Well No. 4916F

Boring No. X-Ref: 8-3

MONITOR WELL CONSTRUCTION SUMMARY

Survey Coords: _____ Elevation Ground Level _____

Top of Casing _____

Drilling Summary:

Total Depth 259

Borehole Diameter 9 7/8

Casing Stick-up Height:

Driller Howard Pump, Inc.
Barstow, CA 92311

Rig Howard Turner (D-1)

Bit(s) 9 7/8" Button Bit

Drilling Fluid 0-259 = clean water and Bentonite

Protective Casing Annodized Aluminum

Construction Time Log:

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling Button Bit	10/10	1700	10/12	0841
Geophys. Logging:				
Casing:				
C1	10/12	1230	10/12	1300
S1	10/12	1210	10/12	1230
Filter Placement:	10/12	1320	10/12	1515
Cementing:	10/13	1200	10/13	1330
Development:	10/19	1630	10/20	1253

Well Design & Specifications

Basis: Geologic Log X Geophysical Log ___

Casing String (s): C = Casing S = Screen.

Depth	String(s)	Elevation
- 169	C1	-
169 - 254	S1	-
-		-
-		-
-		-

Casing: C1 4½" diameter Sch. 40 pvc flush threaded

C2

Screen: S1 4½" diameter Sch. 40 pvc flush threaded

S2

Filter Pack: 259-254; 163-254 Monterey Sand #3; 161-163 #40 Sand; 60-156 Monterey Sand #3

Grout Seal: 0-60', 5:1 Portland type I & II cement plus Aquagel Gold Seal (Bentonite)

Bentonite Seal: 156-161 Aquagel Gold Seal (Bentonite)

Well Development:

10/19 1630-1730 Bail
10/20 0745-0845 SWAB
10/20 0900-1000 Bail
10/20 1052-1253 Submersible Pump
Total gallons removed: 1380 gallon

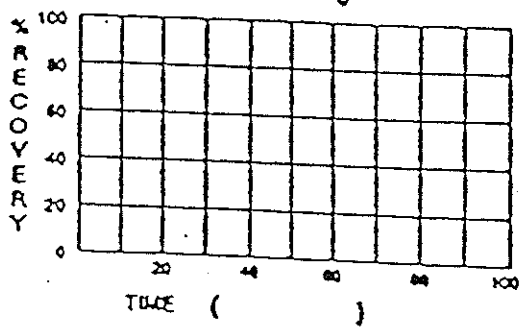
Stabilization Test Data:

All times 10/20/88

Time	pH	Spec. Cond.	Temp (C)
1114	8.55	520	19.74
1126	8.52	510	19.52
1137	8.49	499	19.58
1229	8.36	508	20.35
1243	8.36	506	20.07

Recovery Data:

Q= S_0=



Comments: (1) All dates are 1988

SITE NAME Bradley Landfill

LOCATION Sun Valley, CA

WC 01122

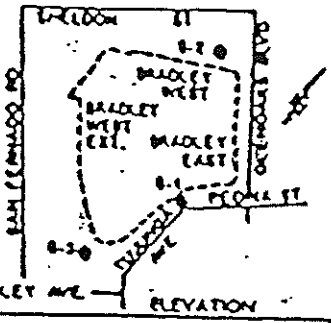
SUPERVISED BY Kurt Easthouse

DATE 10/25/88

BORING LOG

4916F

NAME AND LOCATION: Bradley Landfill, Valley, California



DRILLING METHOD: Mud Rotary

SAMPLING METHOD: Bag (B)

BORING NO. B-3

SHEET 1 OF 7

					DRILLING START	DRILLING FINISH
WATER LEVEL						
TIME					TIME 1700	TIME 0841
DATE					DATE 10/10/88	DATE 10/12/88
CASING DEPTH						

MSL ELEVATION

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

Howard Turner (D-1)

vertical BEARING --

HAMMER TORQUE -- FT.-LBS

SURFACE CONDITIONS: Level open area at southern position of landfill. Approximately 300' to the NE of Verdugo Fault.

BLOWS/6" OR SAMPLE (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT OR CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	PLASTICITY
		Olive brown (2.5Y 4/4) SILTY SAND, moderate plasticity fines; fine to coarse grained; angular quartz and lithic fragments (SM)	B B8							
		Light olive brown (2.5Y 5/4) SAND, 5% fines; fine to medium grained; 20% coarse grained; angular quartz and lithic fragments (SP-SW)								
		Light olive brown (2.5Y 5/4) SAND, 5% fines; fine to coarse grained; trace fine gravel; angular to sub-angular quartz and lithic fragments (SW)								
		@14.5': Cobbles								
		@15': Trace fines								
		@20': 10% fine gravel; sub-angular to sub-rounded grains								
		@25': Trace coarse gravel								
		@30': 45% fine gravel; 5% coarse gravel								
		@35': 10% fine gravel								

SL 00313

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

SOIL BOREHOLE LOG

LOCATION	DRILLING METHOD: Mud Rotary	BORING NO. B-3
	SAMPLING METHOD: Bag (B)	SHEET 2 OF 7
		DRILLING START / FINISH
	WATER LEVEL / TIME / DATE / CASING DEPTH	TIME / TIME / DATE / DATE
SL ELEVATION		

ward Turner (0-1)
ical BEARING --
R TORQUE -- FT.-LBS

SURFACE CONDITIONS: Level open area at southern portion of landfill. Approximately 300' to the NE of the Verdugo Fault

DRILLING CONTR. Howard Pump. Inc.
Tony Villanueva

SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BLOWS	CASING TYPE	BLOWS/FOOT OR CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
	Light olive brown (2.5Y 5/4) SAND (SW) (continued)	B BB							
	@40': 25% fine gravel; angular to sub-angular								
	@45': 5-10% fine gravel								
	@50': 30% fine gravel								
	@55': 20% fine gravel; angular to sub-rounded								
	@60': 15% fine gravel; trace coarse gravel								
	Light olive brown (2.5Y 5/4) SAND to SILTY SAND; 5-12% fines; fine to coarse grained; 25% fine gravel; angular to sub-rounded quartz and lithic fragmants (SW-SM)								
	Light olive brown (2.5Y 5/4) SAND, trace fines; fine to coarse grained; 10% fine gravel; angular quartz and lithic fragments (SW)								
	@74': cobbles								

SL 00400

LOGGED BY Kurt Easthouse
DATE 10/25/88 CHK'D BY KE

SOIL BOREHOLE LOG

LOCATION	DRILLING METHOD: Mud Rotary	BORING NO. B-3
	SAMPLING METHOD: Bag (B)	SHEET 4 of 7
		DRILLING START TIME / FINISH TIME
	WATER LEVEL / TIME / DATE / CASING DEPTH	DATE / DATE

MSL ELEVATION

Howard Turner (D-1)

Vertical BEARING --

HAMMER TORQUE -- FT.-LBS

SURFACE CONDITIONS Level open area at souther portion of landfill. Approximately 300' NE of Verdugo Fault.

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

RECOVERY	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLES AND BKI	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	PHOTO
		Light olive brown (2.5Y 5/4) SAND (SW) (continued)	B BB							
		@115': 20% fine gravel; angular to sub-angular								
		@120': 10% fine gravel								
		@130': 15-20% fine gravel								
		@132-137': Boulders and cobbles								
		@135': 5% fines								
		@140': Angular to well rounded grains								
		Light olive brown (2.5Y 5/4) SAND to SILTY SAND, 5-12% fines; fine to coarse grained; 10% fine gravel; angular quartz and lithic fragments (SW-SM)								

SL 00398

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

SOIL BOREHOLE LOG

LOCATION	DRILLING METHOD: Mud Rotary	BORING NO. B-3
	SAMPLING METHOD: Bag (B)	SHEET 5 of 7
		DRILLING START TIME / FINISH TIME
	WATER LEVEL / TIME / DATE / CASING DEPTH	DATE / DATE

SL ELEVATION

Howard Turner (D-1)

Cal BEARING --

TORQUE -- FT.-LBS

SURFACE CONDITIONS: Level open area at southern portion of landfill. Approximately 300' NE of the Verdugo Fault.

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
	Light olive brown (2.5Y 5/4) SAND to SILTY SAND (SW-SM) (continued)	B BB							
	@150': angular to sub-angular grains								
	@155': trace coarse gravel								
	Light olive brown (2.5Y 5/4) SAND, 5% fines; fine to coarse grained; trace fine gravel; angular quartz and lithic fragments (SW)								
	@165': trace to 5% coarse gravel								
	@170': trace fines; 10% fine gravel								
	@172-177': boulders and cobbles								
	@175': 20% fine gravel								
	@180': trace fine gravel								
	@182-191': boulders and cobbles								
	@185': 15% fine gravel; angular to sub-rounded								

SL 00397

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

BORING LOG

DRILLING METHOD:	Mud Rotary
SAMPLING METHOD:	Bag (B)
BORING NO.	B-3
SHEET	7 of 7
DRILLING START TIME / DATE	
DRILLING FINISH TIME / DATE	
WATER LEVEL / TIME / DATE / CASING DEPTH	
HOLE NO. AND LOCATION	
ELEVATION	KSL
	Howard Turner (D-1)
BEARING	vertical --
HAMMER TORQUE	-- FT.-LBS
SURFACE CONDITIONS	Level open area at southern portion of landfill. Approximately 300' NE of the Verdugo fault.

BLOWS/6" OR RQD (% RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	PERM
		Light olive brown (2.5Y 6/4) SAND to SILTY SAND (SW-SM) (continued)	B-88							
		@230': 10-15% fine gravel; angular quartz and lithic fragments								
		@232-242': boulders and cobbles								
		Grayish brown (2.5Y 5/2) to light olive brown (2.5Y 5/4) SAND, trace fines; fine to coarse grained; trace to 5% fine gravel; angular to sub-angular quartz and lithic fragments (SW)								
		@240': 15% fine gravel								
		@245': 20% fine gravel; angular to sub-rounded								
		@245-251': boulders and cobbles								
		@250': 5% fines; trace fine gravel								
		@255': angular to sub-angular grains								
		@259': 15% fine gravel								
		Total depth of exploratory Boring: 259'								

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

SL 00395

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE