



# BORING LOG

**BORING LOG: #1**  
**SHEET 1 of 3**  
**PROJECT #: Soil Borings and Sampling**

**PROJECT: Miracle Mile**      **CONTRACTOR: Yellow Jacket**  
**LOCATION: Tucson, Arizona**    **DRILLER: Mark**  
**CLIENT: ADEQ**                  **INSPECTOR:**

LOCATION: Friedman Recycling  
 COORDINATES. N:  
 E:

**RIG TYPE: BK 81**  
**DRILLING METHOD: Hollow Stem Auger**  
**HAMMER TYPE: Safety Hammer**

REF. ALIGNMENT:  
 STATION: See Figure 2  
 OFFSET:

**COMMENTS: Surface Condition: Asphaltic concrete parking lot**

SURFACE ELEV.:  
 DATUM: Ground Surface  
 START DATE: 5/18/2002    TIME: 0815  
 FINISH DATE: 5/19/2002    TIME: 0715

Type/Symbol	Casing	Split Spoon	Shelby Tube	Simulprobe	Ring Sample	Core Barrel	GROUNDWATER DATA				
		S	U	SP	R	C	Date	Time	Water Depth (ft.)	Casing Depth (ft)	Hole Depth (ft)
I.D.		1.375"									97.5
O.D.		2"									
Length		18"									
Hammer WT.	Drill Rod Size										
Hammer Fall	I.D. (O.D.)										

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	ROCK CORING							
						FROM	TO			0/6	6/12	12/18	N	REC. (in.)			
	RUN (in.)	REC. (in.)	REC. (%)	L>4" (in.)	RQD (%)												
5	CL		SP	5-1		5	5.5	0.3	50/6							CL: SANDY CLAY with silt, brown, hard fine sand, low to medium plasticity index (PI), slightly moist	
6																SC: CLAYEY SAND with silt, trace angular gravels, brown, low PI, very dense, mostly fine, with coarse sand, slightly moist	X
10			SP	10-1		10	10.75	1.3	32	50/3						decrease in gravel	X
15			SP	15-1		15	15.67	1.3	20	50/4							X
20			SP	20-1		20	20.5	2.1	50/6								X
25																	

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# BORING LOG

BORING LOG: #1

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB	
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)				
						FROM	TO			ROCK CORING								
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)						
30																		
35																		
40			SP	40-1	▲	40	40.67	9.8	25	50/3				8				X
45	SC																	
50																		
55																		
60																		
65																		

Cobble layer

Interbedded gravels to 73'



# BORING LOG

BORING LOG: #1

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
66			SP	60-1		66	66.5	19.8	50/6					4		X	
80			SP	80-1		80	80.25	20.5	50/3					3		X	
85	CL														CL: SANDY CLAY, brown, very moist		
90	SC														SC: CLAYEY SAND with gravel, trace silt, brown, very dense, moist, interbedded gravels and cobbles		
97			SP	97-1		97	97.5	2.1	50/6					3	Stopped sampler @ 97.5'	X	
105																	

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# BORING LOG

BORING LOG: #2

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
30																	
35	SC-SM																
40		SP	40-2	▲	40	40.5		50/6								Interbedded CL, SM, SC, and SP-SM	X
45																gravel layer @ 47'	
50																	
55																	
60		SP	60-2	▲	60	60.5	25.3	50/6					6			SP: SAND with gravels, trace silt, brown, very dense, interbedded rounded to subrounded gravels and cobbles, slightly moist	X
65																	

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# BORING LOG

BORING LOG: #2

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB	
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)				
						FROM	TO			ROCK CORING								
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)						
70	SP																	
75	SC																	
80		SP	80-2	▲	80	80.4	32.6	50/5					5				SC: CLAYEY SAND, few gravels, brown, medium PI, very dense, moist	
																	Soil is somewhat cool @ 80'	
																	Stopped sampler @ 80.5'	X
85																		
90																		
95																		
100																		
105																		





# BORING LOG

BORING LOG: #3

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB		
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)					
						FROM	TO			ROCK CORING									
						RUN (in.)	REC. (in.)			REC (%)	L>4" (in.)	RQD (%)							
30	SC-SM																		
35																			
40			SP	40-3		40	41.5	11.6	10	6	6	12	8					X	
45																			
50	SP																		
55																			
60																			
65			SP	62.5-3		62.5	63.5	8	28	50/6			12						X

SP: GRAVELLY SAND, trace silt, brown, fine, subrounded gravels and mostly coarse sands, moist

gravel layer @ 42'

gravel layer @ 44'

SC: CLAYEY SAND, trace gravels, dense, low PI, slightly moist

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# BORING LOG


BORING LOG: #3

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
70	SC																
75																	
80		SP	80-3		80	80.9		2.3	25	50/5				11			X
81																	
85																	
90																	
95																	
100																	
105																	

becomes very moist at 75'

stopped sampler @ 81'







# BORING LOG

**BORING LOG: #4**  
**SHEET 3 of 3**  
**PROJECT #: Soil Borings and Sampling**

**PROJECT:** Miracle Mile  
**LOCATION:** Tucson, Arizona  
**CLIENT:** ADEQ

**CONTRACTOR:** Yellow Jacket  
**DRILLER:** Mark  
**INSPECTOR:**

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
										RUN (in.)	REC. (in.)	REC. (%)	L>4" (in.)	RQD (%)			
70															interbedded gravels and cobbles, subangular to subrounded		
75																	
80	SC		SP	80-4		80	81	4.3	26	50/6				12	decrease in gravels	X	
85																	
90																	
95			SP	97-4		97	97.5		50/6					6	Stopped sampler @ 97.5'	X	
100																	
105																	

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# BORING LOG

**BORING LOG: #5**

**SHEET 1 of 3**

**PROJECT #: Soil Borings and Sampling**

**PROJECT: Miracle Mile**  
**LOCATION: Tucson, Arizona**  
**CLIENT: ADEQ**

**CONTRACTOR: Yellow Jacket**  
**DRILLER: Mark**  
**INSPECTOR:**

**LOCATION: Fairfax Investments, LLC**  
**COORDINATES. N:**  
**E:**

**RIG TYPE: BK 81**  
**DRILLING METHOD: Hollow Stem Auger**  
**HAMMER TYPE: Safety Hammer**

**REF. ALIGNMENT:**  
**STATION: See Figure 2**  
**OFFSET:**

**COMMENTS: Surface Condition: Soil and aggregate base cover**

**SURFACE ELEV.:**  
**DATUM: Ground Surface**  
**START DATE: 5/21/2002 TIME: 1550**  
**FINISH DATE: 5/22/2002 TIME: 1200**

Type/Symbol	Casing	Split Spoon	Shelby Tube	Simulprobe	Ring Sample	Core Barrel	GROUNDWATER DATA				
		S	U	SP	R	C	Date	Time	Water Depth (ft.)	Casing Depth (ft)	Hole Depth (ft)
I.D.		1.375"									
O.D.		2"									
Length		18"									
Hammer WT.	Drill Rod Size										
Hammer Fall	I.D. (O.D.)										

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
										RUN (in.)	REC (in.)	REC (%)	L>4" (in.)	RQD (%)			
5	CL		SP	5-5				1.2	50/6						6	CL: SANDY CLAY with silt, brown, stiff, medium PI, slightly moist	
10	SM		SP	10-5		10	10.5	0.7	50/6						6	SM: SILTY SAND, trace clays, brown, dense, fine grain sand, slightly moist	X
15	CL		SP	15-5		15	15.4	1.0	50/5						5	CL: CLAY, trace sand, mottled brown, tan and white, very stiff, 1/2" nodules of weak to strong cementation, slightly moist	X
20	SP		SP	20-5		20	21		20	50/6					12	SP: SAND, trace to little silt, trace fine gravel, angular to subangular, medium to coarse sand, dense, slightly moist	X
25																	



# BORING LOG

BORING LOG: #5

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
30																	
35																	
40	SP																
41.5			SP	41.5-5	▲	41.5	42	4.3	50/6								
45																	
50																	
55																	
60			SP	60-5	▲	60	60.9	5.0	20	50/6							
65																	

interbedded gravels from 37' to 60'

cobbles and gravels @ 42'

SC: Clayey sand, trace gravel, brown, medium PI, medium to coarse sand

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# BORING LOG



BORING LOG: #5

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
LOCATION: Tucson, Arizona  
CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
DRILLER: Mark  
INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE									SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB	
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
									RUN (in.)	REC (in.)	REC (%)	L>4" (in.)	RQD (%)				
70	SC															interbedded fine to medium sands	
80			SP	80-5		80	80.3	4.9	50/3							Stopped sampler at 80.3'	X
85																	
90																	
95																	
100																	
105																	

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# BORING LOG

BORING LOG: #6

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
30	SP																
35																	
40																	
43																	
43.8																	
45			SP	43-6	▲	43	43.8	8.3	20	28.3							
50	SP																
55																	
60			SP	60-6	▲	60	61	3.6	20	50/6				12			
65																	

gravel layer @ 40'

SP: GRAVELLY SAND, brown, subangular to subrounded sand and subrounded gravel, slightly moist interbedded gravels to 50'

interbedded gravels 55' to 60'

SC-CL: CLAYEY SAND with silt, brown, low to medium PI, very dense, mostly fine, some medium sand, moist

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# BORING LOG

BORING LOG: #6

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC (%)	L>4" (in.)	RQD (%)					
70																	
75																	
80	SC-CL		SP	80-6	▲	80	80.3	2.6	50/4							becomes decomposed granitic material, medium to large (3/4") grain, very dense, very moist	X
85																	
90																	
95																	
97.5									50/6							Stopped sampler @ 97.5'	X
100																	
105																	

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# BORING LOG

BORING LOG: #7

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
30															interbedded angular to subangular gravels		
35																	
40	SP		SP	40-7		40	40.4	22.2	50/5								X
45																increase in fines	
50																interbedded large rounded gravels, mostly coarse sands	
55																cobble layer, angular to subrounded	
60			SP	60-7		60	61.3	3.2	20	34	50/3					CL: SANDY CLAY with silt, brown, fine sand, medium PI, moist	X
65																	

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# BORING LOG

BORING LOG: #7

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
LOCATION: Tucson, Arizona  
CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
DRILLER: Mark  
INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
										RUN (in.)	REC. (in.)	REC. (%)	L>4" (in.)	RQD (%)			
70	CL														decrease in sands		
72.5															Stopped auger at 72.5', tagged at 70.95'		
75																	
80																	
85																	
90																	
95																	
100																	
105																	





# BORING LOG

BORING LOG: #8

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC (%)	L>4" (in.)	RQD (%)					
30	SC																
35																	
40			SP	40-8		40	40.8	8.2	45	50/4					10	interbedded gravels and cobbles	X
45																	
50	SP																
55																	
60																	
65																	

SP: SAND with gravel, trace silt, brown, mostly coarse grain subrounded to rounded sand, slightly moist gravel layer @ 33'

gravels & cobbles @ 52'



# BORING LOG

BORING LOG: #8

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
65			SP	65-8	▲	65	65.7		19.8	30	50/2			8	SC: Clayey sand, light brown, very dense, moist	X	
78.2			SP	80-8	▲	77.7	78.2							6	Stopped sample @ 78.2'	X	







# BORING LOG

BORING LOG: #9

SHEET 2 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
30																	
35																	
40	SP		SP	40-9	▲	40	40.4	3.4	50/5					3	fine to coarse sand	X	
45																	
50																	
55															gravel and possible cobble layer @ 53'		
60			SP	60-9	▲	60	61.5	5.7	6	4	4	8	18		SC: CLAYEY SAND, brown, loose, low PI, moist to very moist	X	
65																	

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# BORING LOG

BORING LOG: #9

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
70	SC		s						29	25	50/5						
75	CL															CL: Possible SANDY CLAY, brown, medium PI, hard, moist	
80																Sampler refusal @ 80.1'	
85																	
90																	
95																	
100																	
105																	



# BORING LOG

**BORING LOG: #10**  
**SHEET 1 of 3**  
**PROJECT #: Soil Borings and Sampling**

**PROJECT:** Miracle Mile      **CONTRACTOR:** Yellow Jacket  
**LOCATION:** Tucson, Arizona      **DRILLER:** Mark  
**CLIENT:** ADEQ      **INSPECTOR:**

**LOCATION:** Fairfax Investments, LLC  
**COORDINATES. N:**  
**E:**

**RIG TYPE:** BK 81  
**DRILLING METHOD:** Hollow Stem Auger  
**HAMMER TYPE:** Safety Hammer

**REF. ALIGNMENT:**  
**STATION:** See Figure 2  
**OFFSET:**

**COMMENTS:** Surface Condition: Grass lawn

**SURFACE ELEV.:**  
**DATUM:** Ground Surface  
**START DATE:** 5/14/2002    **TIME:** 1110  
**FINISH DATE:** 5/15/2002    **TIME:** 1130

Type/Symbol I.D. O.D. Length Hammer WT. Hammer Fall	Casing	Split Spoon	Shelby Tube	Simulprobe	Ring Sample	Core Barrel	GROUNDWATER DATA				
		S	U	SP	R	C	Date	Time	Water Depth (ft.)	Casing Depth (ft)	Hole Depth (ft)
		1.375"					5/14/2002	1700	81.2		81.4
		2"									
		18"									
	Drill Rod Size										
	I.D. (O.D.)										

DEPTH BELOW SURFACE (FT)	SAMPLE								SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB			
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N			REC. (in.)		
						FROM	TO			ROCK CORING								
										RUN (in.)	REC (in.)	REC (%)	L>4" (in.)			RQD (%)		
5	SC		SP	5-10		5	5.5		50/6						6	SC: CLAYEY SAND, trace gravel, silts, brown, medium dense, low PI, subangular fine to coarse sand, mottled thin veins cementation, slightly moist		
10	CL		SP	10-10					26	31	30	61	18			18	CL: SANDY CLAY, brown, very dense, slightly moist	X
15			SP	15-10		15	16.5		10	24	30	54	18			18		X
20			SP	20-10		20	21.5		8	14	30	44	12			12	SM: SILTY SAND with clay, brown, medium dense, angular to subangular sand, slightly moist	X
25																		

RANDY FOR PETROUTSON P:\MIRACLE MILE\SOIL BORINGS-VERTICAL PROFILING\BORING LOGS\SOIL BORINGS.GPJ TEMPLAT1.GDT 12/19/02



# BORING LOG

**BORING LOG: #10**  
**SHEET 2 of 3**  
**PROJECT #: Soil Borings and Sampling**

**PROJECT: Miracle Mile**  
**LOCATION: Tucson, Arizona**  
**CLIENT: ADEQ**

**CONTRACTOR: Yellow Jacket**  
**DRILLER: Mark**  
**INSPECTOR:**

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
30	SM																
35																	
40			SP	40-10		40	41		14	50/6				12	SP: WELL GRADED SAND, brown, trace silt and gravels, brown, dense to very dense, angular to subrounded, slightly moist	X	
45															interbedded rounded gravels 44' to 58'		
50	SP																
55																	
60			SP	60-10		60	60.4		50/5					4	SC-SP: CLAYEY SAND with gravel, trace silt, brown, trace silt and gravels, brown, very dense, subangular to rounded sand, moist, occasional gravels beyond 60'	X	
65																	

RANDY FOR PETROUTSON P:\MIRACLE MILE\SOIL BORINGS-VERTICAL PROFILING\BORING LOGS\SOIL BORINGS.GPJ TEMPLAT1.GDT 12/19/02



# BORING LOG

BORING LOG: #10

SHEET 3 of 3

PROJECT #: Soil Borings and Sampling

PROJECT: Miracle Mile  
 LOCATION: Tucson, Arizona  
 CLIENT: ADEQ

CONTRACTOR: Yellow Jacket  
 DRILLER: Mark  
 INSPECTOR:

DEPTH BELOW SURFACE (FT)	SAMPLE										SOIL (Blows/6 in.)					VISUAL MATERIAL CLASSIFICATION AND REMARKS	SAMPLES SENT TO LAB
	USCS	GRAPHIC	TYPE	NUMBER	SYMBOL	DEPTH (FT)		MOISTURE, %	PID (ppm)	0/6	6/12	12/18	N	REC. (in.)			
						FROM	TO			ROCK CORING							
						RUN (in.)	REC. (in.)			REC. (%)	L>4" (in.)	RQD (%)					
70	SP-SC																
75																	
80			SP	80-10		80	81		12	50/6				8			
81.4																	
85																	
90																	
95																	
100																	
105																	

interbedded SP & SC

Stopped sampler at 81.4'

X