00	110
CADMIUM (IN EP TOX)	MG/L	80905406	0.023	0.023	0	0.530	0.500	101
CHROMIUM (IN EP TOX)	MG/L	80905406	0.05	0.05	0	STDA	CC=	0.9
COPPER	MG/L	80903504	<0.010	<0.010	NA	1.02	1.000	102
IRON	MG/L	80905604	1.87	1.87	0	4.05	2.000	109
HARDNESS	MG/L	80904201	NA	NA	NA	NA	NA	NA
MERCURY (IN EP TOX)	MG/L	80905406	<0.0002	<0.0002	NA	0.0052	0.0050	104
POTASSIUM	MG/L	80903503	3.9	4.0	3	24.2	20.00	102
MAGNESIUM	MG/L	80905604	53	53	0	152	100.0	99
MANGANESE	MG/L	80905603	0.316	0.317	0.3	2.34	2.000	101
SODIUM	MG/L	80903503	35.6	35.6	0	74.1	40.00	96
LEAD (IN EP TOX)	MG/L	80905406	0.29	0.29	0	10.52	10.00	102
SELENIUM (IN EP TOX)	MG/L	80905402	<0.005	<0.005	NA	0.052	0.050	104
SELENIUM (IN EP TOX)	MG/L	80906407	<0.005	<0.005	NA	0.057	0.050	114
ZINC	MG/L	80903504	0.030	0.031	3	0.580	0.500	110

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 10$$



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906402

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SAMPLE #4
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/16/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
-----------	---------

BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	93
BROMOFLUOROBENZENE (%)	81



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906403

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : DUPLICATE #4
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/16/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
-----------	---------

BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	86
BROMOFLUOROBENZENE (%)	85



GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906410

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : TRIP BLANK
SAMPLE MATRIX : AQUEOUS

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : N/A
DATE ANALYZED : 09/16/88
UNITS : UG/L
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
-----------	---------

BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.2
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	<2.0
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	93
BROMOFLUOROBENZENE (%)	74



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 601/602)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : REAGENT BLANK

ATI I.D. : 809064
DATE EXTRACTED : 09/16/88
DATE ANALYZED : 09/16/88
UNITS : UG/L
DILUTION FACTOR : N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
BROMODICHLOROMETHANE	<0.2
BROMOFORM	<0.2
BROMOMETHANE	<0.2
CARBON TETRACHLORIDE	<0.2
CHLOROBENZENE	<0.5
CHLOROETHANE	<0.2
CHLOROFORM	<0.2
CHLOROMETHANE	<0.2
DIBROMOCHLOROMETHANE	<0.2
1,2-DICHLOROBENZENE	<0.5
1,3-DICHLOROBENZENE	<0.5
1,4-DICHLOROBENZENE	<0.5
DICHLORODIFLUOROMETHANE	<0.2
1,1-DICHLOROETHANE	<0.2
1,2-DICHLOROETHANE	<0.2
1,1-DICHLOROETHENE	<0.2
1,2-DICHLOROETHENE (TOTAL)	<0.2
1,2-DICHLOROPROPANE	<0.2
CIS-1,3-DICHLOROPROPENE	<0.2
TRANS-1,3-DICHLOROPROPENE	<0.2
ETHYLBENZENE	<0.5
METHYLENE CHLORIDE	8.3
1,1,2,2-TETRACHLOROETHANE	<0.2
TETRACHLOROETHENE	<0.2
TOLUENE	<0.5
1,1,1-TRICHLOROETHANE	<0.2
1,1,2-TRICHLOROETHANE	<0.2
TRICHLOROETHENE	<0.2
TRICHLOROFLUOROMETHANE	<2.0
VINYL CHLORIDE	<0.2
META XYLENE	<0.5
ORTHO & PARA XYLENE	<0.5

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	92
BROMOFLUOROBENZENE (%)	88



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906401

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SITE #30
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/23/88
UNITS : MG/KG
DILUTION FACTOR : 10

COMPOUNDS	RESULTS
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BENZENE	<0.250
BROMODICHLOROMETHANE	<0.100
BROMOFORM	<0.100
BROMOMETHANE	<0.100
CARBON TETRACHLORIDE	<0.100
CHLOROBENZENE	<0.250
CHLOROETHANE	<0.100
CHLOROFORM	<0.100
CHLOROMETHANE	<0.100
DIBROMOCHLOROMETHANE	<0.100
1,2-DICHLOROBENZENE	<0.250
1,3-DICHLOROBENZENE	<0.250
1,4-DICHLOROBENZENE	<0.250
DICHLORODIFLUOROMETHANE	<0.100
1,1-DICHLOROETHANE	<0.100
1,2-DICHLOROETHANE	<0.100
1,1-DICHLOROETHENE	<0.100
1,2-DICHLOROETHENE (TOTAL)	<0.100
1,2-DICHLOROPROPANE	<0.100
CIS-1,3-DICHLOROPROPENE	<0.100
TRANS-1,3-DICHLOROPROPENE	<0.100
ETHYLBENZENE	<0.250
METHYLENE CHLORIDE	<1.000
1,1,2,2-TETRACHLOROETHANE	<0.100
TETRACHLOROETHENE	<0.100
TOLUENE	<0.250
1,1,1-TRICHLOROETHANE	<0.100
1,1,2-TRICHLOROETHANE	<0.100
TRICHLOROETHENE	10.4
TRICHLOROFLUOROMETHANE	<5.0
VINYL CHLORIDE	<0.100
META XYLENE	<0.250
ORTHO & PARA XYLENE	<0.250

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	111
BROMOFLUOROBENZENE (%)	109



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906404

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SITE #9
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/23/88
UNITS : MG/KG
DILUTION FACTOR : 10

COMPOUNDS	RESULTS
BENZENE	<0.250
BROMODICHLOROMETHANE	<0.100
BROMOFORM	<0.100
BROMOMETHANE	<0.100
CARBON TETRACHLORIDE	<0.100
CHLOROBENZENE	<0.250
CHLOROETHANE	<0.100
CHLOROFORM	<0.100
CHLOROMETHANE	<0.100
DIBROMOCHLOROMETHANE	<0.100
1,2-DICHLOROBENZENE	<0.250
1,3-DICHLOROBENZENE	<0.250
1,4-DICHLOROBENZENE	<0.250
DICHLORODIFLUOROMETHANE	<0.100
1,1-DICHLOROETHANE	<0.100
1,2-DICHLOROETHANE	<0.100
1,1-DICHLOROETHENE	<0.100
1,2-DICHLOROETHENE (TOTAL)	<0.100
1,2-DICHLOROPROPANE	<0.100
CIS-1,3-DICHLOROPROPENE	<0.100
TRANS-1,3-DICHLOROPROPENE	<0.100
ETHYLBENZENE	<0.250
METHYLENE CHLORIDE	<1.000
1,1,2,2-TETRACHLOROETHANE	<0.100
TETRACHLOROETHENE	<0.100
TOLUENE	<0.250
1,1,1-TRICHLOROETHANE	<0.100
1,1,2-TRICHLOROETHANE	<0.100
TRICHLOROETHENE	6.2
TRICHLOROFLUOROMETHANE	<5.0
VINYL CHLORIDE	<0.100
META XYLENE	<0.250
ORTHO & PARA XYLENE	<0.250

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	111
BROMOFLUOROBENZENE (%)	107



Analytical Technologies, Inc

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906405

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SITE #11
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/23/88
UNITS : MG/KG
DILUTION FACTOR : 10

COMPOUNDS RESULTS

BENZENE	<0.250
BROMODICHLOROMETHANE	<0.100
BROMOFORM	<0.100
BROMOMETHANE	<0.100
CARBON TETRACHLORIDE	<0.100
CHLOROBENZENE	<0.250
CHLOROETHANE	<0.100
CHLOROFORM	<0.100
CHLOROMETHANE	<0.100
DIBROMOCHLOROMETHANE	<0.100
1,2-DICHLOROBENZENE	<0.250
1,3-DICHLOROBENZENE	<0.250
1,4-DICHLOROBENZENE	<0.250
DICHLORODIFLUOROMETHANE	<0.100
1,1-DICHLOROETHANE	<0.100
1,2-DICHLOROETHANE	<0.100
1,1-DICHLOROETHENE	<0.100
1,2-DICHLOROETHENE (TOTAL)	<0.100
1,2-DICHLOROPROPANE	<0.100
CIS-1,3-DICHLOROPROPENE	<0.100
TRANS-1,3-DICHLOROPROPENE	<0.100
ETHYLBENZENE	<0.250
METHYLENE CHLORIDE	<1.000
1,1,2,2-TETRACHLOROETHANE	<0.100
TETRACHLOROETHENE	<0.100
TOLUENE	<0.250
1,1,1-TRICHLOROETHANE	<0.100
1,1,2-TRICHLOROETHANE	<0.100
TRICHLOROETHENE	1.8
TRICHLOROFLUOROMETHANE	<5.0
VINYL CHLORIDE	<0.100
META XYLENE	0.7
ORTHO & PARA XYLENE	0.3

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	105
BROMOFLUOROBENZENE (%)	98



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906406

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SITE #12
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/22/88
UNITS : MG/KG
DILUTION FACTOR : 1

COMPOUNDS RESULTS

BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.010
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.010
CHLOROFORM	<0.010
CHLOROMETHANE	<0.010
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.010
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
1,2-DICHLOROETHENE (TOTAL)	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	<0.100
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	0.05
1,1,1-TRICHLOROETHANE	0.09
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	1.5
TRICHLOROFLUOROMETHANE	<0.5
VINYL CHLORIDE	<0.010
META XYLENE	0.07
ORTHO & PARA XYLENE	<0.025

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	95
BROMOFLUOROBENZENE (%)	95

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GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906407

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SITE #13
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/24/88
UNITS : MG/KG
DILUTION FACTOR : 1

COMPOUNDS RESULTS

BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.010
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.010
CHLOROFORM	<0.010
CHLOROMETHANE	<0.010
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.010
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
1,2-DICHLOROETHENE (TOTAL)	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	<0.100
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	0.05
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	0.3
TRICHLOROFLUOROMETHANE	<0.5
VINYL CHLORIDE	<0.010
META XYLENE	<0.025
ORTHO & PARA XYLENE	<0.025

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	92
BROMOFLUOROBENZENE (%)	90



GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906408

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : DUPLICATE B
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/24/88
UNITS : MG/KG
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.010
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.010
CHLOROFORM	<0.010
CHLOROMETHANE	<0.010
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.010
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
1,2-DICHLOROETHENE (TOTAL)	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	<0.100
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	0.03
1,1,1-TRICHLOROETHANE	0.1
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	0.1
TRICHLOROFLUOROMETHANE	<0.5
VINYL CHLORIDE	<0.010
META XYLENE	0.06
ORTHO & PARA XYLENE	0.1

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	95
BROMOFLUOROBENZENE (%)	100



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GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 80906409

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT : KLEINFELDER
PROJECT # : 52-1015-01
PROJECT NAME : (NONE)
CLIENT I.D. : SITE #24
SAMPLE MATRIX : SOIL

DATE SAMPLED : 09/12/88
DATE RECEIVED : 09/12/88
DATE EXTRACTED : 9/14/88
DATE ANALYZED : 09/24/88
UNITS : MG/KG
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.010
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.010
CHLOROFORM	<0.010
CHLOROMETHANE	<0.010
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.010
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
1,2-DICHLOROETHENE (TOTAL)	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.025
ETHYLBENZENE	<0.100
METHYLENE CHLORIDE	<0.010
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.025
TOLUENE	0.04
1,1,1-TRICHLOROETHANE	<0.010
1,1,2-TRICHLOROETHANE	0.1
TRICHLOROETHENE	<0.5
TRICHLOROFLUOROMETHANE	<0.010
VINYL CHLORIDE	<0.025
META XYLENE	<0.025
ORTHO & PARA XYLENE	

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)
BROMOFLUOROBENZENE (%)

98
101



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : VOLATILE HALOCARBONS/AROMATICS (EPA 8010/8020)

CLIENT	: KLEINFELDER	ATI I.D.	: 809064
PROJECT #	: 52-1015-01	DATE EXTRACTED	: 09/14/88
PROJECT NAME	: (NONE)	DATE ANALYZED	: 09/23/88
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
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BENZENE	<0.025
BROMODICHLOROMETHANE	<0.010
BROMOFORM	<0.010
BROMOMETHANE	<0.010
CARBON TETRACHLORIDE	<0.010
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.010
CHLOROFORM	<0.010
CHLOROMETHANE	<0.010
DIBROMOCHLOROMETHANE	<0.010
1,2-DICHLOROBENZENE	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.010
1,1-DICHLOROETHANE	<0.010
1,2-DICHLOROETHANE	<0.010
1,1-DICHLOROETHENE	<0.010
1,2-DICHLOROETHENE (TOTAL)	<0.010
1,2-DICHLOROPROPANE	<0.010
CIS-1,3-DICHLOROPROPENE	<0.010
TRANS-1,3-DICHLOROPROPENE	<0.010
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	0.4
1,1,2,2-TETRACHLOROETHANE	<0.010
TETRACHLOROETHENE	<0.010
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.010
1,1,2-TRICHLOROETHANE	<0.010
TRICHLOROETHENE	<0.010
TRICHLOROFLUOROMETHANE	<0.5
VINYL CHLORIDE	<0.010
META XYLENE	<0.025
ORTHO & PARA XYLENE	<0.025

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE (%)	103
BROMOFLUOROBENZENE (%)	110

Chain of Custody

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Chain of Custody

DATE 9/2/88 PAGE 2 OF 2

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