ARCADIS
Infrastructure, environment, facilities

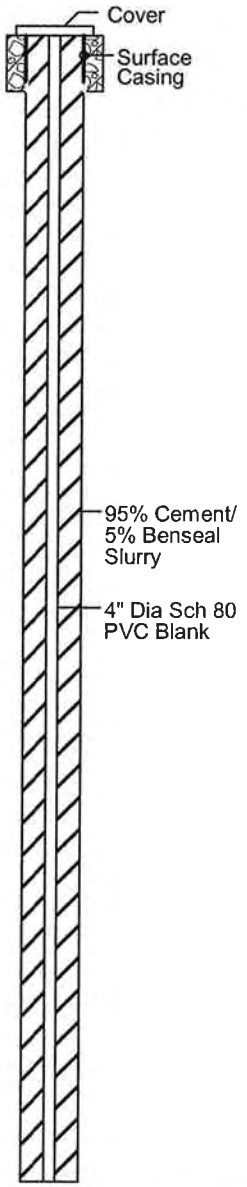
LOG OF BORING EW-1

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 25, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 9.75
Drill Rig	: Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0	—		08:25					Grass surface to ~6". (Off mud-return) SILT with CLAY and SAND, ~10-20% Sand, black (7.5YR 2.5/1).
5	—		08:33					(Off mud-return) CLAYEY SILT, soft, olive (5Y 4/4), moist.
10	—		08:40			ML		Same as above.
15	—		08:47	-				Same as above - medium stiff. Increasing SAND content ~5-10% fine to medium Sand (max. 1.5 mm diameter).
20	—		09:01					(Off mud-return) SILT with SAND and CLAY, ~20% fine to medium Sand, ~10-20% Clay, olive brown (2.5Y 4/4).
25								

Well: EW-1
Elev.: 152.43



DESCRIPTION OF BORING LOCATION: On side of Burke just east of Sorenson, in greenbelt, between MW-8A and MW-8D.

NOTES: Depth in feet below ground surface (bgs). Centralizers on sump and at 40 feet bgs.

ARCADIS
Infrastructure, environment, facilities

LOG OF BORING EW-1

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 25, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 9.75
Drill Rig	: Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well: EW-1
Elev.: 152.43

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25						ML		
						SP/SW		(Off mud-return) Poorly graded SAND, predominantly (~80%) fine to medium (max. 2 mm diameter), ~20% coarse (max 5 mm diameter)
30								Same. Lots of "chatter" from 30-37', possible gravel.
35	—		09:27					Same as above.
						SP		(Off mud-return) Poorly graded SAND, fine to medium grained (max. 1 mm diameter), olive brown (2.5Y 4/4), wet.
						SP/SW		Some chatter ~38-39'. Well graded SAND
40	—		09:32			SP		Poorly graded SAND, as above.
45	—		09:45			SW		(Off mud-return) Well graded SAND, fine to coarse Sand, (max. 5 mm diameter), subangular to subrounded.
50								

95% Cement/ 5% Benseal Slurry

4" Dia Sch 80 PVC Blank

DESCRIPTION OF BORING LOCATION: On side of Burke just east of Sorenson, in greenbelt, between MW-8A and MW-8D.

NOTES: Depth in feet below ground surface (bgs). Centralizers on sump and at 40 feet bgs.

09-07-2006 C:\COMMON\MTech5\Omega Chemical\EW-1.BOR

ARCADIS
Infrastructure, environment, facilities

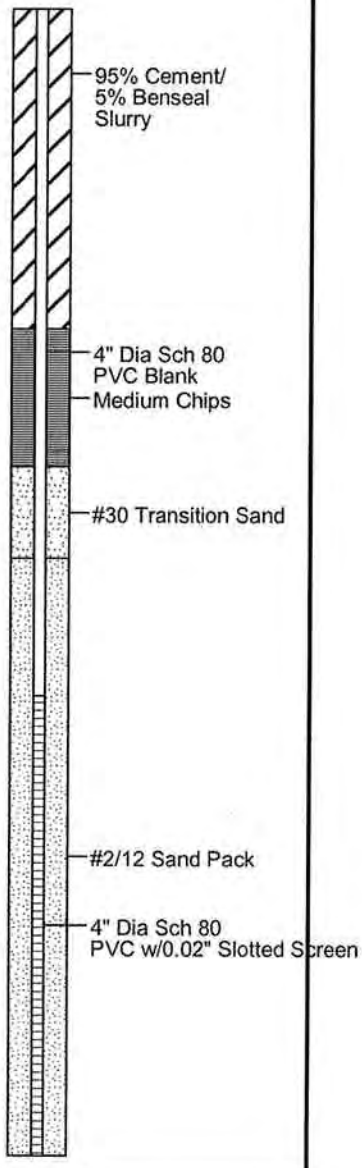
LOG OF BORING EW-1

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 25, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 9.75
Drill Rig	: Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well: EW-1
Elev.: 152.43

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50								Fine and coarse GRAVEL (<5%) observed.
55	—		09:55			SW		Lot of chatter at 55'. Well graded SAND with Gravel, ~20-30% Gravel, ~70-80% well-graded fine to coarse Sand, Gravel (max 15 mm diameter) (subrounded, igneous rock with quartz and mafic materials).
60	—		10:00			ML		(Off mud-return). SILT, olive brown.
65								
70	—		10:26			SP		(Off mud-return) Poorly graded SAND, fine to medium grained.
75						CL		(Off mud-return) Chattering stopped at ~73'. SILTY CLAY with SAND, ~10-20% fine to medium Sand, occasional fine Gravel, olive brown, soft to medium stiff.



DESCRIPTION OF BORING LOCATION: On side of Burke just east of Sorenson, in greenbelt, between MW-8A and MW-8D.

NOTES: Depth in feet below ground surface (bgs). Centralizers on sump and at 40 feet bgs.

ARCADIS
Infrastructure, environment, facilities

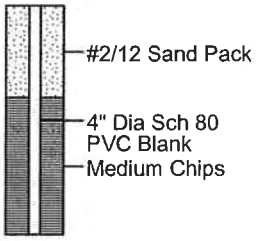
LOG OF BORING EW-1

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 25, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 9.75
Drill Rig	: Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75								
						CL		
80			10:37					Bottom of boring at 80'.
85								
90								
95								
100								

Well: EW-1
Elev.: 152.43



DESCRIPTION OF BORING LOCATION: On side of Burke just east of Sorenson, in greenbelt, between MW-8A and MW-8D.

NOTES: Depth in feet below ground surface (bgs). Centralizers on sump and at 40 feet bgs.

WELL NUMBER MW01A

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Hollow Stem Auger, 10-inch Diameter
SAMPLING METHOD Continuous 5-foot Core
GROUND ELEVATION 158.35
TOP OF CASING 158.21
LOGGED BY B. Clarke
REMARKS

DATE STARTED 12/11/01
DATE COMPLETED 12/11/01
CASING TYPE/DIAMETER Sch. 40 PVC / 4-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 140 gal.
DEPTH TO WATER 30.6
GROUND WATER ELEVATION 127.8

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
NM		60	AUGER			SP-SM		Asphalt	0.4
								FILL--Gravelly, silty sand, dense	1.0
								Yellowish brown to brown (10YR 5/4 to 10YR 5/3) SILT to fine sandy SILT, slightly moist, medium soft.	
		0	NR		5	ML			
		36	CORE						
									8.5
0.0		60	CORE		10	CL-ML		Dark brown (10YR 3/3) silty CLAY, slight to medium plasticity, slightly moist, stiff.	
						CL-ML		Dark brown silty CLAY, as above, more silt, slightly blocky.	12.0
									13.5
0.0		0	NR		15	ML		Dark yellowish brown (10YR 3/4) clayey SILT, slight to medium elasticity, slightly moist, slightly blocky and crumbly.	
		48	CORE						16.5
								Dark yellowish brown clayey SILT, as above, with trace fine sand.	
0.2		60	CORE		20	ML			
									24.0
0.0		60	CORE		25	ML		Dark yellowish brown (10YR 4/4) SILT, trace fine sand, trace to little clay, very slight plasticity.	
						ML		Dark yellowish brown fine sandy SILT.	26.3
						ML		Dark yellowish brown clayey SILT, blocky partings.	26.8
									29.3
0.0		60	CORE		30	CL		Dark yellowish brown (10YR 4/4) silty CLAY, trace fine sand.	30.5
						ML		Dark yellowish brown to dark brown (10YR 3/4 to 10YR 4/3) SILT, trace to little clay, trace very fine sand, slightly micaceous, moist to very moist at 31.5 feet, wet at 34 feet.	
									35.0

WELL DIAGRAM: Traffic-rated Vault; Rapid-set Concrete; Portland Cement Grout w/ 5% Bentonite; Sch. 40 PVC Blank Casing

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

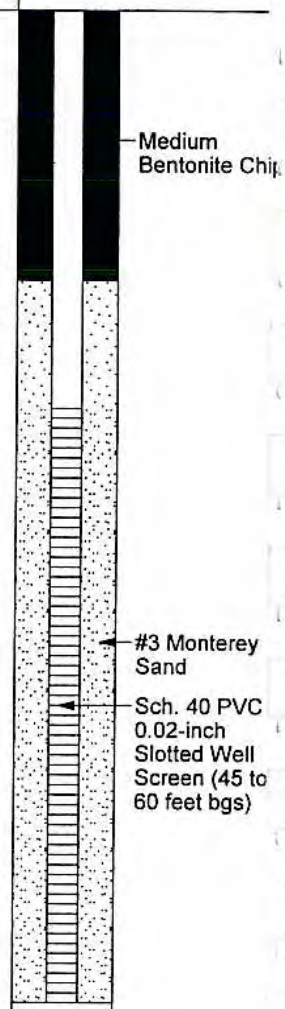
WELL NUMBER MW01A

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/11/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/11/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.2		60	CORE			ML		Dark grayish brown (10YR 4/2) fine SILT, non-plastic, mottled with oxides, micaceous, wet, soft. ▽	38.0
		0	NR		40	SM		Dark grayish brown (2.5Y 4/2) silty very fine SAND, very well sorted, micaceous, locally grading to fine sandy silt.	41.5
0.2		42	CORE			ML		Dark grayish brown (2.5Y 4/2) fine sandy SILT.	43.0
						SP		Dark grayish brown (2.5Y 4/2) fine to medium SAND, medium to well sorted, saturated, dense.	44.0
NM		0	NR		45	SW		Dark grayish brown fine to coarse SAND, trace to little subrounded gravel to 1 to 2-inch, medium sorting, saturated, dense.	49.5
		36	CORE						
		0	NR		50	SP		Olive gray (5Y 4/2) fine SAND to fine to medium SAND, very well to well sorted, trace silt, trace clay, with 2-inch fine sandy silt layer at base	53.5
1.7		42	CORE			SW		Dark grayish brown (2.5Y 4/2) gravelly fine to coarse SAND, medium sorted, gravel to 1.5-inch.	55.0
0.7		0	NR		55	SP-SM		Light olive brown (2.5Y 5/4) silty fine to medium SAND, medium sorted, trace fine gravel to 3/4-inch, trace clay, slightly moist, slightly cemented.	56.0
		24	CORE			SP		Light olive brown medium to coarse SAND, trace gravel to 3/4-inch, saturated, very dense.	59.5
2.1					60	SM		Pale olive (5Y 6/3) silty fine to medium SAND, trace clay, wet/saturated, very slightly cemented.	60.0
								Bottom of borehole at 60.0 feet.	

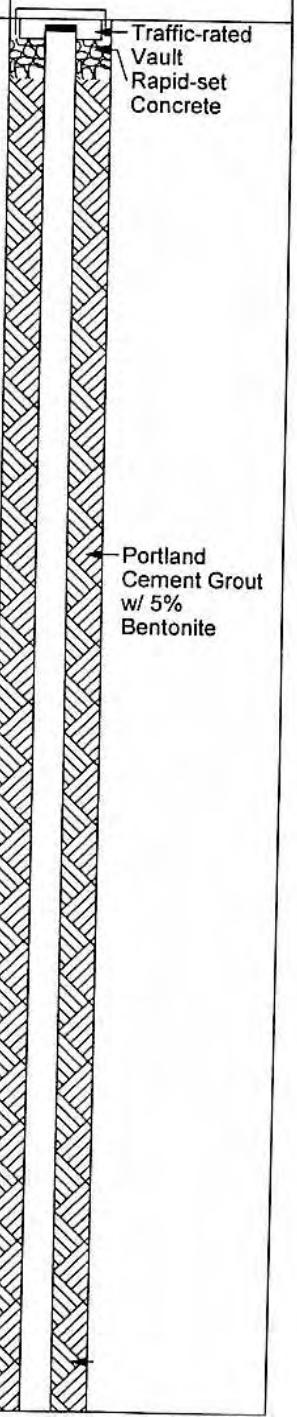


WELL NUMBER MW01B

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/27/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/27/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 5-foot Core	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	158.26	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 230 gal.
TOP OF CASING	158.09	**DEPTH TO WATER**	30.4
LOGGED BY	B. Clarke A. Cohan	**GROUND WATER ELEVATION**	127.8
REMARKS	Lithology to 60 feet from MW01A		

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
NM		60	AUGER			SP-SM		Asphalt	0.4
								Fill--Gravelly, silty sand, dense	1.0
								Yellowish brown to brown (10YR 5/4 to 10YR 5/3) SILT to fine sandy SILT, slightly moist, medium soft.	
		0	NR		5	ML			
		36	CORE						
									8.5
0.0		60	CORE		10	CL-ML		Dark brown (10YR 3/3) silty CLAY, slight to medium plasticity, slightly moist, stiff.	
						CL-ML		Dark brown silty CLAY, as above, more silt, slightly blocky.	12.0
									13.5
		0	NR		15	ML		Dark yellowish brown (10YR 3/4) clayey SILT, slight to medium elasticity, slightly moist, slightly blocky and crumbly.	
		48	CORE						
								Dark yellowish brown clayey SILT, as above, with trace fine sand.	16.5
0.2		60	CORE		20	ML			
									24.0
0.0		60	CORE		25	ML		Dark yellowish brown (10YR 4/4) SILT, trace fine sand, trace to little clay, very slight plasticity.	
						ML		Dark yellowish brown fine sandy SILT.	26.3
						ML		Dark yellowish brown clayey SILT, blocky partings.	26.8
									29.3
0.0		60	CORE		30	CL		Dark yellowish brown (10YR 4/4) silty CLAY, trace fine sand.	
									30.5
						ML		Dark yellowish brown to dark brown (10YR 3/4 to 10YR 4/3) SILT, trace to little clay, trace very fine sand, slightly micaceous, moist to very moist at 31.5 feet, wet at 34 feet.	
									35.0

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

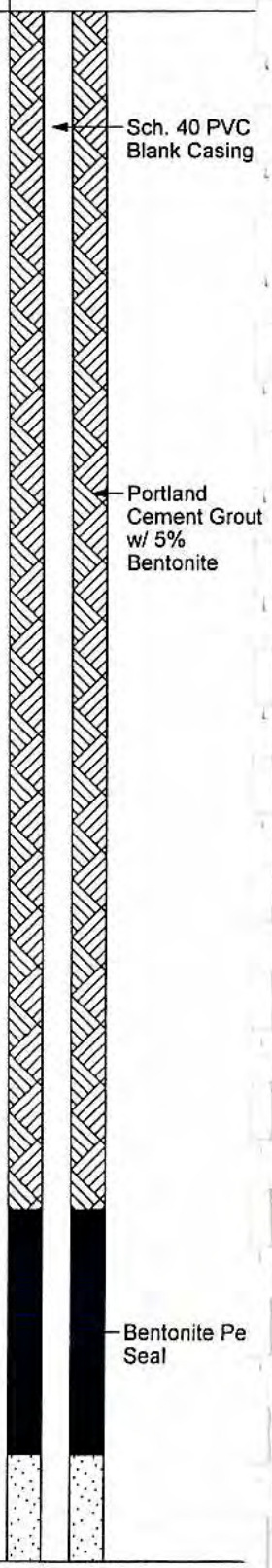
PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/27/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/27/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.2		60	CORE			ML		Dark grayish brown (10YR 4/2) fine sandy SILT, non-plastic, mottled with oxides, micaceous, wet, soft.	
									38.0
						SM		Dark grayish brown (2.5Y 4/2) silty very fine SAND, very well sorted, micaceous, locally grading to fine sandy silt.	
		0	NR		40				
0.2		42	CORE			ML		Dark grayish brown (2.5Y 4/2) fine sandy SILT.	41.5
									43.0
						SP		Dark grayish brown (2.5Y 4/2) fine to medium SAND, medium to well sorted, saturated, dense.	44.0
NM		0	NR		45	SW		Dark grayish brown fine to coarse SAND, trace to little subrounded gravel to 1 to 2-inch, medium sorting, saturated, dense.	
		36	CORE						
									49.5
1.7		0	NR		50	SP		Olive gray (5Y 4/2) fine SAND TO fine to medium SAND, very well to well sorted, trace silt, trace clay, with 2-inch fine sandy silt layer at base.	
		42	CORE						
									53.5
						SP		Dark grayish brown (2.5Y 4/2) gravelly fine to coarse SAND, medium sorted, gravel to 1.5-inch.	55.0
0.7		0	NR		55	SP-SM		Light olive brown (2.5Y 5/4) silty fine to fine SAND, medium sorted, trace fine gravel to 3/4-inch, trace clay, slightly moist, slightly cemented.	56.0
						SP		Light olive brown medium to coarse SAND, trace gravel to 3/4-inch, saturated, very dense.	
		24	CORE						59.5
		0	NR		60	SM		Pale olive (5Y 6/3) silty fine to medium SAND, trace clay, wet/saturated, very slightly cemented.	
									62.0
2.1		36	CORE			SP		Olive brown (2.5Y 4/3) fine to medium SAND, trace silt, trace subrounded gravel to 1/2-inch toward base, medium sorted, wet.	
		0	NR		65				
									69.0
		12	CORE			SM		Olive brown (2.5Y 4/4) silty fine SAND, micaceous, well sorted, wet.	69.5
		0	NR		70	SW		Olive brown gravelly fine to coarse SAND, trace silt, gravel subrounded to subangular and 1/2 to 1-1/2 inch, medium sorted, wet, partly cemeted at 70 feet bgs.	72.0
0.7		36	CORE			SW		Olive brown fine to coarse SAND, little subrounded gravel 1/8 to 2-inch, poorly sorted, wet.	
									74.0
						SP			

WELL DIAGRAM



PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/27/01
PROJECT NAME Omega OU-02 DATE COMPLETED 12/27/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
		0	NR			SP		Olive brown fine to medium SAND, trace silt, trace gravel, micaceous, cemented at 75 feet bgs. *(continued)*		
		36	CORE			GP		Olive brown medium to coarse sandy GRAVEL, clasts subrounded 1/8 to 1-inch.	77.0	
						ML		Olive brown clayey SILT, trace fine sand, micaceous.	78.3	
		0	NR		80	SP		Olive brown fine SAND, little silt, micaceous, well sorted, wet.	78.5	#3 Monterey Sand Sch. 40 PVC 0.02-inch Slotted Well Screen (75 to 85.4 feet bgs)
0.5		30	CORE			SP		Dark grayish brown (2.5Y 4/2) fine to medium SAND, few coarse grains, 1-inch silt lens, wet.	82.5	
0.3		60	CORE		85	CL		Olive brown (2.5Y 4/4) silty CLAY, slightly plastic, stiff.	85.0	
0.2		60	CORE		90	CL		Olive brown silty CLAY, trace subrounded gravel 1/8 to 1/4 inch, stiff.	90.0	Bentonite Pellet Backfill
NM					95			Bottom of borehole at 95.0 feet.	95.0	

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

WELL NUMBER MW02A

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Hollow Stem Auger, 10-inch Diamter
SAMPLING METHOD Continuous 5-foot Core
GROUND ELEVATION 154.94
TOP OF CASING 158.09
LOGGED BY A. Cohan
REMARKS

DATE STARTED 12/12/01
DATE COMPLETED 12/12/01
CASING TYPE/DIAMETER Sch. 40 PVC / 4-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 155 gal.
DEPTH TO WATER 27.1
GROUND WATER ELEVATION 127.8

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
NM		60	AUGER			SC		Asphalt Dark brown (10YR 3/3) clayey SAND, some stringers, some calcareous clasts, slight luster.	0.4
NM		60	CORE		5	CL		Very dark brown (10YR 2/2) CLAY	6.0
0.0		60	CORE		10	ML		Dark brown (10YR3/3) clayey SILT, trace fine sand, slight to medium plasticity, slightly moist, stiff.	9.5
0.0		60	CORE		15	CL-ML		Dark brown (10YR 3/3) silty CLAY, trace angular gravel (possible concretions).	17.0
0.0		0	NR		20	CL		Dark yellowish brown (10YR 3/4) fine sandy CLAY.	21.0
		48	CORE			ML		Dark yellowish brown (10YR 3/4) fine sandy SILT, very moist, more plastic and micaceous at 25 feet bgs.	22.5
		0	NR		25	SM		Dark brown silty fine SAND ▼	26.5
0.0		48	CORE			SP		Fine SAND, well sorted	29.0
0.2		0	NR		30	SP		Dark yellowish brown (10YR 3/6) SAND, fine to medium grained, trace silt, well sorted, wet, trace mica. ▽	32.5
		30	CORE						

WELL DIAGRAM

- Traffic-rated vault
- Rapid-set Concrete
- Portland Cement Grout w/ 5% Bentonite
- Sch. 40 PVC Blank Casing

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/12/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/12/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
35		0	NR					Dark yellowish brown (10YR 3/6) SAND, fine to medium grained, trace silt, well sorted, wet, trace mica. *(continued)*		
						SP				
		0	NR		40					Bentonite Pellets
									42.5	
		30	CORE			SW		Olive brown (2.5Y 4/3) gravelly SAND, poorly sorted, wet.	43.0	
						ML		Dark yellowish brown (10YR4/4) fine sandy SILT.	43.5	
								Olive brown (2.5Y 4/3) fine to coarse SAND		
51		0	NR		45	SW				
									48.0	
		24	CORE					Medium to coarse SAND, moderate to poorly sorted, moist, 1.5-inch subrounded grains, trace of cementation with trace clay found in lower inch of sample.		
23		0	NR		50	SP				#3 Monterey Sand
									52.4	
		30	CORE			SM		Dark grayish brown (10YR4/2) SILTY FINE SAND, wet, soft	52.5	Sch. 40 PVC 0.02-inch Slotted Well Screen (45 to 60 feet bgs)
						SW		Olive brown (2.5Y 4/3) fine to coarse SAND, moderately sorted, 1 inch subrounded to rounded gravel, moist, trace of cementation in lower portion of sample.	55.0	
39		0	NR		55			Olive brown fine to medium SAND, cemented toward base		
						SP				
		30	CORE							
					60				60.0	
31								Bottom of borehole at 60.0 feet.		

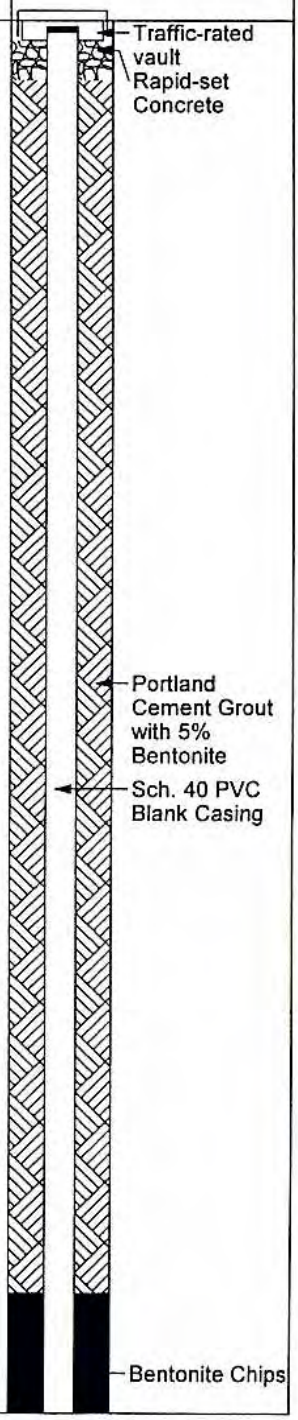
BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

WELL NUMBER MW03A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/12/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/12/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	30-inch Split Spoon	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	152.28	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 140 gal.
TOP OF CASING	151.99	**DEPTH TO WATER**	25.9
LOGGED BY	T. Mehall	**GROUND WATER ELEVATION**	126.4
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER					Asphalt	0.4
NM		0 24	NR CORE		5			Dark yellowish brown (10YR 3/4), CLAY with little sand, low plasticity, slightly moist, firm, no odor. Similar extending to 15 feet below ground surface (bgs).	
0		30	CORE		10	CL			
0.1		30	CORE		15	SC-SM		Yellowish brown (10YR 5/6), Clayey SAND with silt, 30% fines and 70% fine sand, moist, firm, no odor.	16.5 17.0
						CL		Dark yellowish brown (10YR 3/4), CLAY with some fine sand, low plasticity, moist, firm, no odor.	
0.2		30	CORE		20	SC		Dark yellowish brown (10YR 4/4), clayey SAND, 40% clays, 60% fine sand, moist, firm, no odor.	21.5
0.4		30	CORE		25	SC-SM		Dark yellowish brown (10YR 4/4), SAND with clay and silt, 30% fines, 70% fine to medium sand, subrounded, moist to wet, soft.	25.5
NM		30	CORE		30	ML		Brownish yellow (10YR 6/6), SILT with sand and clay, 20% fine sand and 80% fines, low plasticity, moist to wet, firm, no odor, trace cementation.	29.0

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/12/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/12/01

Continued from Previous Page

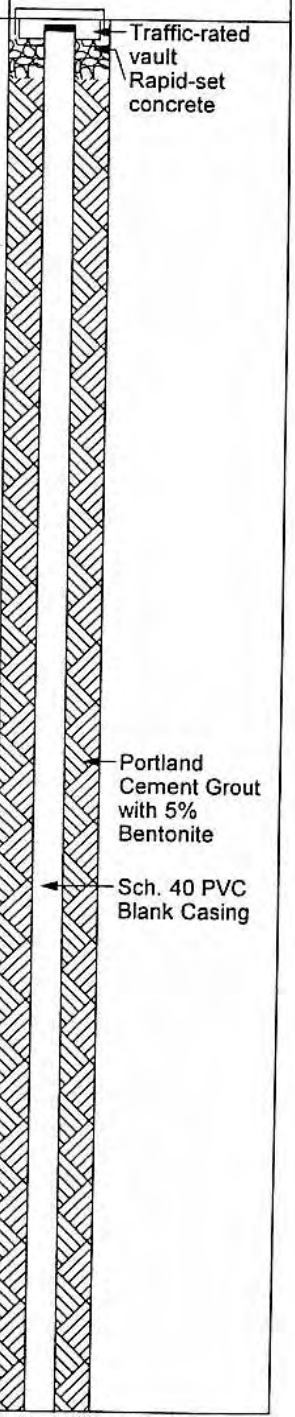
PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
NM		0	NR						35.5	
		27	CORE			SM		Brownish yellow (10YR 6/6), silty SAND, 40% fines, 60% fine sand, no plasticity, wet, soft, no odor, 2-inch diameter cemented nodule in shoe.		
NM		0	NR		40				40.5	
		27	CORE			SP-SM		Dark yellowish brown (10YR 4/6), SAND with silt, 20% silt and 80% fine to medium sand (predominantly medium), poorly graded, wet, soft, no odor.		#3 Monterey Sand Sch. 40 PVC 0.02-inch Slotted Well Screen (37.8 to 48 feet bgs)
									44.0	
NM		30	CORE		45	SP		Dark yellowish brown (10YR 4/6), SAND, poorly graded, predominantly medium grained, wet, soft, no odor.		
									47.0	
						ML		Yellowish brown (10YR 5/4), SILT, 25% fine sand and 75% silt, moist, firm to hard, no odor, trace cementation, wet at 50 feet bgs.		
NM		15	CORE		50					Bentonite Pellets Backfi
									51.3	
								Bottom of borehole at 51.3 feet.		

WELL NUMBER MW04A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/10/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/10/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 30-inch Split Spoon	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	147.39	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 140 gal.
TOP OF CASING	147.20	**DEPTH TO WATER**	23.0
LOGGED BY	T. Mehall	**GROUND WATER ELEVATION**	124.4
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER					Asphalt	0.4
						ML		Dark yellowish brown (10YR 4/4), SILT with gravel, 90% silt and 10% medium subrounded gravel clasts, moist, soft, no odor.	
2.7		30	CORE		5				5.0
						ML		Dark yellowish brown (10YR 4/4), SILT, 95% silt and trace fine sand, moist to wet, soft, no odor.	
		0	NR						8.5
		15	CORE					Very dark grayish brown (10YR 3/2), CLAY, medium plasticity, moist, firm, no odor, trace of cemented nodules at 9.5 to 10 feet below ground surface (bgs).	
1.7		30	CORE		10	CL			
						CL		Similar to above, consistency increases to hard, color change to dark grayish brown (10YR 4/2).	11.5
		30	CORE					Moisture decreases to slightly moist, increased silt content, lower plasticity.	12.5
						CL-ML			
1.2		30	CORE		15				
						SW-SC		Dark yellowish brown (10YR 3/4), SAND with clay, 75% fine to coarse sand, 25% clay, well graded, subrounded, moist, no odor, trace of fine gravel.	16.5 17.0
		30	CORE					Dark grayish brown (10YR 4/2), CLAY, low plasticity, firm, slightly moist to moist, no odor. Slight increase in plasticity at 20 feet bgs. Trace cementation at 21.5 and 25 feet bgs.	
0.7		30	CORE		20				
						CL			
		30	CORE						
0.7		30	CORE		25				
		30	CORE			CL		No significant change from above, 75% fines and 25% fine sand, decrease plasticity to low, slightly moist, no odor.	27.0 28.5
		0	NR		30	ML		Dark yellowish brown (10YR 4/6), sandy SILT, slightly moist, hard, no odor.	
2.7		15	CORE						32.0
		30	CORE			SP		Dark yellowish brown (10YR 4/6), SAND, fine to medium grained (predominantly medium), poorly graded, subangular, wet, no odor.	

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

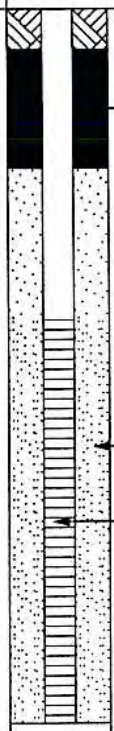
PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/10/01

PROJECT NAME Omega OU-02 DATE COMPLETED 12/10/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
17.5		30	CORE			SP		Dark yellowish brown (10YR 4/6), SAND, fine to medium grained (predominantly medium), poorly graded, subangular, wet, no odor. *(continued)*	37.0
		30	CORE			SW		Dark brown well graded SAND with gravel (25% fine sand, 50% medium sand, 25% coarse sand), 90% sand with 10% gravel, subrounded to rounded sand, wet, no odor.	38.5
						SP		Dark yellowish (10YR 4/6) poorly graded sand, fine to medium (predominantly medium), subangular, wet, no odor.	40.0
0		30	CORE		40	SW-SC		Dark grayish brown (10YR 4/2) well graded SAND with clay and gravel, (20% clay, 10% medium gravel subrounded, 70% SAND). SAND comprised of 20% fines, 40% medium, 40% coarse, subangular, wet, no odor.	43.0
		30	CORE			SW		Gray (10YR 5/1), SAND, 15% gravel and 85% well graded sand (20% fine, 40% medium, and 40% coarse), subangular, wet, no odor.	45.5
0		30	CORE		45	SM		Silty SAND in sluff	47.5
0		0	NR			SM-SW		Gray (10YR 5/1), silty SAND, similar to above, bottom 1/2 foot well graded SAND (SW) with coarse gravel, 25% gravel, 75% SAND (20% Fines, 50% medium, and 30% coarse), subangular to subrounded, wet.	50.0
		12	CORE						
NM		0	NR		50	SP		Sluff contains poorly graded sand and silty sand, wet, no odor.	53.0
		15	CORE					Bottom of borehole at 53.0 feet.	

WELL DIAGRAM



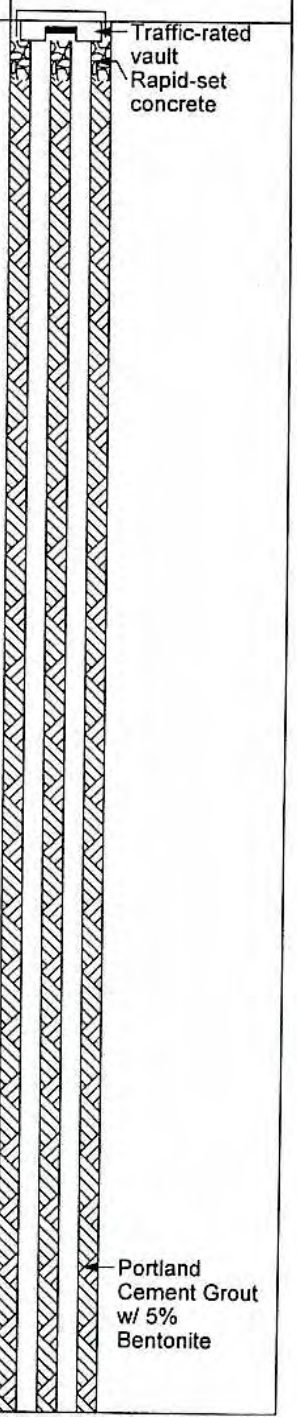
WELL NUMBER MW04B/MW04C

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Mud Rotary, 10-inch Diameter
SAMPLING METHOD Continuous 5-foot Core
GROUND ELEVATION 147.40-MW04B; 147.39-MW04C
TOP OF CASING 147.23-MW04B; 147.10-MW04C
LOGGED BY B. Clarke
REMARKS Lithology to 53 feet below ground surface from MW04A

DATE STARTED 12/17/01
DATE COMPLETED 12/18/01
CASING TYPE/DIAMETER Sch. 40 PVC / 2-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 150 gal.
DEPTH TO WATER 22.9
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			AUGER			ML		Asphalt Dark yellowish brown (10YR 4/4), SILT with gravel, 90% silt and 10% medium subrounded gravel clasts, moist, soft, no odor.	0.4
					5	ML		Dark yellowish brown (10YR 4/4), SILT, 95% silt and trace fine sand, moist to wet, soft, no odor.	5.0 8.5
					10	CL		Very dark grayish brown (10YR 3/2), CLAY, medium plasticity, moist, firm, no odor, trace of cemented nodules at 9.5 to 10 feet below ground surface (bgs).	11.5
						CL		Similar to above, consistency increases to hard, color change to dark grayish brown (10YR 4/2).	12.5
					15	CL-ML		Moisture decreases to slightly moist, increased silt content, lower plasticity.	16.5
						SW-SC		Dark yellowish brown (10YR 3/4), SAND with clay, 75% fine to coarse sand, 25% clay, well graded, subrounded, moist, no odor, trace of fine gravel.	17.0
					20	CL		Dark grayish brown (10YR 4/2), CLAY, low plasticity, firm, slightly moist to moist, no odor. Slight increase in plasticity at 20 feet bgs. Trace cementation at 21.5 and 25 feet bgs.	
					25	CL		No significant change from above, 75% fines and 25% fine sand, decrease plasticity to low, slightly moist, no odor.	27.0 28.5
					30	ML		Dark yellowish brown (10YR 4/6), sandy SILT, slightly moist, hard, no odor.	32.0
						SP		Dark yellowish brown (10YR 4/6), SAND, fine to medium grained (predominantly medium), poorly graded, subangular, wet, no odor.	

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/17/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/18/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
						SP		Dark yellowish brown (10YR 4/6), SAND, fine to medium grained (predominantly medium), poorly graded, subangular, wet, no odor. *(continued)*	37.0
						SW		Dark brown well graded SAND with gravel (25% fine sand, 50% medium sand, 25% coarse sand), 90% sand with 10% gravel, subrounded to rounded sand, wet, no odor.	38.5
						SP		Dark yellowish (10YR 4/6) poorly graded sand, fine to medium (predominantly medium), subangular, wet, no odor.	40.0
					40	SW-SC		Dark grayish brown (10YR 4/2) well graded SAND with clay and gravel, (20% clay, 10% medium gravel subrounded, 70% SAND). SAND comprised of 20% fines, 40% medium, 40% coarse, subangular, wet, no odor.	43.0
						SW		Gray (10YR 5/1), SAND, 15% gravel and 85% well graded sand (20% fine, 40% medium, and 40% coarse), subangular, wet, no odor.	
					45				45.5
						SM		Silty SAND in sluff	
									47.5
						SM-SW		Gray (10YR 5/1), silty SAND, similar to above, bottom 1/2 foot well graded SAND (SW) with coarse gravel, 25% gravel, 75% SAND (20% Fines, 50% medium, and 30% coarse), subangular to subrounded, wet.	50.0
					50	SP		Sluff contains poorly graded sand and silty sand, wet, no odor.	
									53.0
						SM		Dark yellowish brown (10YR 3/4), silty SAND (25% silt, 75% fine sand), wet, no odor.	
		0	NR		55				
									57.5
									60.0
NM		60	CORE		60	ML		Olive brown (2.5Y 5/3), very fine sandy SILT, micaceous, low plasticity, moist, medium stiff.	61.5
						ML		Dark olive 2.5Y 4/3 and 2.5Y 5/1 slightly mottled clayey SILT, grading to (CL) silty CLAY, slight to medium plasticity, moist, medium stiff.	63.0
						ML		Fine sandy SILT, slightly micaceous.	63.5
						ML		Clayey SILT, medium plasticity, medium stiff.	64.0
		0	NR		65	SM		Light olive brown (2.5Y 5/4), silty fine SAND, 5% clay, 55% fine sand and 40% silt, well sorted, grading into a fine to medium SAND, 45% fine sand, 10% medium sand and 40% silt, micaceous.	
		48	CORE						67.5
								Dark gray (5Y 4/1) well sorted SAND (75% fine sand, 10-25% medium sand), 0-10% SILT, wet, medium dense.	
NM		0	NR		70	SP			

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/17/01
PROJECT NAME Omega OU-02 DATE COMPLETED 12/18/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		0	NR			SP		Dark gray (5Y 4/1) well sorted SAND (75% fine sand, 10-25% medium sand), 0-10% SILT, wet, medium dense. *(continued)*	
									79.0
NM		12	CORE		80	SP		Grading to dark grayish brown (2.5Y 4/2), SAND, 60% medium sand and 40% fine sand.	79.5
		0	NR			CL		Gray (2.5Y 5/1) silty CLAY, medium plasticity, moist, medium stiff, some nodules.	81.5
NM		42	CORE			CL-ML		Olive to gray (5Y 5/1 and 5Y 5/4), clayey SILT to silty CLAY, 10% very fine sand, very slightly plastic, hard/cemented.	82.5
					85	ML		Olive (5Y 5/4), Clayey SILT to very fine sandy SILT, moist, non-plastic, medium stiff. Grades into a fine sandy SILT, 30 % fine sand, 60% silt and 10% clay, moist, non-plastic.	
		0	NR						
									88.5
NM		18	CORE		90	SM		Dark grayish brown to dark yellowish brown (2.5Y4/2 to 10YR 4/4), silty fine SAND, 60% fine sand, <10% medium sand, 30% silt and 5% clay, cohesive, very well sorted, slightly micaceous.	
		0	NR						
									93.5
NM		18	CORE			SP		Olive brown (2.5Y 4/3), fine to medium SAND, 30% fine sand, 70% medium sand, trace rounded 1/2-inch gravel, wet, dense.	94.5
		0	NR		95	SP-SM		Dark grayish brown (2.5Y 4/2), fine to medium sand, 70% fine sand, 20% medium sand, 10% silt, wet, dense.	
									98.0
NM		24	CORE			ML		Olive brown (2.5Y 4/3), clayey SILT with trace very fine sand, medium plasticity, moist, stiff, slightly micaceous.	99.5
		0	NR		100				
NM		54	CORE			ML		Dark grayish brown (2.5Y 4/2), fine sandy SILT, 70% silt, 25% fine sand and 5% clay, very slightly plastic, moist to very moist, medium stiff, slightly micaceous, grading into silty very fine sand, slightly micaceous.	
									102.5
						ML		Clayey SILT, medium plasticity, very stiff.	103.0
						ML		Dark grayish brown to olive brown (2.5Y 4/2 to 2.5Y 4/4), fine sandy SILT, 25% fine sand, 60% silt and 15% clay, trace fine subangular 1/4-inch gravel, slightly mottled.	105.0
NM		60	CORE		105			Grading into an olive brown (2.5Y 4/3), very fine to fine sandy CLAY, 50% clay, 30% silt and 20% fine sand, trace subangular to rounded 3/4-inch gravel, very slightly plastic, moist, very stiff to hard. At approximately 107.5 feet, increase in silt and sand, color change to gray and brown (10YR 5/1 and 10YR 5/3).	
		0	NR		110				
NM		48	CORE			CL			111.0

WELL DIAGRAM

- Sch. 40 PVC 0.02-inch Slotted Well Screen (69.7 to 80 feet bgs)
- Bentonite Pellets
- #3 Monterey Sand
- Sch. 40 PVC 0.02-inch Slotted Well Screen (88.7 to 99 feet bgs)
- Bentonite Chips and Pellets
- Medium Bentonite Chips

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/17/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/18/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
NM		60	CORE					Olive brown to gray (2.5Y 4/3 to 10YR 5/1), very fine to fine sandy CLAY, medium plasticity, stiff to very stiff, trace subangular 1/4-inch gravel. Color change at 114 feet bgs to very dark grayish brown (10YR 3/2) with sand, medium to high plasticity. At 120 feet bgs, continuing very fine sandy CLAY, 70% clay, 15% silt and 15% very fine sand, medium plasticity, very stiff to hard. *(continued)*		
NM		60	CORE		120	CL				Medium Bentonite Chips
NM					125			Bottom of borehole at 125.0 feet.	125.0	

WELL NUMBER MW05A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/10/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/10/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 5-foot Core	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	151.78	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 140 gal.
TOP OF CASING	151.57	**DEPTH TO WATER**	24.4
LOGGED BY	B. Clarke	**GROUND WATER ELEVATION**	127.4
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER					Asphalt	
						SM		Light olive brown (2.5Y 5/4), silty fine SAND, slightly moist to moist, medium dense. Color changes to olive brown (2.5Y 4/3) at 6.5 feet below ground surface (bgs) and changes back to light olive brown at 7.5 feet bgs.	0.4
		0	NR		5				
NM		42	CORE						
						SP		Light olive brown (2.5Y 5/3), fine SAND with trace silt, moist to wet at 10 feet bgs.	8.0
0.4		60	CORE		10				
						ML		Light yellowish brown to light brownish gray (2.5Y 6/4 to 2.5Y 6/2), clayey SILT, medium elasticity, very moist, medium soft, mottled oxides, pore holes.	10.5
									12.5
		0	NR		15	CL		Very dark grayish brown (2.5Y 3/2), silty CLAY, slight to medium plasticity, moist, medium stiff to stiff, mottled with white stringers, a few oxide root casts, blocky. Color changes to dark brown (10YR 3/3) at 17 feet bgs and then to dark yellowish brown (10YR 4/4) at 19.5 feet bgs.	
0.1		48	CORE						
0.0		60	CORE		20				
						ML		Yellowish brown (10YR 5/4), fine sandy SILT, very slight elasticity, moist, medium stiff, slightly mottled, blocky, clayier downward.	20.5
									22.5
		0	NR		25	CL		Dark yellowish brown (10YR 4/4 to 10 YR 3/4), silty CLAY, medium plasticity, blocky, white stringers, phacoidal. Trace fine sand at 25 feet bgs. ▼	
0.0		54	CORE						
									27.0
						CL		Dark grayish brown (2.5Y 4/2), CLAY, abundant light gray and white stringers. Grades into an olive brown (2.5Y 4/3), silty CLAY, very moist, medium stiff.	
		0	NR		30			▽	30.0
0.0		54	CORE			ML		Grayish brown to dark grayish brown (2.5Y to 2.5Y 4/2), clayey to fine sandy silt, very slight elasticity, very moist to wet, medium soft, mottled oxides, stringers, calcite nodules, micaceous. More fine sand at 33 feet bgs, non-plastic.	

WELL DIAGRAM

- Traffic-rated Vault
- Rapid-set Concrete
- Portland Cement Grout with 5% Bentonite
- Sch. 40 PVC Blank Casing

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/10/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/10/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
		0	NR			ML		Grayish brown to dark grayish brown (2.5Y to 2.5Y 4/2), clayey to fine sandy silt, very slight elasticity, very moist to wet, medium soft, mottled oxides, stringers, calcite nodules, micaceous. More fine sand at 33 feet bgs, non-plastic. *(continued)*		Bentonite Chips
NM		60	CORE		40	ML		Dark gray to grayish brown (2.5Y 4/1 to 2.5Y 5/2), fine sandy SILT, very slight elasticity, wet, medium soft, mottled yellowish oxides. Grades into SILT, with zero to trace fine sand at 42 feet bgs, medium elasticity, slightly micaceous.	40.0	
						ML		Clayey SILT to SILT, medium elasticity, very moist to wet.	43.0	
						SP		Dark grayish brown (2.5Y 4/2), fine to medium SAND, trace silt, well sorted, saturated.	44.0	
		0	NR		45	ML		(5Y 5/2 to 5Y 5/3) very fine sandy SILT, non-plastic, cohesive	44.5	
						SP		Dark grayish (2.5Y 4/2) fine to medium SAND, saturated, well sorted, medium dense	46.5	#3 Monterey Sand
		30	CORE							Sch. 40 PVC 0.02-inch Slotted Well Screen (43.3 to 53.3 feet bgs)
13		0	NR		50	SW		Grayish brown to olive brown (2.5Y 5/2 to 2.5Y 4/3), medium to coarse sand, subangular sand grains, little to some subrounded to subangular 1/2-3-inch gravel, dense, saturated.	48.5	
NM								Bottom of borehole at 53.0 feet.	53.0	

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

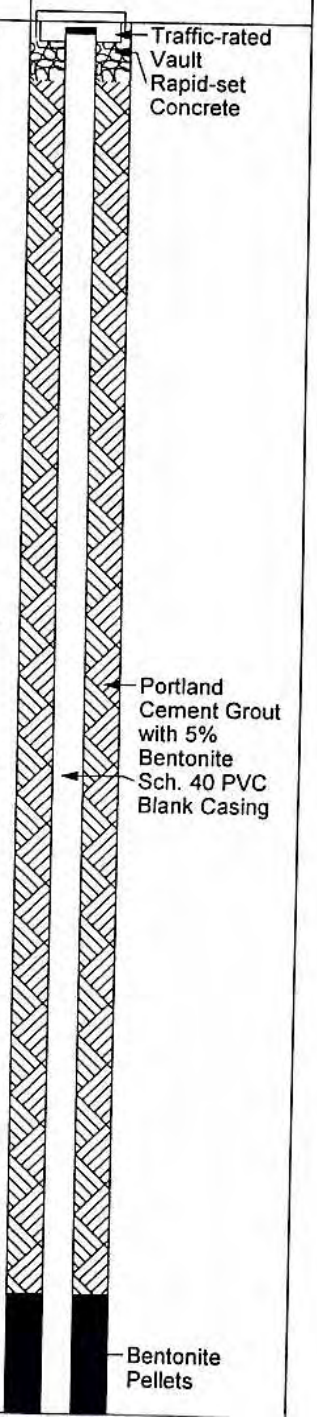
WELL NUMBER MW06A

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Hollow Stem Auger, 10-inch Diamter
SAMPLING METHOD Continuous 30-inch Split Spoon
GROUND ELEVATION 150.77
TOP OF CASING 150.63
LOGGED BY T. Mehall
REMARKS

DATE STARTED 12/13/01
DATE COMPLETED 12/13/01
CASING TYPE/DIAMETER Sch. 40 PVC / 4-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 140 gal.
DEPTH TO WATER 24.1
GROUND WATER ELEVATION 126.6

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER			ML-SM		Landscaped lawn Very dark gray (10YR 3/1), silty SAND, 40% silt and 60% fine sand, soft, moist, no odor.	0.2
0.2		30	CORE		5	SM		Yellowish brown (10YR 5/6), silty SAND, 20% silt and 80% fine sand, moist, soft, no odor.	5.0
		30	CORE						
		0	NR		10	ML		Yellowish brown (10YR 5/6), SILT with sand, 15% fine sand and 85% silt, moist to wet, soft, no odor.	9.5
0.2		24	CORE			CL		Very dark grayish brown (10YR 3/2), CLAY, low to medium plasticity, moist, no odor, some rootlets present. Increase in plasticity to medium at 13.5 feet below ground surface (bgs), still a trace of rootlets.	10.5
		30	CORE						
0.4		30	CORE		15	SM		Dark yellowish brown (10YR 3/6), silty SAND, 30% silt and 70% fine sand, moist, soft, no odor. Increase clay content at 18.5 feet bgs.	15.5
		30	CORE						
0.2		30	CORE		20	SC		Dark grayish brown (10YR 4/2), clayey SAND, 25% clay and 75% fine sand, low plasticity, moist, no odor, trace roots. Color change from 20 to 22 feet bgs to a dark yellowish brown mixed with dark gray (10 YR 4/1) and dark yellowish brown (10YR 4/4).	19.0
		30	CORE						
						SC		Dark yellowish brown (10YR 4/4) clayey SAND, 25% clay, 75% fine to medium sand with trace coarse sand, firm, moist, no odor	23.0 23.5
		0	NR		25	SC-CL		Dark yellowish brown (10YR 4/6), sandy CLAY to clayey SAND, 40% clay and 60% fine to medium sand, medium plasticity, slightly moist, hard, no odor.	
0.2		23	CORE						27.0
		0	NR			SC		Reddish brown (5YR 4/3), clayey SAND, 80% fine to medium sand and 20% clay, low plasticity, moist, soft, no odor.	28.5
		15	CORE			SP		Dark yellowish brown (10YR 4/4) poorly graded SAND, fine to coarse grained (predominantly medium), subrounded, wet, no odor.	
0.2		30	CORE		30				
								Trace medium to coarse subrounded gravel at 31, 39, and 43 feet bgs. No significant change observed in the lithology from 32 to 46 feet bgs.	31.0
		0	NR			SP			
		27	CORE						

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/13/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/13/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
3.7		30	CORE					Trace medium to coarse subrounded gravel at 31, 39, and 43 feet bgs. No significant change observed in the lithology from 32 to 46 feet bgs. *(continued)*		
		30	CORE							
1.7		30	CORE		40	SP				
		30	CORE							
1.4		30	CORE		45	SP-SW		Color change to yellowish brown (10 YR 5/4) poorly sorted SAND, increase in coarse sand and subrounded gravel, wet, no odor	45.0	
1.2								Bottom of borehole at 47.5 feet.	47.5	

#3 Monterey Sand
Sch. 40 PVC 0.020-inch Slotted Well Screen (37.1 - 47.5 feet bgs)

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

WELL NUMBER MW07A

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Hollow Stem Auger, 10-inch Diamter
SAMPLING METHOD Continuous 30-inch Split Spoon
GROUND ELEVATION 143.94
TOP OF CASING 143.65
LOGGED BY T. Mehall
REMARKS

DATE STARTED 12/11/01
DATE COMPLETED 12/12/01
CASING TYPE/DIAMETER Sch. 40 PVC / 4-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 140 gal.
DEPTH TO WATER 20.8
GROUND WATER ELEVATION 123.2

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER			ML		Asphalt Dark yellowish brown (10YR 4/6), sandy SILT, 15% fine sand and 85% silt, moist, soft, no odor.	0.4
		30	CORE		5	CL		Very dark gray (10YR 3/1), CLAY, low to medium plasticity, moist, soft, no odor.	5.0
		30	CORE			CL		Dark yellowish brown (10YR3/4), sandy CLAY, 25% fine sand and 75% clay, low to medium plasticity, moist, firm, no odor.	7.5
		0	NR		10				
0.2		24	CORE			CL		Very dark gray (10YR 3/1), CLAY, medium plasticity, slightly moist, firm, no odor. Color change at 13 feet bgs to dark yellowish brown (10YR 3/4). Trace cementation at 19.8 feet below ground surface (bgs).	11.5
		30	CORE						
0.2		30	CORE		15				
		30	CORE						
0.4		30	CORE		20			▽ ▼	21.0
		30	CORE			SC		Dark yellowish brown (10YR 4/4), clayey SAND, 70% fine to medium sand and 30% clay, low plasticity, moist, soft, no odor. Trace fine gravel at 21 feet bgs.	23.0
						SC		Yellowish brown (10YR 5/4), SAND with clay, 85% fine to medium sand and 15% clay, wet, soft, no odor.	24.5
		0	NR		25	ML		Silty sand in slough. Yellowish brown (10YR 5/4), SILT, trace of fine sand, moist to wet, soft, no odor.	26.0
		15	CORE			SM		Yellowish brown (10YR 5/4), silty SAND, 85% fine to medium sand and 15% silt, moist, soft, no odor. Increase grain size from medium to coarse at 28 feet bgs.	28.0
0.0		30	CORE			ML		Very dark grayish brown (10YR 3/2), SILT with sand, 15% fine sand and 85% silt, soft, no odor. Increase sand at 30.5 feet bgs.	30.5
		0	NR		30				
		23	CORE			SW		Light brownish gray (10YR 6/2), SAND, 25% fine, 40% medium and 35% coarse grained sand, well graded, wet, no odor. 2-inch layer of SILT at 31.5 feet bgs; increased coarse sand below silt, color change at 32.3 feet bgs to yellowish brown (10YR 5/6)	33.0
0.0		30	CORE			SP		Yellowish-brown medium SAND, poorly graded, wet, no odor.	

WELL DIAGRAM

- Traffic-rate Vault
- Rapid-set Concrete
- Portland Cement Grout with 5% Bentonite
- Sch. 40 PVC Blank Casing
- Bentonite Chips

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/11/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/12/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0		0 23	NR CORE			SP		Yellowish-brown medium SAND, poorly graded, wet, no odor. *(continued)*	36.5	
		0 23	NR CORE					Yellowish brown (10YR 5/6), SAND, predominantly subrounded and medium grained, wet, poorly sorted, no odor. Large gravel in sluff at 41 feet bgs.		#3 Monterey Sand
		0 28	NR CORE		40	SP				Sch. 40 PVC 0.020-inch Slotted Well Screen (35.8 to 46 feet bgs)
0.0		0 23	NR CORE						45.0	
0.0 NM		12	CORE		45	SW		Light brownish gray (10YR 6/2), SAND with gravel, 25% fine sand, 40% medium sand and 35% coarse sand, subangular fine to coarse gravel, well graded, wet, no odor.	46.0	

Bottom of borehole at 46.0 feet.

WELL NUMBER MW08A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/17/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/17/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 5-foot Core	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	150.47	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 100 gal.
TOP OF CASING	150.25	**DEPTH TO WATER**	26.3
LOGGED BY	A. Cohan	**GROUND WATER ELEVATION**	124.2
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER			ML		Landscaped lawn Very dark grayish brown (10YR 3/2), SILT with some clay and trace sand, micaceous.	0.2
0.0		60	CORE		5	ML		Black (7.5YR 2.5/1), SILT with clay and fine sand, micaceous. Color change at 7 feet below ground surface (bgs) to brown (10YR 4/3).	5.5
0.0		60	CORE		10	ML		Dark brown (7.5YR 3/3), SILT with some clay and trace fine sand, 5% sand and 90% fines, root casts, no odor.	10.0
0.0		60	CORE		15	CL		Very dark grayish brown (10YR 3/2), CLAY wih silt, moist, no odor, rootlets. Trace sand and some oxidation at 18.5 feet bgs.	14.0
0.0		60	CORE		20				
0.0		60	CORE		25	ML		Dark yellowish brown (10YR 3/4), SILT with fine sand and clay, 15% sand and 85% fines, moist, some oxidation. Color change at 23.5 feet bgs to dark brown (7.5YR 3/4) and increase in fine sand content, micaceous, wet at 27 feet bgs. ▼	22.0
		0	NR		30	SP-SW		Dark yellowish brown (10YR 3/6), fine to medium and fine to coarse SAND with trace to little silt, poorly to moderately sorted, wet. ▽	29.0
0.0		36	CORE						34.5

WELL DIAGRAM

- Traffic-rated Vault
- Rapid-set Concrete
- Portland Cement Grout with 5% Bentonite
- Sch. 40 PVC Blank Casing
- Bentonite Chips

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/17/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/17/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
		0	NR			SM		Brown (10YR 4/3), silty fine to medium SAND, wet, no odor, slightly cemented. *(continued)*		#3 Monterey Sand
0.0		36	CORE			SW		Dark yellowish brown (10YR 3/4), fine to coarse SAND, trace silt, trace subrounded to subangular 1/2-inch gravel, wet.	37.0	Sch. 40 PVC 0.020-inch Slotted Well Screen (30 to 45 feet bgs)
		0	NR		40	SM		Dark yellowish brown (10YR 4/4), silty fine SAND, trace subangular gravel, 1/4-inch gravel clasts, wet, slightly cemented.	38.5	
0.0		30	CORE			SW-SP		Olive brown (2.5Y 4/4), fine to coarse SAND, trace to little silt, poorly sorted, trace 1/2 to 1-inch subrounded gravel. Color change at 44 feet bgs to dark yellowish brown (10YR 3/6); finer sands toward bottom.	42.5	
0.0					45			Bottom of borehole at 45.0 feet.	45.0	

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

WELL NUMBER MW08B/MW08C

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Hollow Stem Auger, 10-inch Diamter
SAMPLING METHOD Continuous 5-foot Core
GROUND ELEVATION 150.35-MW08B and MW08C
TOP OF CASING 150.11 - MW08B; 150.14 - MW08C
LOGGED BY A. Cohan
REMARKS Lithology to 45 feet below ground surface from MW08A

DATE STARTED 12/26/01
DATE COMPLETED 12/26/01
CASING TYPE/DIAMETER Sch. 40 PVC / 2-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 210 gal.
DEPTH TO WATER 26.8
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER			ML		Landscaped lawn Very dark grayish brown (10YR 3/2), SILT with some clay and trace sand, micaceous.	0.2
0.0		60	CORE		5	ML		Black (7.5YR 2.5/1), SILT with clay and fine sand, micaceous. Color change at 7 feet below ground surface (bgs) to brown (10YR 4/3).	5.5
0.0		60	CORE		10	ML		Dark brown (7.5YR 3/3), SILT with some clay and trace fine sand, 5% sand and 90% fines, root casts, no odor.	10.0
0.0		60	CORE		15	CL		Very dark grayish brown (10YR 3/2), CLAY wih silt, moist, no odor, rootlets. Trace sand and some oxidation at 18.5 feet bgs.	14.0
0.0		60	CORE		20	ML		Dark yellowish brown (10YR 3/4), SILT with fine sand and clay, 15% sand and 85% fines, moist, some oxidation. Color change at 23.5 feet bgs to dark brown (7.5YR 3/4) and increase in fine sand content, micaceous, wet at 27 feet bgs.	22.0
0.0		60	CORE		25	ML			
		0	NR		30	SP-SW		Dark yellowish brown (10YR 3/6), fine to medium and fine to coarse SAND with trace to little silt, poorly to moderately sorted, wet.	29.0
0.0		36	CORE			SP-SW			34.5

WELL DIAGRAM

- Traffic-rated Vault
- Rapid-set Concrete
- Portland Cement Grout w/ 5% Bentonite

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/26/01
PROJECT NAME Omega OU-02 DATE COMPLETED 12/26/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
		0	NR			SM		Brown (10YR 4/3), silty fine to medium SAND, wet, no odor, slightly cemented. *(continued)*		
									37.0	
0.0		36	CORE			SW		Dark yellowish brown (10YR 3/4), fine to coarse SAND, trace silt, trace subrounded to subangular 1/2-inch gravel, wet.	38.5	
		0	NR		40	SM		Dark yellowish brown (10YR 4/4), silty fine SAND, trace subangular gravel, 1/4-inch gravel clasts, wet, slightly cemented.		
									42.5	
0.0		30	CORE					Olive brown (2.5Y 4/4), fine to coarse SAND, trace to little silt, poorly sorted, trace 1/2 to 1-inch subrounded gravel. Color change at 44 feet bgs to dark yellowish brown (10YR 3/6); finer sands toward bottom.		Sch. 40 PVC Blank Casing
0.0		0	NR		45	SW-SP				
									50.0	
		0	NR		50			Olive brown (2.5Y 4/3), SAND, fine to coarse grained, moist, moderately sorted, soft, grades into more gravel and coarser sand towards lower portion of sample.		
		0	NR		55	SW				
		24	CORE							
		0	NR		60	ML		Olive brown (2.5 Y 4/4), clayey SILT with some sand, trace subrounded 1/2-1.5-inch gravel, medium plasticity, wet, medium stiff, slightly micaceous.	59.5	Bentonite Pellets
									63.0	
NM		24	CORE			SP-SM		Olive brown (2.5Y 4/3), fine to medium SAND with trace of silt, moderate to well sorted, wet, soft. Silty sand at 65 feet bgs.		#3 Monterey Sand
		0	NR		65	SM			65.0	
									68.5	
0.9		18	CORE					Olive brown (2.5Y 4/3), SAND, fine to medium grained, wet, moderate to well sorted, soft, slightly micaceous. Increase in silt content at 73 feet bgs; well sorted.		Sch. 40 PVC 0.020-inch Slotted Well Screen (65 to 75 feet bgs)
		0	NR		70	SP				
									73.0	
0.8		24	CORE			SM				

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

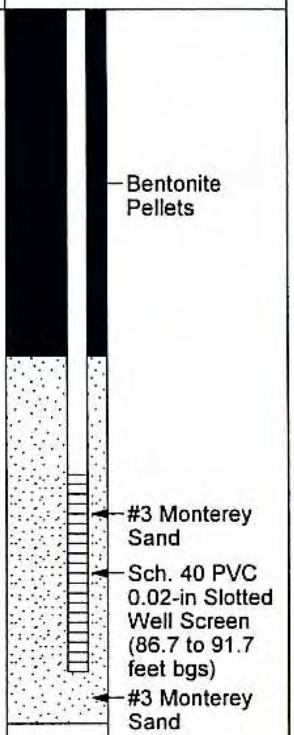
WELL NUMBER MW08B/MW08C

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/26/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/26/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		0	NR			SM			76.0
0.9		48	CORE					Olive gray (5Y 4/2), clayey SILT, little subrounded 1/4-1/2-inch gravel, wet, medium stiff, micaceous. Color change at 79 feet bgs to dark yellowish brown (10YR 4/4), with increase in fine sand.	
						ML			
		0	NR		80				
									82.5
0.8		30	CORE			SP		Olive brown (2.5Y 4/4), SAND with some silt, fine to medium grained sand, moderate to well sorting, wet, soft, micaceous.	83.5
						ML		Dark yellowish brown (10YR 4/4), clayey SILT, wet, medium stiff, micaceous. Grades into a very fine sandy SILT at 84 feet bgs with trace clay, medium soft.	
		0	NR		85				
									89.0
0.7		12	CORE					Dark olive brown (2.5Y 3/3), silty fine SAND with some clay, wet, soft to medium soft, micaceous.	
		0	NR		90	SM			
									93.0
								Bottom of borehole at 93.0 feet.	



WELL DIAGRAM

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

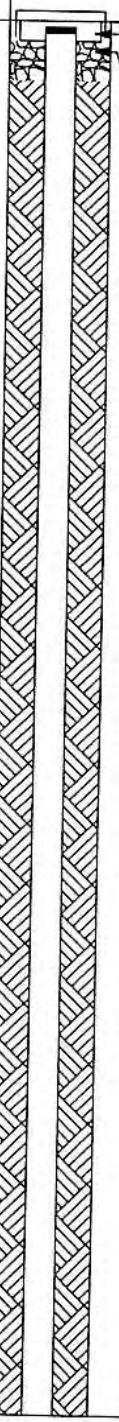
WELL NUMBER MW08D

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Mud Rotary, 8-inch Diameter
SAMPLING METHOD Continuous 5-foot Core
GROUND ELEVATION 150.17
TOP OF CASING 150.02
LOGGED BY B. Clarke A. Cohan
REMARKS Lithology to 45 feet below ground surface from MW08A

DATE STARTED 12/19/01
DATE COMPLETED 12/19/01
CASING TYPE/DIAMETER Sch. 40 PVC / 4-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 165 gal.
DEPTH TO WATER 30.1
GROUND WATER ELEVATION 120.1

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		540	AUGER		0	ML		Landscaped lawn Very dark grayish brown (10YR 3/2), SILT with some clay and trace sand, micaceous.	0.2
					5	ML		Black (7.5YR 2.5/1), SILT with clay and fine sand, micaceous. Color change at 7 feet below ground surface (bgs) to brown (10YR 4/3).	5.5
					10	ML		Dark brown (7.5YR 3/3), SILT with some clay and trace fine sand, 5% sand and 90% fines, root casts, no odor.	10.0
					15	CL		Very dark grayish brown (10YR 3/2), CLAY wih silt, moist, no odor, rootlets. Trace sand and some oxidation at 18.5 feet bgs.	14.0
					20	ML		Dark yellowish brown (10YR 3/4), SILT with fine sand and clay, 15% sand and 85% fines, moist, some oxidation. Color change at 23.5 feet bgs to dark brown (7.5YR 3/4) and increase in fine sand content, micaceous, wet at 27 feet bgs.	22.0
					25	SP-SW		Dark yellowish brown (10YR 3/6), fine to medium and fine to coarse SAND with trace to little silt, poorly to moderately sorted, wet. ▼	29.0
					30				34.5

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/27/03

PROJECT NUMBER 20074.515.009.0321 **DATE STARTED** 12/19/01

PROJECT NAME Omega OU-02 **DATE COMPLETED** 12/19/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
						SM		Brown (10YR 4/3), silty fine to medium SAND, wet, no odor, slightly cemented. *(continued)*	
									37.0
						SW		Dark yellowish brown (10YR 3/4), fine to coarse SAND, trace silt, trace subrounded to subangular 1/2-inch gravel, wet.	38.5
					40	SM		Dark yellowish brown (10YR 4/4), silty fine SAND, trace subangular gravel, 1/4-inch gravel clasts, wet, slightly cemented.	
									42.5
								Olive brown (2.5Y 4/4), fine to coarse SAND, trace to little silt, poorly sorted, trace 1/2 to 1-inch subrounded gravel. Color change at 44 feet bgs to dark yellowish brown (10YR 3/6); finer sands toward bottom.	
0.0		0	NR		45	SW-SP			
									49.0
						GP		Medium to coarse sandy subangular 2-inch GRAVEL.	50.0
NM		6	CORE		50				
		0	NR					Olive brown (2.5Y 4/4), SAND with trace silt and some subangular 1/2-1-inch gravel, medium to coarse grained sand, wet. Color change at 54.5 feet bgs to strong brown (7.5YR 4/6).	
NM		12	CORE			SP-SW			
		0	NR		55				
									58.5
		18	CORE			ML		Dark yellowish brown (10YR 4/4), clayey SILT with a trace of fine sand and some subrounded 1/2-1-inch gravel,	59.5
						GP		slightly plastic, wet, medium stiff.	60.0
		0	NR		60			Sandy GRAVEL, subrounded, 1/4-1/2-inch.	
NM		42	CORE			ML		Brown (7.5YR 4/4), clayey SILT, wet, stiff, micaceous. Increase in sand content towards lower portion of sample.	
									63.0
						SM		Olive gray to olive (5Y 4/2 to 5Y 5/3), silty fine SAND, wet, stiff, micaceous.	64.5
		0	NR		65	SP		Olive gray (5Y 5/2), SAND, fine to medium grained, some silt, wet. Some subrounded 1/2-1-inch gravel and a color change to olive brown (2.5Y 4/4) at 68 feet.	
									68.0
									69.0
		12	CORE			ML		Dark yellowish gray (10YR 4/4), fine sandy SILT, wet, stiff, micaceous.	
		0	NR		70				
NM		54	CORE						
									72.0
								Increase in clay content, carbonate patches and partially cemeted.	

WELL DIAGRAM

Portland Cement Grou with 5% Bentonite

Sch. 40 PVC Blank Casing

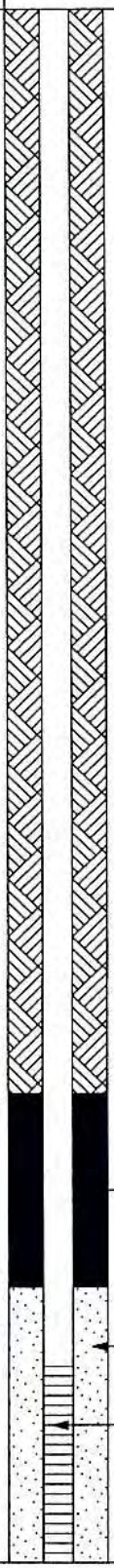
BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/27/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/19/01
PROJECT NAME Omega OU-02 DATE COMPLETED 12/19/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		0	NR					Increase in clay content, carbonate patches and partially cemeted. *(continued)*	
		12	CORE		80			Color change by 79 feet bgs to light brown (2.5Y 4/3). Color changes back to dark yellowish brown (10YR 4/4) at 79.5 feet bgs.	79.0
		0	NR			ML			
NM		12	CORE		85			Fine sandy SILT as above. Color change to dark olive brown (2.5Y 3/3), medium soft.	84.0
		0	NR			ML			87.0
		36	CORE					Very dark grayish brown (2.5Y 3/2), SAND, fine to medium, little silt, trace gravel, wet, soft.	
NM		60	CORE		90	SP			93.0
NM		60	CORE		95	CL-ML		Dark yellowish brown (10YR 3/4), silty CLAY, wet, stiff, moderately cemented, micaceous. Color changes to dark brown (7.5YR 3/3) at 95.5 feet bgs and is partially cemented.	96.5
						ML		Dark brown (7.5YR 3/3), fine sandy SILT, wet, medium stiff, partially cemented, micaceous.	
NM		60	CORE		100				101.0
						SM		Silty fine SAND, medium soft, wet, micaceous	103.5
NM		60	CORE		105	SP		Brown (10YR 4/3), SAND, fine to medium, trace silt, wet, medium soft, micaceous. Grading into fine to very fine sand at 106 feet bgs.	
						CL-ML		Brown (10YR 4/3), silty CLAY, medium stiff, partially cemented, micaceous.	108.0
NM		60	CORE		110	SP		Dark yellowish brown (10YR 3/6) to dark olive gray (5Y 3/2), SAND, fine grained, trace silt, wet, micaceous, odor.	109.3

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/27/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/19/01
PROJECT NAME Omega OU-02 DATE COMPLETED 12/19/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		0	NR						115.5
		54	CORE			SP		Dark olive gray (5Y 3/2), SAND, fine grained, trace silt, wet, soft, micaceous, odor. At 122 feet bgs some medium grained sands and some subrounded 1/4-1/2-inch gravel.	
NM		60	CORE		120				122.0
						CL		Small lens of CLAY, wet, medium soft.	122.5
								Dark olive gray (5Y 3/2), SAND as seen above. Dark yellowish brown (10YR 4/6) oxidized layer at 125 feet bgs. Trace of subrounded 1/4-1/2-inch gravel at 126.5 feet bgs.	122.7
NM		60	CORE		125				
NM		60	CORE		130	SP			
NM		60	CORE		135				
		0	NR		140				141.0
		54	CORE			SW		Fine to coarse SAND, some gravel	
						ML		Clayey SILT, cemented, with subrounded 1/8-1/4-inch gravel layer.	143.5
NM		60	CORE		145			SAND, fine to medium grained, some gravel, wet, soft. Some coarse sand at approximately 147 bgs.	145.0
						SP			
						ML		Fine sandy SILT, wet, medium soft.	149.0
					150			Bottom of borehole at 150.0 feet.	150.0

WELL DIAGRAM

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/27/03

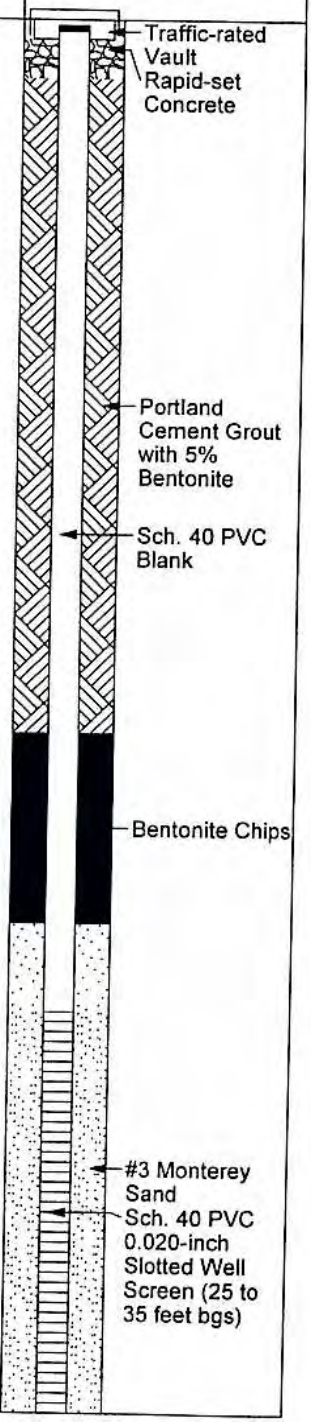
WELL NUMBER MW09A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/28/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/28/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 5-foot Core	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	149.51	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 50 gal.
TOP OF CASING	149.37	**DEPTH TO WATER**	24.9
LOGGED BY	A. Cohan	**GROUND WATER ELEVATION**	124.6

REMARKS Lithology and sampling detail to 65 feet below ground surface from MW09B

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			AUGER		5	ML		Landscaped lawn Dark yellowish brown (10YR 4/4), SILT, soft, moist, no odor.	0.2
					10	CL		Brown (10YR 4/3), fine sandy CLAY, 20% fine sand and 80% clay, medium plasticity, moist, soft, no odor, roots present. Color change at 12 feet below ground surface (bgs) to dark reddish brown (5YR 4/3), and trace cementation at 13 feet bgs.	8.3
					15	ML		Dark reddish brown (5YR 4/3), fine sandy SILT, 15% fine sand and 85% silt, slightly moist, soft, no odor. At 16 feet bgs, color changes to grayish brown (10YR 5/2), increase consistency to firm, and decrease in moisture. At 18 feet bgs, increase in moisture, decrease consistency to soft, and slight black discoloration from 19.5 to 20 feet bgs.	14.5
					20	SM		Dark yellowish brown (10YR 4/4), silty SAND, 25% silt and 75% fine sand, slightly moist, soft, no odor.	21.0
						ML		Dark reddish brown (10YR 4/3) sandy SILT, 15% fine sand, 85% silt, soft, slightly moist, no odor.	22.5
					25	SP		Yellowish brown (10YR 5/6), SAND, fine to medium grained, subrounded, poorly sorted, slightly moist, no odor. At 25.5 feet bgs, color change to grayish brown (10YR 5/2) and increase in moisture.	23.5
					30	ML		Brown (10YR 4/3), fine sandy SILT, 15% fine sand and 85% silt, wet, soft, no odor.	29.0
						SM		Dark grayish brown (10YR 4/2), silty SAND, 20% silt and 80% fine sand, wet, soft, no odor.	32.5
						ML-SM		Dark grayish brown (10YR 4/2), sandy SILT to silty SAND, 50% silt and 50% fine sand, moist to wet, firm, no odor.	33.5

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/28/01

PROJECT NAME Omega OU-02 DATE COMPLETED 12/28/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						ML-SM		Dark grayish brown (10YR 4/2), sandy SILT to silty SAND, 50% silt and 50% fine sand, moist to wet, firm, no odor. *(continued)*	38.0	
					40	ML		At 38 feet bgs, cementation and decrease in moisture content		
						ML		At 41 feet bgs, trace cementation, increase consistency to hard, increase clay content and color change to light brownish gray (10YR 6/2).	41.0	
					45				46.0	
						SC		Dark yellowish brown (10YR 4/6), clayey SAND, 40% clay and silt and 60% fine sand, low plasticity, moist, no odor.	48.0	
					50	CL		Yellowish brown (10YR 5/4), sandy CLAY, 40% clay, 60% fine sand, medium plasticity, moist, hard, no odor, trace cementation. 1/4-inch fine sand lense at 48.5 feet bgs.	53.0	
					55	SP		Grayish brown (10YR 5/2), SAND, poorly graded, predominantly medium grained, wet, soft, no odor. At 55.5 feet bgs, decrease in grain size to predominantly fine.		
					60				61.0	
						CL		Dark grayish brown (10YR 4/2), sandy CLAY, 20% sand and 80% clay, medium plastic, moist to wet, no odor.		Bentonite Pellets Backfi
		0	NR		65					
		24	CORE			SP-SM		Olive brown (2.5Y 4/3), silty SAND, fine to medium, some clay, 75% sand and 25% fines, wet, poorly sorted, soft, micaceous.	68.0	
		0	NR		70					
1.2		48	CORE			CL-ML		Dark yellowish brown (10YR 4/4), silty CLAY, low to medium plasticity, wet, medium stiff, micaceous.	71.0	
									74.5	

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
DATE STARTED 12/28/01
DATE COMPLETED 12/28/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
		0	NR			CL		Light olive brown (2.5Y 5/4), CLAY. Similar to above, but less silt and some oxidation. Non-recovery indicates possible sand. *(continued)*		
		0	NR		80					
NM		42	CORE			CL-ML		Olive brown (2.5Y 4/4), silty CLAY, similar to 71 to 74.5 feet bgs.	81.5	
						ML		Olive brown (2.5Y 4/4), fine sandy SILT, wet, soft, very micaceous.	83.5 83.6	
		0	NR		85	SP		Olive brown (2.5Y 4/3), SAND, fine to medium, wet, moderately sorted, soft.		
					90			Bottom of borehole at 90.0 feet.	90.0	

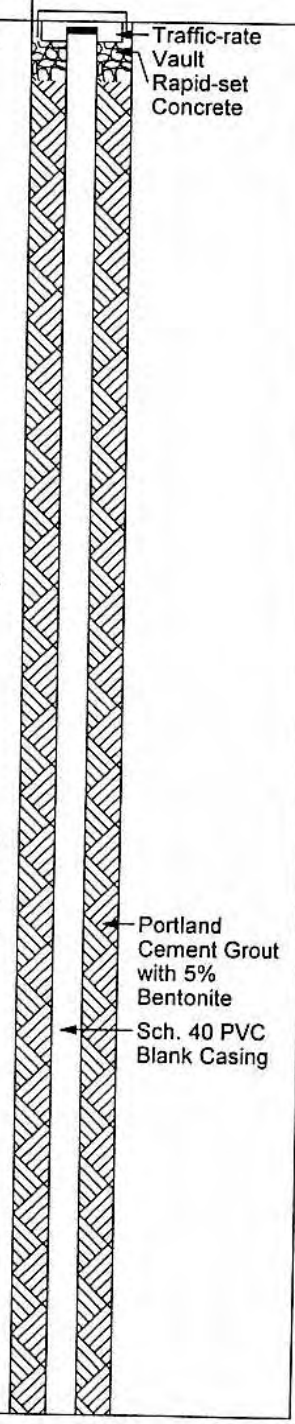
WELL NUMBER MW09B

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
LOCATION Whittier, CA
DRILLING METHOD Hollow Stem Auger, 10-inch Diamter
SAMPLING METHOD Continuous 5-foot Core
GROUND ELEVATION 149.56
TOP OF CASING 149.34
LOGGED BY T. Mehall
REMARKS

DATE STARTED 12/14/01
DATE COMPLETED 12/14/01
CASING TYPE/DIAMETER Sch. 40 PVC / 4-inch
SCREEN TYPE/SLOT Sch. 40 PVC / 0.020-inch
GRAVEL PACK TYPE #3 Monterey Sand/8 cu. ft.
GROUT TYPE/QUANTITY Portland/5% Bentonite / 150 gal.
DEPTH TO WATER 27.7
GROUND WATER ELEVATION 121.9

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER			ML		Landscaped lawn Dark yellowish brown (10YR 4/4), SILT, soft, moist, no odor.	0.2
0.0		60	CORE		5				
0.0		60	CORE		10	CL		Brown (10YR 4/3), fine sandy CLAY, 20% fine sand and 80% clay, medium plasticity, moist, soft, no odor, roots present. Color change at 12 feet below ground surface (bgs) to dark reddish brown (5YR 4/3), and trace cementation at 13 feet bgs.	8.3
0.0		60	CORE		15	ML		Dark reddish brown (5YR 4/3), fine sandy SILT, 15% fine sand and 85% silt, slightly moist, soft, no odor. At 16 feet bgs, color changes to grayish brown (10YR 5/2), increase consistency to firm, and decrease in moisture. At 18 feet bgs, increase in moisture, decrease consistency to soft, and slight black discoloration from 19.5 to 20 feet bgs.	14.5
		0	NR		20				
0.0		48	CORE			SM		Dark yellowish brown (10YR 4/4), silty SAND, 25% silt and 75% fine sand, slightly moist, soft, no odor.	21.0
						ML		Dark reddish brown (10YR 4/3) sandy SILT, 15% fine sand, 85% silt, soft, slightly moist, no odor.	22.5
		0	NR		25	SP		Yellowish brown (10YR 5/6), SAND, fine to medium grained, subrounded, poorly sorted, slightly moist, no odor. At 25.5 feet bgs, color change to grayish brown (10YR 5/2) and increase in moisture.	23.5
0.0		30	CORE						
		0	NR		30	ML		Brown (10YR 4/3), fine sandy SILT, 15% fine sand and 85% silt, wet, soft, no odor.	29.0
0.0		30	CORE			SM		Dark grayish brown (10YR 4/2), silty SAND, 20% silt and 80% fine sand, wet, soft, no odor.	32.5
						ML-SM		Dark grayish brown (10YR 4/2), sandy SILT to silty SAND, 50% silt and 50% fine sand, moist to wet, firm, no odor.	33.5

WELL DIAGRAM



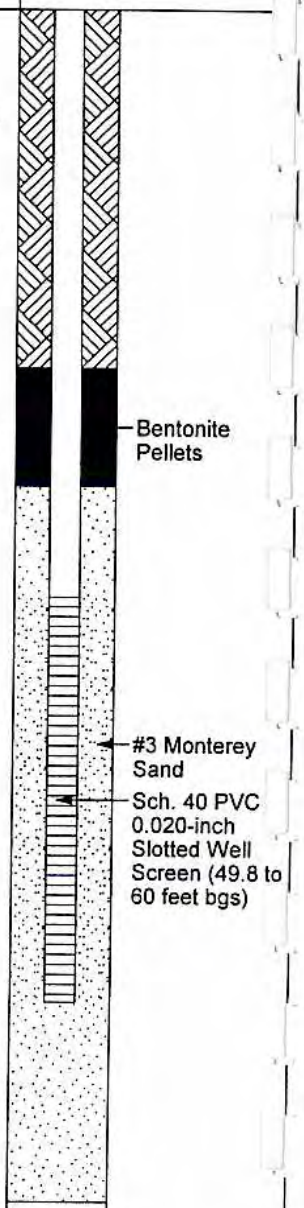
BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/14/01
PROJECT NAME Omega OU-02 DATE COMPLETED 12/14/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.0		60	CORE			ML-SM		Dark grayish brown (10YR 4/2), sandy SILT to silty SAND, 50% silt and 50% fine sand, moist to wet, firm, no odor. *(continued)*	
									38.0
						ML		At 38 feet bgs, cementation and decrease in moisture content	
NM		60	CORE		40				
								At 41 feet bgs, trace cementation, increase consistency to hard, increase clay content and color change to light brownish gray (10YR 6/2).	41.0
						ML			
NM		60	CORE		45				
						SC		Dark yellowish brown (10YR 4/6), clayey SAND, 40% clay and silt and 60% fine sand, low plasticity, moist, no odor.	46.0
								Yellowish brown (10YR 5/4), sandy CLAY, 40% clay, 60% fine sand, medium plasticity, moist, hard, no odor, trace cementation. 1/4-inch fine sand lense at 48.5 feet bgs.	48.0
		0	NR		50	CL			
NM		36	CORE						
								Grayish brown (10YR 5/2), SAND, poorly graded, predominantly medium grained, wet, soft, no odor. At 55.5 feet bgs, decrease in grain size to predominantly fine.	53.0
		0	NR		55	SP			
		18	CORE						
NM		60	CORE		60				
						CL		Dark grayish brown (10YR 4/2), sandy CLAY, 20% sand and 80% clay, medium plastic, moist to wet, no odor.	61.0
0.0					65			Bottom of borehole at 65.0 feet.	65.0

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

WELL NUMBER MW10A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/18/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/18/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 5-foot Core	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	147.82	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 150 gal.
TOP OF CASING	147.71	**DEPTH TO WATER**	31.3
LOGGED BY	A. Cohan	**GROUND WATER ELEVATION**	116.5
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER					Asphalt	0.4
						CL-ML		Very dark brown (10YR 2/2), silty CLAY, roots, micaceous.	
		0	NR		5				
0.0		48	CORE						
						ML		Dark yellowish brown (10YR 3/4), fine sandy SILT, 20% sand and 80% fines, slightly cemented, roots.	8.0
0.0		60	CORE		10	SM		Dark yellowish brown (10YR 4/4), silty fine SAND, 80% sand and 20% fines, moist, very micaceous.	10.0
						ML		Dark yellowish brown (10YR 3/4), fine sandy SILT, similar to previous, darker, slight cementation.	11.0
									14.0
		0	NR		15	ML		Dark yellowish brown (10YR 4/4), SILT with fine to medium sand and some clay, 15% sand and 85% fines, micaceous.	
0.0		24	CORE						18.4
		0	NR		20			Dark yellowish brown (10YR 3/4), SAND, 1% gravel, 90% sand and 9% fines, fine to medium grained, poorly sorted, trace 1.5 inch subrounded gravel, moist, no odor. At 23 feet bgs, increase in gravel content; subrounded 1/2 to 1-inch, trace silt. At 28 feet bgs, increase in sand grain size from medium to coarse.	
0.0		30	CORE			SP			
		0	NR		25				
0.0		24	CORE						28.0
		0	NR		30	SP			
0.0		18	CORE			SW			33.5

WELL DIAGRAM

- Traffic-rated Vault Rapid-set Concrete
- Portland Cement Grout with 5% Bentonite
- Sch. 40 PVC Blank Casing

BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/27/03

PROJECT NUMBER 20074.515.009.0321
PROJECT NAME Omega OU-02
DATE STARTED 12/18/01
DATE COMPLETED 12/18/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		0	NR			SW		Dark brown (10YR 3/3), gravelly SAND, subrounded 1/2 to 2-inch clasts, fine to coarse grained sand, trace silt, wet, no odor. *(continued)*	
0.0		30	CORE					Very dark grayish brown to dark olive brown (2.5Y 3/2 to 2.5Y 3/3), SAND with trace to some silt, trace subangular 1/2 to 1 inch gravel,1% gravel, 4% fines and 95% sand, fine to medium grained sand, moderately sorted, wet, no odor, micaceous.	37.5
		0	NR		40	SP			
0.0		24	CORE						43.0
		0	NR		45	SP-SM			
0.0		24	CORE						48.5
		0	NR		50	SW		Dark brown (10YR 3/3), gravely SAND, 1/8 to 1 inch subrounded gravel, 10% gravel, 85% sand and 5% fines, poorly sorted, wet, no odor, micaceous. Few small lenses of strong brown (7.5YR 4/6), SILT.	
0.0		36	CORE			CL-ML		Dark yellowish brown (10YR 4/4), silty CLAY with trace gravel, 3% gravel, 2% sand, and 95% fines, wet, slightly cemented, micaceous.	52.0
		0	NR		55	SW		Olive brown (2.5Y 4/3), SAND, fine to coarse grains, trace silt, 5% fines and 95% sand, poorly sorted, wet, no odor, micaceous. At 57.5 feet bgs, some subrounded 1/4 to 1/2 inch-gravel.	54.0
0.0		54	CORE						
		0	NR		60	SM		Dark yellowish brown (10YR 4/4), silty SAND, trace clay.	59.0
0.0		36	CORE			CL-ML		Dark yellowish brown (10YR 3/6), silty CLAY, some oxidation, micaceous.	62.0
0.0					65			Bottom of borehole at 65.0 feet.	65.0

WELL DIAGRAM

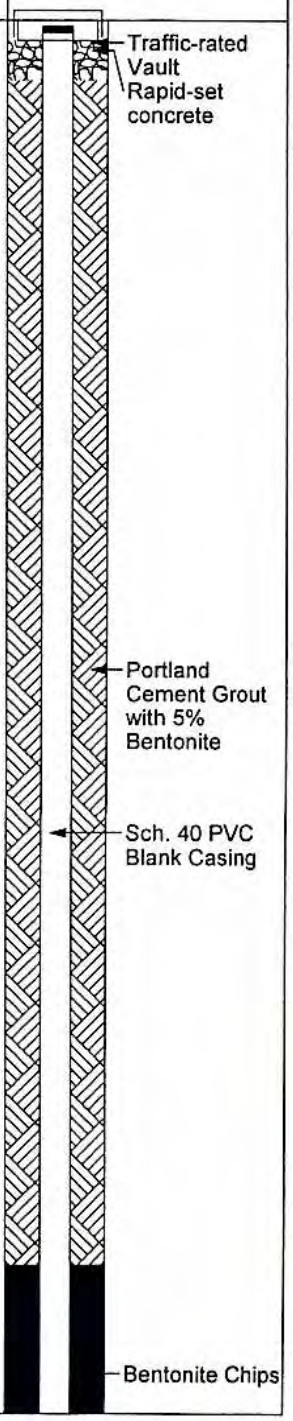
BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/27/03

WELL NUMBER MW11A

PROJECT NUMBER	20074.515.009.0321	**DATE STARTED**	12/13/01
PROJECT NAME	Omega OU-02	**DATE COMPLETED**	12/13/01
LOCATION	Whittier, CA	**CASING TYPE/DIAMETER**	Sch. 40 PVC / 4-inch
DRILLING METHOD	Hollow Stem Auger, 10-inch Diamter	**SCREEN TYPE/SLOT**	Sch. 40 PVC / 0.020-inch
SAMPLING METHOD	Continuous 5-foot Core	**GRAVEL PACK TYPE**	#3 Monterey Sand/8 cu. ft.
GROUND ELEVATION	151.51	**GROUT TYPE/QUANTITY**	Portland/5% Bentonite / 140 gal.
TOP OF CASING	151.20	**DEPTH TO WATER**	34.4
LOGGED BY	A. Cohan	**GROUND WATER ELEVATION**	117.2
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60	AUGER			ML		Landscaped lawn Brown (10YR4/3), SILT with a trace of clay, micaceous. At 7.0 feet bgs, trace subangular 1/2-inch gravel.	0.2
		0	NR		5				
NM		48	CORE						7.4
						ML		Light olive brown (2.5Y 5/3), sandy SILT, slightly moist.	9.0
						ML		Dark yellowish brown (10YR 4/4) to light olive brown (2.5Y 5/3) SILT, to trace clay, slightly moist, micaceous.	10.0
0.0		60	CORE		10			Olive brown (2.5Y 4/3) clayey SILT, moist, micaceous, mottled with oxides. 6-inch olive brown sand lens at 13 feet bgs, fine grained, some silt, well sorted, slightly micaceous. Cementation and root casts at 16.5 feet bgs.	
						ML			
0.0		60	CORE		15				
						SM		Light olive brown (2.5Y 5/3), silty very fine SAND.	18.0
									19.7
0.0		60	CORE		20			Olive brown (2.5Y 4/4), SILT with trace to little fine sand and trace clay, mottled, some cemented areas. At 24 feet bgs, color change to dark gray (5Y 4/1), slight fuel-like odor. At 25.5 feet bgs, increase in sand content, grading back to silt at 27.5 feet bgs. Some oxidation.	
						ML			
2.3		60	CORE		25				
									28.0
		0	NR		30			Dark yellowish brown (10YR 3/4), fine SAND, trace silt and trace clay, 90% sand and 10% fines, very well sorted, moist. At 32.5 feet bgs, fine to medium sand, with trace fines. Color change at 34 feet bgs to olive brown (2.5Y 4/3). At 38.6 feet bgs, pale olive (5Y 6/3), and wet.	
						SP			
0.0		36	CORE						

WELL DIAGRAM



BORING/WELL CONSTRUCTION LOG OMEGA WELL LOGS.GPJ RFW SHERMAN OAKS.GDT 1/22/03

PROJECT NUMBER 20074.515.009.0321 DATE STARTED 12/13/01

PROJECT NAME Omega OU-02 DATE COMPLETED 12/13/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
		0	NR			SP		Dark yellowish brown (10YR 3/4), fine SAND, trace silt and trace clay, 90% sand and 10% fines, very well sorted, moist. At 32.5 feet bgs, fine to medium sand, with trace fines. Color change at 34 feet bgs to olive brown (2.5Y 4/3). At 38.6 feet bgs, pale olive (5Y 6/3), and wet. *(continued)* ▽		
		18	CORE						39.0	
		0	NR		40	SP-SW		Dark gray (5Y 4/1), gravelly SAND, medium to coarse grained sand, 80% sand and 20% subrounded 1.5-inch gravel, wet.	41.0	
0.0		36	CORE					Dark olive gray (5Y 3/2), SAND with some gravel, 90% medium to coarse sand, 10% gravel, trace silt moderately sorted. At 44.8 feet bgs, silty sand lens. At 48 feet bgs, olive gray (5Y 4/2) fine to coarse sand.		#3 Monterey Sand
		0	NR		45	SP-SW				Sch. 40 PVC 0.020-inch Slotted Well Screen (40 t. 50 feet bgs)
		30	CORE						49.5	
		0	NR		50	GP		Sandy GRAVEL with some silt and trace clay, 70% gravel, 20% sand and 10% fines, gravel is subrounded and predominantly 1/2-inch in diameter, partially cemented.	51.5	
0.0		42	CORE			ML		Olive (5Y 4/4), clayey SILT, 1% sand and 99% fines, very small lenses of sandy gravel, micaceous.	53.5	
						GM		Silty GRAVEL, some sand and trace clay, 80% gravel, 5% sand and 15% fines, gravel is predominantly subrounded and 1/2 to 1-inch in diameter.	55.0	
0.0					55			Bottom of borehole at 55.0 feet.		

ARCADIS
Infrastructure, environment, facilities

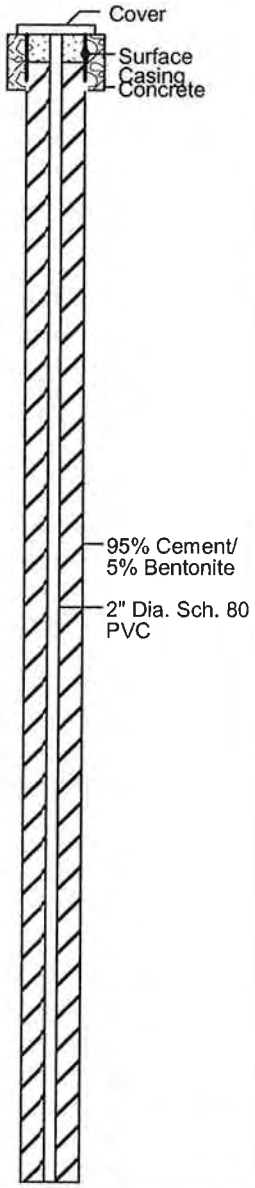
LOG OF BORING MW12

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 9, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Dan
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Concrete to approximately 6".
					0.0		CL		0.5-8' core: SILTY CLAY, stiff, slightly moist, dark yellowish brown (10YR 4/4), no odor.
5									
				10:30	0.0				Same as above.
10					0.0		GW-GM		9.5-11' core: Well graded GRAVEL with Sand and Silt, ~60-70% fine and coarse Gravel (max 55 mm dia.), ~25-30% fine to coarse well graded Sand, ~10% Silt, dark yellowish brown (10YR 4/4), no odor, Gravel and Sand subangular to subrounded
					0.0	None			
15				10:52	0.0		CH		14-19' core: High plasticity, CLAY, very stiff, moist, dark grayish brown (10YR 3/2), no odor, high toughness, high liquid limit, very plastic, no dilatency.
20				11:10	0.0				Same as above.
				11:24	0.0				
25									

Well: MW12
Elev.: 221.23



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW12

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 9, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Dan
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25					0.0		CH		Same as above.
					0.0		SP-SC		27-29' core: Poorly graded SAND with Clay and Gravel, ~35-50% predominantly fine subangular Gravel (<=20 mm dia.), ~55-60% fine and coarse Sand (gap grades), ~5% Clay, dry, dark yellowish brown (10YR 4/6), no odor, Gravel sub-spherical and subrounded of granitic origin.
30				12:02	0.0		SC-CL		30-31.5' core: CLAYEY SAND with Gravel, 20% fine and coarse subrounded Gravel (max 35 mm dia.), ~40% predominantly wellf fine to coarse Sand (subrounded) in 40% Silty Clay matrix, dense, moist, brown (10YR 4/3), caliche and brownish yellow (10YR 6/8) patches, (conglomerate).
				12:29	0.0				
35					1.5		SC		34-36': Same as above.
				13:10					37-39' core: Same as above.
					0.3				
				13:30	1.0				39-44' core: Low plasticity SILT, stiff, moist, brown (7.5YR 4/4), occassional fine Gravel.
40					23		ML		
					46				
				14:30	52				44-47.5': SILTY CLAY with Sand, ~5% fine subangular Gravel (max 15 mm dia.), ~10% fine to coarse Sand (max 5 mm dia.), ~85% fines, brown (7.5YR 4/2), moist, stiff, no odor, moderate to high toughess, moderate plasticity.
45				8/8/05					
50							CL		

Well: MW12
Elev.: 221.23

95% Cement/ 5% Bentonite

2" Dia. Sch. 80 PVC

In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW12

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 9, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Dan
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50									No recovery.
55						None	CL		
60				13:45			CL-ML		SILTY CLAY/CLAYEY SILT, stiff, moist, brown (7.5YR 4/2). At 64', dark greenish gray (Gley 1 3/2), staining on wall of sample.
65				-			ML		At 65' CLAYEY SILT, stiff, moist to wet, brown (7.5YR 4/3), no odor, low to moderate toughness, very slow to no dilatency. Same as above.
70							CL		At 72' SILTY CLAY, hard, moist, brown (7.5YR 4/3), caliche, high toughnes, moderate plasticity, high dry strength.
75									

Well: MW12
Elev.: 221.23

95% Cement/ 5% Bentonite

2" Dia. Sch. 80 PVC

In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

09-07-200

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ARCADIS
Infrastructure, environment, facilities

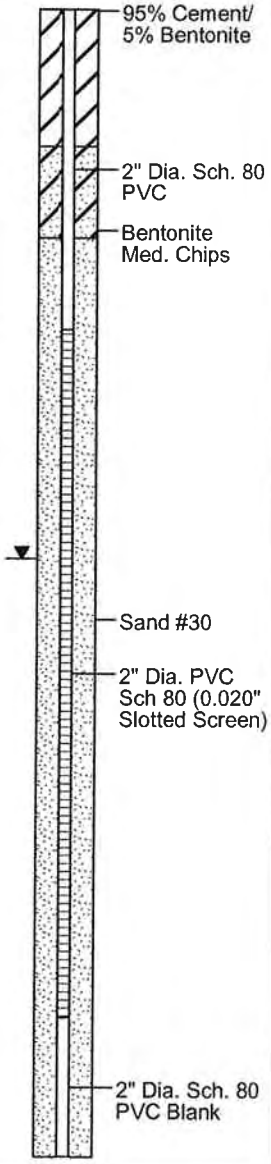
LOG OF BORING MW12

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 9, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Dan
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75							CL		Same as above - no caliche.
80							ML		At 85', SILT, soft (>1" penetration), moist to wet, dark brown (7.5YR 3/4).
85				14:53			SC		From 86.5-89': CLAYEY SAND/SANDY CLAY, ~45-55% very fine Sand (<0.1 mm), soft, wet to saturated, strong brown (7.5YR 4/6), trace fine Gravel, low toughness, rapid dilatency.
90							CL		From 89' CLAY/CLAY with SAND, ~15% fine Sand, 85% Silty Clay, medium stiff, wet, strong brown (7.5YR 4/4) to dark brown (7.5YR 3/4).
95									Same as above, trace fine-Gravel, occasional coarse, wet to saturated.
100									Same as above, wet to saturated, ~10-15% fine Sand, ~15% Silt, ~10% Clay, medium stiff, wet to saturated, dark brown (7.5YR 3/2), low to medium toughness, low plasticity, high dry strength.

Well: MW12
Elev.: 221.23



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

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Infrastructure, environment, facilities

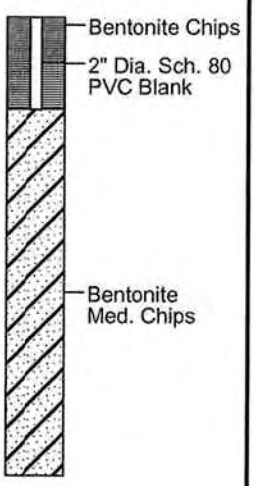
LOG OF BORING MW12

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 9, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Dan
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100			OC2-PMW12 W-0-03	16:00 8/9/05 08:05			SP-SM		From 101-102' set Simulprobe: Poorly graded SAND, with SILT, ~10-20% Silt, 80-90% fine Sand, soft, saturated, brown (10YR 4/3), to dark brown (10YR 3/3), occasional fine and coarse gravel (max 60 mm dia. - subrounded and longated).
105							SM		From 107-109' core: Cemented, well-graded SILTY SAND with Gravel, ~30% Silt, ~45% fine to coarse Sand, ~25% fine and coarse Gravel (max 40 mm dia.), hard, dry mottled brown (7.5YR 4/4), light gray (10YR 7/1) and reddish organge.
110									Bottom of boring at 110'.
115									
120									
125									

Well: MW12
Elev.: 221.23



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

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09-07-2005

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Infrastructure, environment, facilities

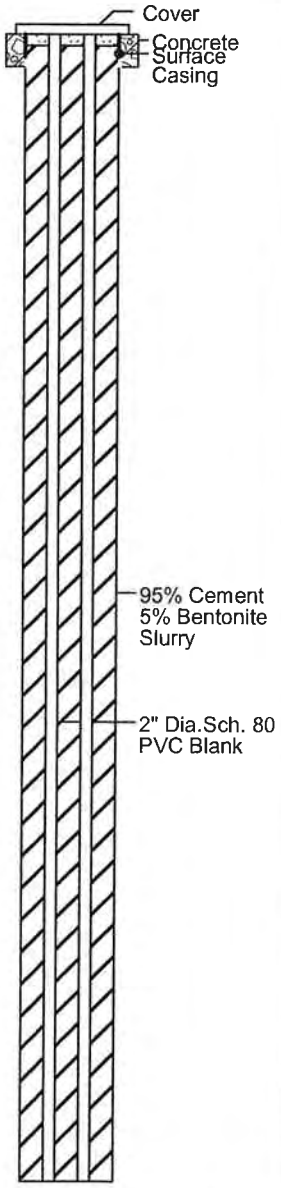
LOG OF BORING MW13

Omega Chemical Operable Unit 2
Whittier & Santa Fe Springs
Project No. CA000646.0001

Date Completed	: July 1, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Steve Houston
Checked By	: Ronald Halpern	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: GEFCO Star 30K	Calibration Gas/Conc	: Isobutylene 100

Well1: MW13A
Well2: MW13B
Elev.: 206.30

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Concrete to 6"
5	—			6/29/05	0.1				(Off cyclone). SILTY CLAY, firm to stiff, dark brown (10YR 3/3), moist.
20	—			12:46					Same as above. Approximately 5% fine to coarse SAND.
25							CL		
30	☒	N/A		13:38	0.1				(30-31' Split Spoon). SILTY CLAY, stiff, dark yellowish brown (10YR 4/4), moist, moderate to high toughness, no dilatency, high plasticity, occassional fine gravel (max 20 mm dia.) and coarse sand (max 4 mm dia.).
40	☒	N/A		14:30	0.1				(40-41' Split Spoon). SILTY CLAY, stiff, dark yellowish brown (10YR 4/4), moist, high toughness, high plasticity, slow dilatency.
50									



Boring in front of Fred Rippey at 12482 Putnam Street. Elevation noted is ground surface.
A = shallow (dry); B = deeper.

ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW13

Omega Chemical Operable Unit 2
Whittier & Santa Fe Springs
Project No. CA000646.0001

Date Completed	: July 1, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Steve Houston
Checked By	: Ronald Halpern	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: GEFCO Star 30K	Calibration Gas/Conc	: Isobutylene 100

Well1: MW13A
Well2: MW13B
Elev.: 206.30

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50	☒			16:20	0.1		CL		(50-51' Split Spoon). SILTY CLAY, hard, dark yellowish brown (10YR 4/4), moist.
55							ML-SP		(60.75' Split Spoon). Low plasticity, SILT/poorly graded Sand, very fine-grained, stiff, olive (5Y 4/4), moist, low toughness, rapid dilatency, low plasticity, low dry strength, light gray artifacts, possibly of marine origin, light yellowish brown oxidation stain (~1/4" thick).
60	☒			16:55			SP		From apprx. 63' off shaker - poorly graded Sand, fine-grained, olive.
65							ML-CL		(70-71' Split Spoon). CLAYEY SILT, stiff, light olive brown (2.5Y 5/4), moist, moderate to high toughness, moderate plasticity, slow to moderate dilatency, light gray artifacts (possible marine shells?), low to moderate strength.
70	☒			17:25 6/29/05 Start 6/30/05					
75									
80	☒			07:50			CH		(80-81' Split Spoon). SILTY CLAY, hard, yellowish brown (10YR 5/4), moist, high toughness, moderate to high liquid limit, no dilatency, high plasticity, high dry strength.
85	☒			08:30			CL		(85-86' Split Spoon). CLAYEY SILT/SILTY CLAY, very stiff, (<1/4" penetration), brown (7.5YR 4/3), moist, low to moderate toughness, moderate plasticity.
90	☒			09:20					(90-91' Split Spoon). CLAYEY SILT/SILTY CLAY, very stiff, brown (7.5 YR 4/4), moist, low to moderate toughness, low plasticity, slow dilatency.
95	☒			09:45					(95-96' Split Spoon). CLAYEY SILT/SILTY CLAY, very stiff, brown (7.5 YR 4/4), moist, low to moderate toughness, low plasticity, slow dilatency.
100									

95% Cement 5% Bentonite Slurry
Medium Bentonite Chips
2" Dia.Sch. 80 PVC Blank
2" Dia. PVC Sch 80 (0.020" Slotted Screen)
#2/16 Sand
2" Dia.Sch. 80 PVC Blank
Medium Bentonite Chips
2" Dia.Sch. 80 PVC Blank
1:1 Bentonite Sand Mix

Boring in front of Fred Rippey at 12482 Putnam Street. Elevation noted is ground surface.
A = shallow (dry); B = deeper.

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ARCADIS
Infrastructure, environment, facilities

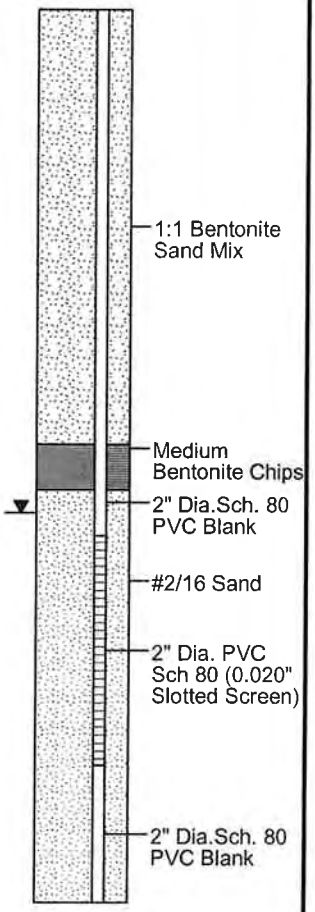
LOG OF BORING MW13

Omega Chemical Operable Unit 2
Whittier & Santa Fe Springs
Project No. CA000646.0001

Date Completed	: July 1, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	: Steve Houston
Checked By	: Ronald Halpern	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: GEFCO Star 30K	Calibration Gas/Conc	: Isobutylene 100

Well1: MW13A
Well2: MW13B
Elev.: 206.30

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100							ML-CL		Driller noted easier drilling @102'.
105	⊠			11:40			CH		(105-106' Split Spoon). High plasticity, CLAY, hard, brown (10YR 5/3), moist, high liquid limit, no dilatency, high toughness, high plasticity, high dry strength.
110									
115	⊠			12:12					(115-116' Split Spoon). SILTY CLAY, hard, dark yellowish brown (10 YR 4/4), moist, high toughness, high liquid limit, high plasticity, high dry strength.
120	⊠			17:40			ML		(120-121' Split Spoon). SANDY SILT with clay, approx 10-20% clay, approx 30-40% very fine to fine sand, approx 40-60% silt; stiff, dark yellowish brown (10 YR 4/4), moist, low plasticity, low toughness, moderate dilatency, low dry strength.
125	⊠		OC2-PMW13 W-0-04	Stop\18:05 Start 7/1/05 07:15			SP		(122 off E-log; from 124 off shaker; 125-126 Split Spoon). Poorly graded SAND, approx 90% fine-grained, 10% medium-grained, (0.5-1 mm dia.), dark grayish brown (2.5 Y 4/2), wet/saturated.
130			OC2-PMW13 W-0-04	-			SM		Increased SILT content with depth.
135							CL		(133-134' Split Spoon). Low plasticity CLAY, approx 3-5% fine sand, firm to very stiff (approx 1/4" penetration), light olive brown (2.5Y 5/3) with oxidation stains ranging from yellowish brown to dark reddish brown (5YR 3/4), moist to wet, low to moderate toughness, low liquid limit, moderate dilatency, low to moderate plasticity, possible organic (continental) artifacts, preferred horizontal fracture plane.
140							SW		
145									(135-139' off E-log): SAND.
150									Bottom of boring at 139'.



Boring in front of Fred Rippey at 12482 Putnam Street. Elevation noted is ground surface.
A = shallow (dry); B = deeper.

ARCADIS
Infrastructure, environment, facilities

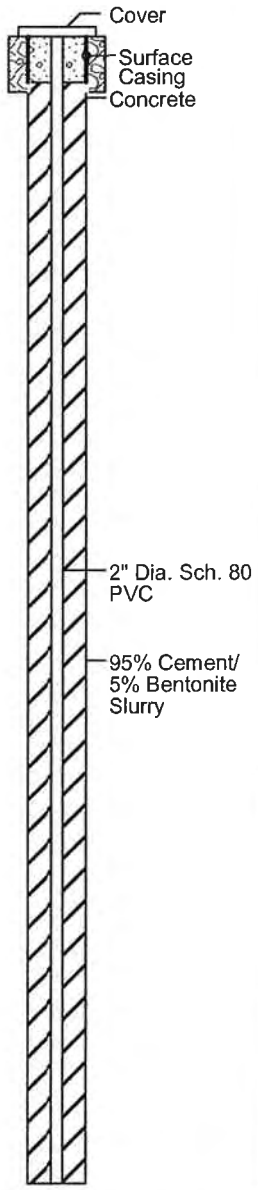
LOG OF BORING MW14

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 5, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Asphaltic concrete to ~6", aggregate base to 1 ft.
									SILTY CLAY, hard, dark brown (10YR 3/3), moist, no odor.
5									SILTY CLAY, hard, dark yellowish brown (10YR 4/4), slightly moist, friable.
10							CL		
15				-					Same as above.
20				11:50					
25									

Well: MW14
Elev.: 172.98



DESCRIPTION OF BORING LOCATION: In parking lot, southeast corner of 12393 Washington Boulevard - Oncology Center (part of Presbyterian Intercommunity).

NOTES: Elevation is of ground surface.

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ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW14

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 5, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW14
Elev.: 172.98

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25									(20-37') SILTY CLAY, medium stiff to stiff, dark yellowish brown (10YR 4/4), moist.
30							CL		
35				12:45					(37-42.5'): Low plasticity SILT with CLAY, medium stiff, light olive brown (2.5Y 5/4), slightly moist, low toughness, moderate to rapid dilatency.
40				-			ML		(42-46'): Non plastic SILT, soft to medium stiff, olive brown (2.5Y 4/3), slightly moist.
45							SP-SM		(46-55'): Poorly graded SAND with SILT, ~10%-20% silt, 80-90% very fine sand (<0.5 mm diameter), olive (5Y 5/3), slightly moist.
50									

2" Dia. Sch. 80 PVC

95% Cement/ 5% Bentonite Slurry

DESCRIPTION OF BORING LOCATION: In parking lot, southeast corner of 12393 Washington Boulevard - Oncology Center (part of Presbyterian Intercommunity).

NOTES: Elevation is of ground surface.

ARCADIS
Infrastructure, environment, facilities

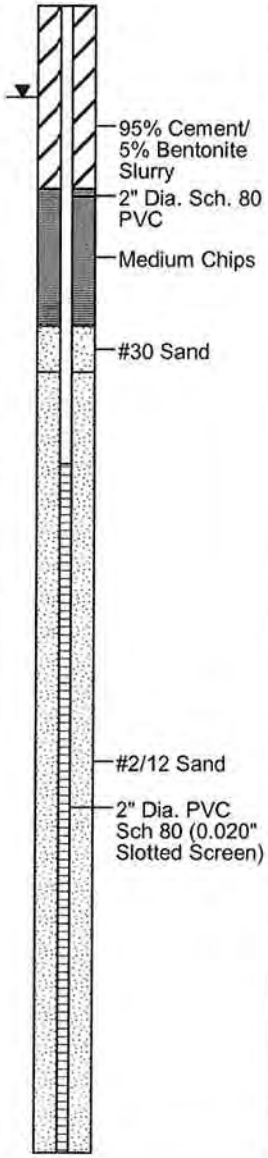
LOG OF BORING MW14

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 5, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50				13:13			SP-SM		Wet from ~52'.
55			OC2-PMW14 W-0-3	15:40			SP		(55-57'): Poorly graded SAND, ~5% Silt, 95% fine to medium sand (max. 2 mm diameter), olive brown, wet.
							SW		(57-58'): Well graded SAND with Gravel, ~20-30% fine and coarse igneous and metamorphic subrounded gravel (max. 55 mm diameter), ~70% fine to coarse subangular sand (max 5 mm diameter), olive brown, wet to saturated.
60				14:30			SP		(58-60'): Poorly graded SAND, predominantly fine to medium (~80-90%), ~10-20% coarse sand; olive brown to dark olive brown (2.5Y 3/3 to 4/3), wet. (60-65'): Poorly graded SAND with Gravel: ~15-20% subangular gravel, ~80-85% predominantly fine to medium grained sand (<2 mm) and some coarse (<5 mm), micaceous.
65			OC2-PMW14 W-0-06	5/6/06					(65-73'): Poorly graded SAND with Gravel ~15-20%: subangular to rounded, gravel, ~80-85% poorly graded medium to coarse sand (0.5 mm - 3 mm diameter) subangular quartz feldspar, micaceous
70			No Water Recovered						(73-75'): Poorly graded SAND with Gravel, ~10-15% subrounded-subangular gravel, 85-90% poorly graded fine to medium sand (0.01-1 mm diameter) well rounded to subrounded; predominantly quartz, plagioclase, and micas.
75									

Well: MW14
Elev.: 172.98



DESCRIPTION OF BORING LOCATION: In parking lot, southeast corner of 12393 Washington Boulevard - Oncology Center (part of Presbyterian Intercommunity).

NOTES: Elevation is of ground surface.

09-07-2006 ...\COMMON\MTech5\Omega Chemical\MW-14.BOR

ARCADIS
Infrastructure, environment, facilities

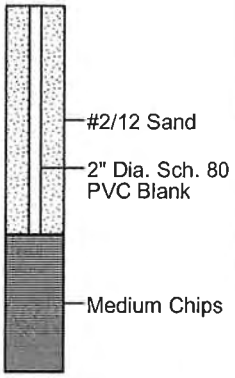
LOG OF BORING MW14

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 5, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW14
Elev.: 172.98

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75									
		No Water Recovered					SP		(75-76'): Poorly graded SAND with Gravel, 15-30% gravel (10-30 mm diameter), 70-85% fine to medium Sand (<2 mm), some coarse.
							MH		(76-77'): Plastic SILT with Clay, brown (10YR 4/3), wet, oxidation stains in Clay.
							ML-SP		(77-80'): Nonplastic SILT, bordering very fine sand (0.05-1 mm); oxidation staining\micaceous.
80							ML		(80-83'): SILT, stiff.
									Bottom of boring at 83'.
85									
90									
95									
100									



DESCRIPTION OF BORING LOCATION: In parking lot, southeast corner of 12393 Washington Boulevard - Oncology Center (part of Presbyterian Intercommunity).

NOTES: Elevation is of ground surface.

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ARCADIS
Infrastructure, environment, facilities

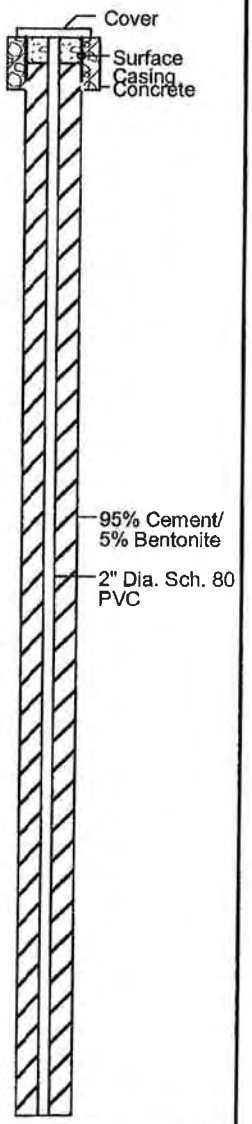
LOG OF BORING MW15

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 11, 2005	OVA	: Thermo
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm Isobutylene

Depth In Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Asphalt to 6" and underlying base to 1'.
5							ML		(8-13' core): SILT, soft (>1" penetration), moist to wet, no odor.
10									
15				12:58			CL		Change in consistency at 13', soft to medium stiff. (13 to 18' core): SILTY CLAY, medium stiff (1/4-1/2" penetration), moist, dark yellowish brown (10YR 3/6), caliche from 14.5-18'.
20									Same as above - stiff.
25									

Well: MW15
Elev.: 148.57



Boring located in northbound right lane of Chetle Avenue in front of 8550A Chetle Avenue. Elevation noted in ground surface.

01-29-2007 G:\COMMON\MTech5\Omega Chemical\MW-15.BOR

ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW15

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 11, 2005	OVA	: Thermo
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW15
Elev.: 148.57

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25							CL		Same as above - very stiff.
30							CL		Same as above.
							ML		Poorly graded SANDY SILT, with Clay, ~30% fine Sand, ~70% Silt w/Clay, hard, moist, dark yellowish brown (10YR 4/6).
							CL		SILTY CLAY, very stiff, moist, dark brown (10YR 3/3).
35							SP-SM		(36-38' core): Poorly graded SAND with SILT, 85% fine-grained, 15% Silt, moist, brown (10YR 4/3), micaceous, wet at 38 feet.
				13:17			SM-ML		(38-42' core): Poorly graded SILTY SAND/SANDY SILT, ~40-60% fine Sand, ~40-60% Silt, soft, saturated, olive brown (2.5Y 4/3).
40									
			OC2-MW15 W-0-03	13:35			SP-SM		(42-43'): Poorly graded SAND with SILT, ~10-20% Silt, 80-90% fine to medium soft, saturated, olive brown (2.5Y 4/3). (43-45' Simulprobe): Poorly graded SAND-fine, saturated, olive brown (2.5Y 4/3).
45				15:24			SP		
			OC2-PMW12 W-0-05	17:10					(48-50'): Poorly graded SAND, ~66% fine, 34% medium to coarse sand (max 5 mm dia.), brown, saturated, subrounded.
50									

95% Cement/ 5% Bentonite

2" Dia. Sch. 80 PVC

Bentonite Chips

Sand #1C

Boring located in northbound right lane of Chetle Avenue in front of 8550A Chetle Avenue. Elevation noted in ground surface.

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ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW15

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 11, 2005	OVA	: Thermo
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW15
Elev.: 148.57

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50							SP		(50-53.5'): Poorly graded SAND, predominantly fine-grained as above, yellowish brown (10YR 5/6) to dark yellowish brown.
									(53.5-54.4'): Poorly graded SAND, predominantly fine (50%), medium (25%), coarse (25%), saturated, yellowish brown to dark yellowish brown (10YR 5/6-4/6).
55							ML		(54.4-56.8'): SILT, medium stiff, moist to wet, light olive brown (2.5Y 5/4), (horizontally laminated).
							SW		(56.8-61' Simulprobe): Well graded SAND, fine to coarse, occasional Gravel-subrounded, saturated, olive brown (2.5Y 4/4).
60			OC2-PMW12 W-0-07	Stop 8/10/05					
				8/11/05 7:30					
							SP		(61-70' core): Poorly graded SAND, predominantly fine to lower-end medium-grained (max 1 mm dia.), occasional coarse sand, fine and coarse gravel (max. 30 mm dia.), light olive brown (2.5Y 5/3), wet.
65									
70			Simulprobe	8:15					(70-72' Simulprobe): Same as above.
			OC2-PMW12 W-0-08	9:25					
							ML		(72-73' core): SILT, medium stiff, (~1/4" penetration), wet, olive brown (2.5Y 4/4), micaceous.
							SP		
75							ML		(73-74' core): Poorly graded SAND, fine-grained, wet, olive brown (2.5Y 4/3)), micaceous.

2" Dia. PVC Sch 80 (0.020" Slotted Screen)

Sand #1C

2" Dia. Sch. 80 PVC Blank

Boring located in northbound right lane of Chetle Avenue in front of 8550A Chetle Avenue. Elevation noted in ground surface.

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ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW15

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: August 11, 2005	OVA	: Thermo
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6 1/4"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW15
Elev.: 148.57

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75							ML		(74-75'): SILT, medium stiff, wet, olive brown (2.5Y 4/3).
							CL		(75-76'): Poorly graded SANDY SILT, ~30-40% fine sand, 60-70% Silt, medium stiff to soft, wet, olive brown (2.5Y 4/3).
									(76-79'): SILTY CLAY, stiff, moist, olive brown (2.5Y 4/4).
80							SP-SM		(79-80' core): Poorly graded SAND with Silt, ~70-80% fine sand, ~20-30% silt, soft, wet, olive brown.
							CL		(80-81' core): SILTY CLAY, hard, moist, olive brown.
85									Bottom of boring at 81'.
90									
95									
100									

Bentonite Chips

Boring located in northbound right lane of Chetle Avenue in front of 8550A Chetle Avenue. Elevation noted in ground surface.

01-29-2007 G:\COMMON\MTech5\Omega Chemical\MW-15.BOR

ARCADIS
Infrastructure, environment, facilities

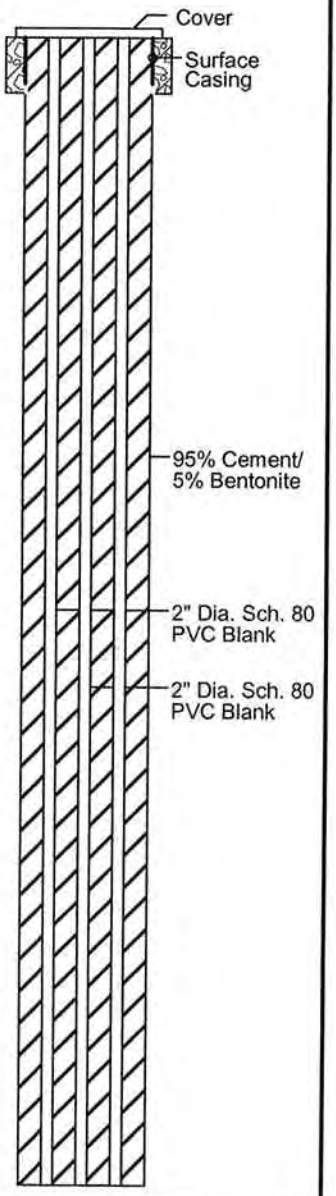
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0	—			5/27/05 12:00					Sod
							ML		SILT with CLAY, (~5-10% clay), soft to medium stiff, dark yellowish brown (10YR 3/4), moist, no odor.
15							SP		Off cyclone @14'; SAND, poorly graded: ~95-98% fine to medium-grained (max diam. 1 mm); dark yellowish brown (10YR 4/4), moist, no odor.
20									Set drive casing to 20'.
25									

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

NOTES:
Elevation = ground surface; A = Shallow, B = Intermediate, C = Deep Well.

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ARCADIS
Infrastructure, environment, facilities

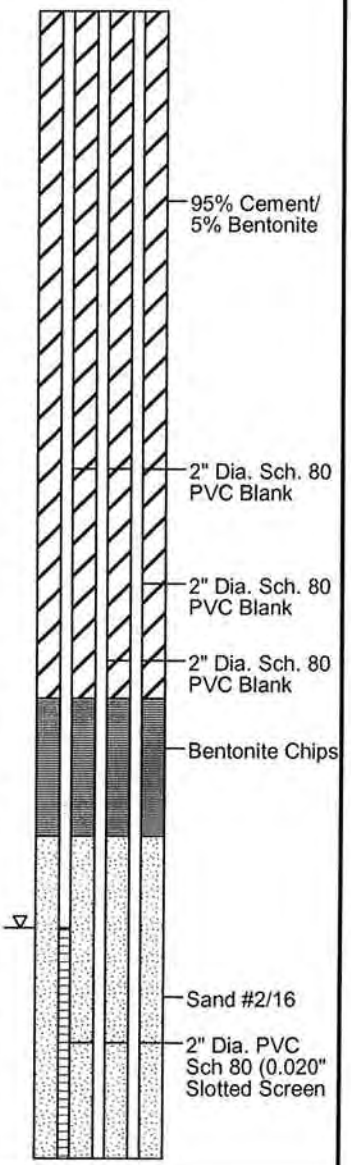
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25							SP		
30	X			14:29	1.3		ML-CL		Off split spoon @ 30-31.5. CLAYEY SILT to SILTY CLAY; soft, light olive brown (2.5Y 5/4), moist, no odor; moderate dilatency, moderate toughness, moderate to high plasticity.
35							SP-SM		(Off Shaker): Poorly graded SAND with Silt; ~10-15% Silt, ~85-90% predominately fine-grained sand, some medium-grained (max 1 mm diam.), light olive brown (2.5Y 4/3 to 4/4).
40	X			14:58					Same as above, moist to wet, no odor. Stopped drilling 5/27/05 at 15:15
				5/31/05 8:40			SP		(Off Shaker) 43-47': Poorly graded SAND, predominantly fine to medium grained (max 1 mm diam), occasional fine gravel (<1%; max diam 7 mm); brown.
45							SP-SM		(Off Shaker) 47-50': Poorly graded SAND with Silt-Silty Sand: ~5-15% silt, 85-95% predominantly very fine to fine sand; olive brown.
50									



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NOTES:
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ARCADIS
Infrastructure, environment, facilities

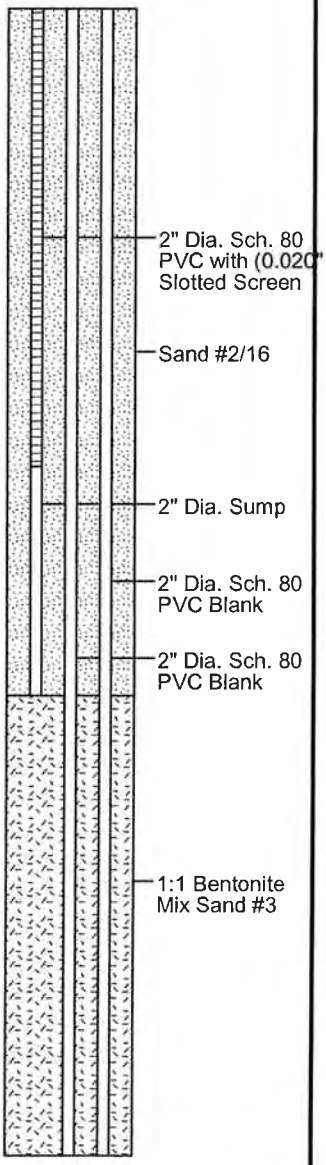
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50	X		No Water Recovery	9:04	1.4	100	SW		50.25-50.75 (off split spoon). Well graded SAND with Silt: ~10-15% silt, ~85-90% fine to coarse sand (max 5 mm dia.), occasional fine gravel; dark yellowish brown (10YR 4/4) to brown (10YR 4/3), saturated.
							ML		
							GP		At 50.75-51.5 (off split spoon); SILT, medium stiff, yellowish brown (10YR 5/6) to dark olive brown (2.5Y 3/3), wet, no odor.
55	X		OC2-PMW16 W-0-04	12:56					At 53'; Poorly graded GRAVEL, ~10% fine to medium sand, ~85% fine subrounded, igneous gravel, ~5% silt.
							SP		56-57 (off split spoon). Poorly graded SAND, fine to medium-grained (max ~0.75 mm dia.); olive (5Y 4/4), saturated.
60	X		OC2-PMW16 W-0-06	14:30					Non plastic SILT; medium stiff, olive brown (2.5Y 4/3), wet; occasional subrounded fine gravel.
65							ML		
70	X		OC2-PMW16 W-0-07 OC2-PMW16 W-1-08	15:50					70.5-71.5' (Off split spoon): Non plastic SILT, soft to medium stiff, olive brown (2.5Y 4/3), moist, bands of iron oxide staining; micaceous.
75									



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Infrastructure, environment, facilities

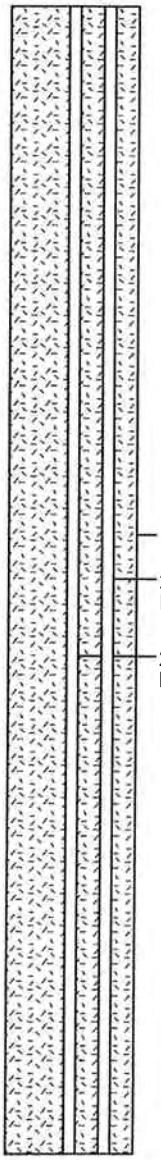
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75									
80	X		OC2-PMW16 W-0-09	17:35			ML		80.5-81.5' (Off split spoon): SILT with CLAY; medium stiff, light olive brown (2.5Y 5/4), wet; some iron oxide banding, micaceous.
85									Increased CLAY content.
90	X		OC2-PMW16 W-0-10	6/1/05 8:40			SM		Stopped drilling 5/31/05 at 18:00. Resumed 6/1/05. Off split spoon. Poorly graded SILTY SAND, ~10-15% silt, ~75% predominantly fine to medium grained (max 1 mm dia.), occasional (~3-5%) coarse sand (~4 mm dia.) and ~5% fine gravel (max dia. 30 mm); olive brown (2.5Y 4/3), saturated.
95									Off shaker. Same as above. ~5% coarse sand, 5% fine gravel.
100							SW		Increasing grain size - grades into well graded SAND, fine to coarse (max 5 mm), occasional fine gravel (max 20 mm), dark grayish brown (10YR 4/2), saturated, subrounded grains. Change in soil type observed at 100.5.



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

NOTES:
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ARCADIS
Infrastructure, environment, facilities

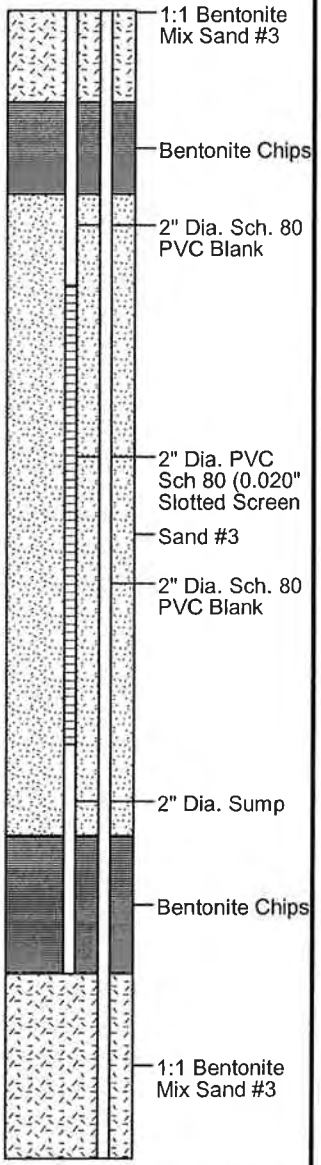
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100							SW		
			No Water Recovery Mud	9:50	0.2		CL		(Off split spoon): SILTY CLAY; stiff, brown (10YR 4/3), moist, no odor; occasional yellowish red (5YR 4/4), staining, (possible iron oxide), high toughness, moderate plastic, no dilatency, positive ribbon test.
105					0.1		SC		(Off shaker and mud pan), CLAYEY SAND: well graded, ~35-45% clay, ~45-55% fine to coarse sand (max 5 mm dia.), ~10% fine gravel (max 15 to 18 mm dia.); very dense; olive brown clay matrix; saturated; sand is subrounded, fine gravel platey and subangular of igneous origin.
110			No Water Recovery Mud	12:00			GP		111-112' (Off split spoon): Poorly graded GRAVEL with Sand: ~60% fine gravel (max 18 mm dia.) ~40% fine to coarse sand (max 5 mm dia.), of igneous origin, subrounded to subangular.
			No Water Recovery Mud	13:35	0.1		GW		Well graded GRAVEL with Sand: ~60% fine and coarse gravel (max 30 mm) ~40% fine to coarse sand.
115									114-114.25' (Off split spoon): Non plastic SILT; medium stiff, olive brown, wet.
120			OC2-PMW16 W-0-12	14:40	0.6		ML		CLAYEY SILT: ~60-90% silt, 10-40% clay, light olive brown (2.5Y 5/4), moist, no odor; brittle, low toughness, low to moderate plasticity, rapid to moderate dilatency, sticky.
125									



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

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ARCADIS
Infrastructure, environment, facilities

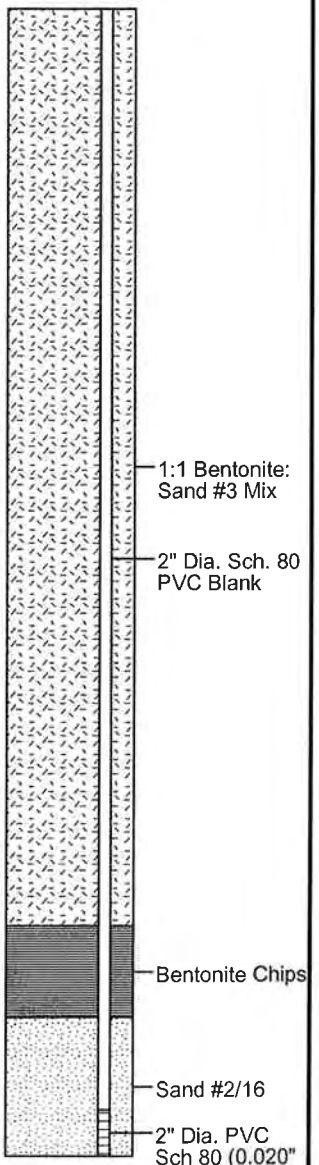
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
125									(off shaker). Same as above.
							ML		130-131.5' (Off split spoon): SILT; firm, olive brown (2.5Y 4/4), moist; micaceous, borderline very fine sand, rolls, low toughness, rapid dilatency, low plasticity. Set Simulprobe at 16:40 at 132-134'. Stopped drilling 6/1/05. Resume 6/2/05.
130				16:20					
				16:40			GP-GC		132-133.5 (Off split spoon). Poorly graded GRAVEL with Clay: ~80-90% fine subrounded to subangular gravel (max 20 mm dia.), occasional coarse gravel (max 25 mm dia.) in an olive brown (2.5Y 4/3) silty clay matrix; stiff moist, no odor; gravel of igneous origin.
			OC2-PMW16 W-0-14	6/2/05 7:00	0.2				
135							ML		From133.5 - SILT, stiff, olive brown (2.5Y 4/3), moist, no odor.
140				- 7:15			SP		140.5-141.5: Poorly graded SAND, fine-grained (max dia. ~0.1-0.2 mm); olive brown (2.5Y 6/3), moist, no odor.
			OC2-PMW16 W-0-15	8:30			CL		145' (off mud pan); CLAY with Sand, ~10-15% fine to coarse sand in silty clay matrix; olive brown (2.5Y 4/3).
145							SP		149' Off mud pan: Poorly graded SAND, fine to medium (max 2 mm dia.), subrounded.
150									



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ARCADIS
Infrastructure, environment, facilities

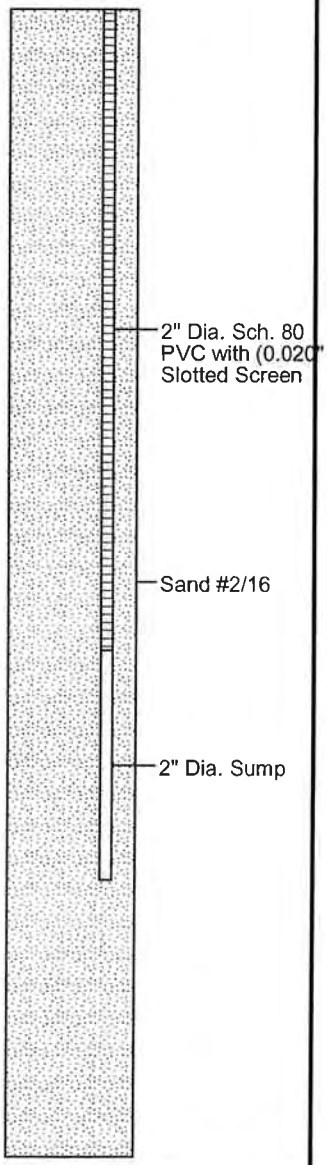
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
150			No Water Recovery	11:36	0.1		GP		151-151.5 (off split spoon): Poorly graded GRAVEL: predominantly fine (max 19 mm dia.), occasional coarse (max 25 mm dia.), subrounded igneous source (plag, mafic, minerals).
									151.5 to 152 (off split spoon): Poorly graded SAND: predominantly fine grained (~10-15% medium <1 mm dia.), dense, olive brown (2.5Y 4/4), wet.
155			No Water Recovery	14:00			SP		154-155' (off split spoon): Poorly graded SAND; fine to medium grained (max 1 mm dia.), olive brown (2.5Y 4/4) to light olive brown (2.5Y 5/4), wet.
160			OC2-PMW16 W-0-16	15:50	0.1		SP-SM		At 160-162 off split spoon. Same as above. ~10-20% silt, 80-90% fine to medium sand (max 2 mm dia.), dark grayish brown (2.5Y 4/2), wet.
165									Driller indicates change in soil type at 170' based on drilling conditions/clay on drill bit. Change also observed on shaker.
				16:45					Stopped drilling 6/2/05 at 16:45 at 170'. Simulprobe set overnight
170			OC2-PMW16 W-0-19	6/3/05 7:15			CL		170-172 (off split spoon); SILTY CLAY, very stiff, dark yellowish brown (10YR 4/4 to 4/6), moist, light bluish gray (Gley 2 8/1) artifacts, (marine?); some blackish artifacts-possibly decayed organic; moderate to high toughness, no dilatency, moderate to high plasticity, low liquid limit, high dry strength.
175									



In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

NOTES:
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ARCADIS
Infrastructure, environment, facilities

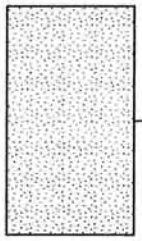
LOG OF BORING MW16

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 3, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Drilling Method	: Mud Rotary
Drilling Company	: WDC	Diameter	: 8 3/4"
Drill Rig	: GF Star 30	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW16A
Well2: MW16B
Well3: MW16C
Elev.: 153.19

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
175									
180	X			8:17			CL		Same as above, very stiff to hard, strong brown (7.5YR 5/6-4/6), slightly moist. Bottom of boring at 182'.
185									
190									
195									
200									



Sand #2/16

In the greenbelt on the east side of Dice Road, approximately 85 feet north of the centerline intersection with Altamar Place.

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ARCADIS
Infrastructure, environment, facilities

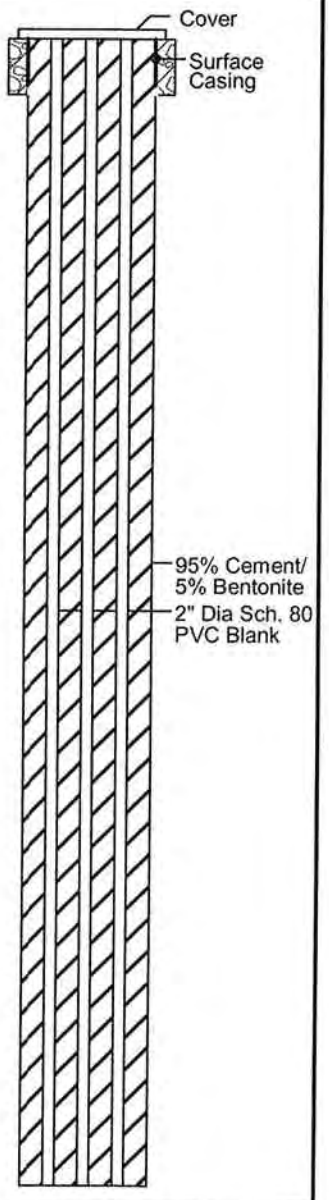
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Unpaved soil
5							CL		(Off cylcone): SILTY CLAY, stiff, brown (10YR 4/3), slightly moist, no odor.
10									(Off cyclone): SILTY CIAY, stiff, dark yellowish brown (10YR 4/6), dry to slightly moist, ~3-5% fine sand.
15							SP-ML		(Off cyclone): Poorly graded SAND/SILT, very fine-grained sand, light yellowish brown (2.5Y 6/4), dry to slightly moist.
20							SP		(Off mud return): Poorly graded SAND, predominantly fine to medium grained, ~5-10% coarse (3-4 mm dia.)
25									

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

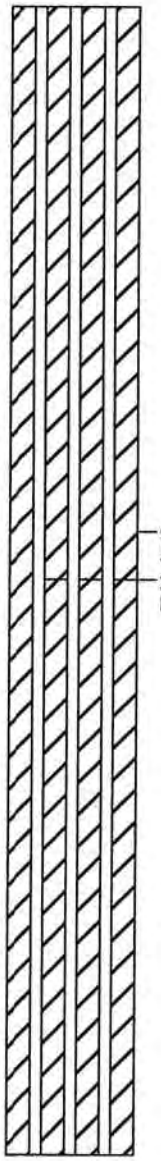
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25							SP		
30	X			10:43			CL		(30-31' Split Spoon): CLAY, hard, strong brown (7.5YR 4/6), moist, mottled with light gray and reddish brown, ~3-5% fine sand.
35							SP		(36' Off shaker): Poorly graded SAND, ~80-90% fine to medium Sand, ~10-20% medium to coarse Sand.
40	X			12:00	0.7	100%			At 11:45 set Simulprobe 4-41.5'. No water at 12:00 (40-41.5' off Simulprobe): Poorly graded SAND, predominantly (90-95%) fine to medium sand (up to 1 mm dia.), 5-10% low-end coarse sand (2-2.5 mm di.), yellowish brown (10 YR 5/4) to dark yellowish brown (10YR 4/4), wet.
45							ML		(Based on E-logs)
50									

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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ARCADIS
Infrastructure, environment, facilities

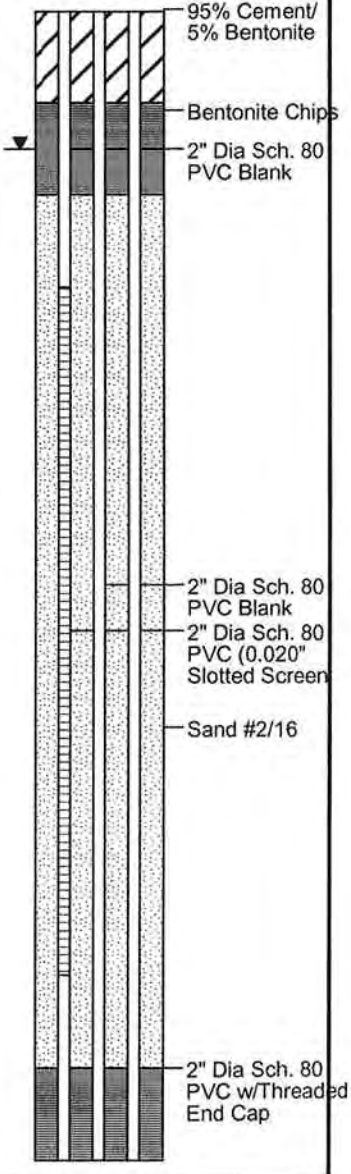
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50	X		OC2PMW17 W-0-04	13:50	1.1	100%	ML		(50-51.5' off Simulprobe): SILT with CLAY, soft to firm (~1/4" penetration), yellowish-brown (10YR 5/6), wet (not saturated), rapid dilatency, low toughness, low plasticity, occasional black (organic?) artifacts, occasional evidence of horizontal layering, sticky.
55									
60	X		No Water Recovery		0.4	100%			(60-60.5' from Simulprobe): Same as above.
							SP		(60.5-61.5' from Simulproble): Poorly graded SAND, fine-grained (max 1/2 mm dia.), light olive brown (2.5Y 5/3), moist, no odor.
65	X		Dry Canister	6/22/05		100%			(65-66.5' from Simulprobe): Poorly graded SAND, ~75-80% fine to medium grained sand (up to 2 mm dia.), ~20-25% coarse (max 5 mm dia.), occasional fine gravel, light olive brown (2.5Y 5/3), wet.
70							ML		(Based on E-logs)
75									

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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ARCADIS
Infrastructure, environment, facilities

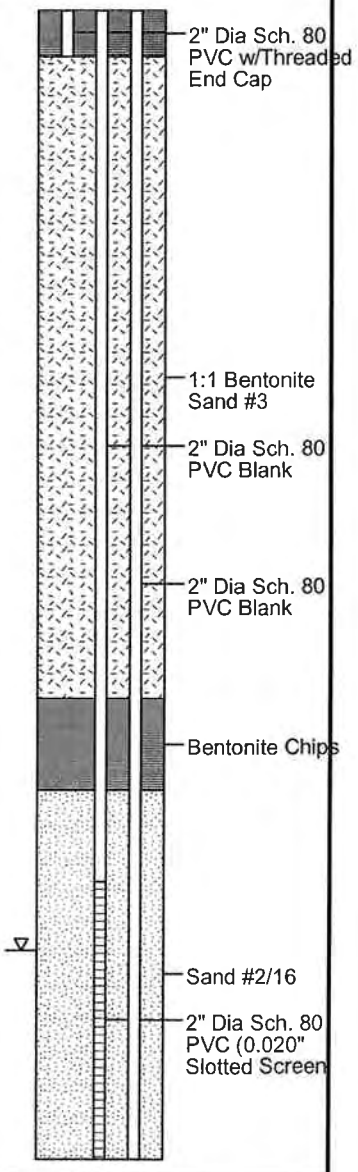
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75			No Water Recovery	8:30 9:30			ML		(75-77' off Simulprobe): SILT, firm (~1/4" penetration), brown (7.5YR 5/4), mottled with light gray and reddish brown, wet (but not saturated), low plasticity, low toughness, slow dilatency, low liquid limit. (77-80' off mud return): SANDY SILT, ~15% fine to medium Sand, saturated (max 2 mm dia.) in brown clayey Silt matrix.
80									(Based on E-logs)
85			No Water Recovery	10:30 11:30			CL		(85-87' off Simulprobe): SILTY CLAY, hard, reddish brown (5YR 4/4), slightly moist, ~10-20% fine-grained size (15-20 mm dia.) modules of clay, sub-spherical and subrounded.
90									
95			OC2PMW17 W-0-06 OC2PMW17 W-1-07	12:30 14:00			SP		(95-97' Split Spoon): Poorly graded SAND, ~3-5% reddish brown clay, ~95-97% fine to medium Sand (<=1 mm dia.), strong brown (7.5YR 4/4), to olive brown (2.5Y 4/3), saturated.
100									



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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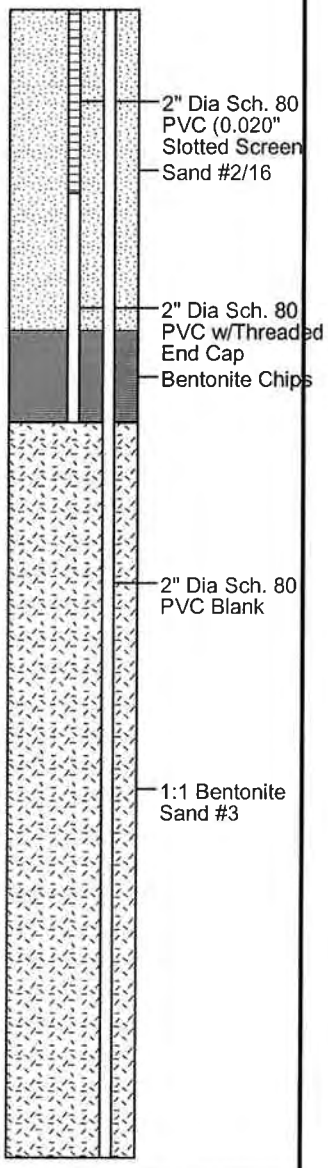
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100							SP		(102' off shaker): Poorly graded SAND: ~70-80% fine to medium grained, ~20-30% medium to coarse (max 5 mm).
105	X		No Water Recovery	14:40 15:50			ML		(105-107' off Simulprobe): CLAYEY SILT, firm (<1/4" penetration), light olive brown (2.5Y 4/3), moist, rapid dilatency, moderate toughness, low plasticity, positive ribbon test, trace very fine sand.
110									Off mud return at 110' - same as above.
115	X		OC2PMW17 W-0-08	6/22/05 - 6/23/05 7:50					(115-117' off Simulprobe): SILT, medium stiff (1/4-3/8" penetration), light olive brown (2.5Y 5/3) to olive brown (2.5Y 4/3), wet (but not saturated), low plasticity. At 117' driller indicates change soil type.
120							SW-SC		(117' off shaker): Well graded SAND with Silt and Gravel, ~5-10% Silt, ~5% Clay, ~60-70% fine to coarse Sand (max dia. 5 mm), and ~30% fine gravel, yellowish brown, sand and gravel subangular to subrounded and sub-spherical.
125							SP		

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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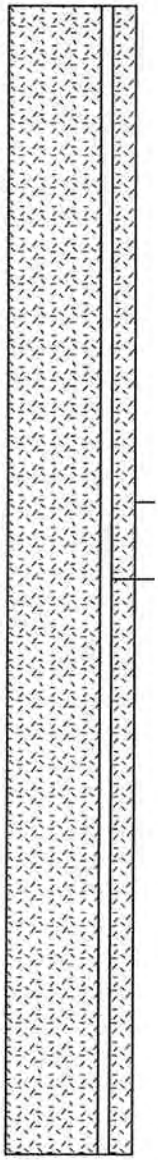
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
125	X		No Water Recovery	9:00			SP		(125-127' off Simulprobe): Poorly graded SAND with SILT, ~3-5% Silt, 95-97% very fine Sand, olive (5Y 4/4), wet, does not roll, rapid dilatency, no dry strength.
130							CL		(From 130' based on E-log) (~132' off mud return): SILTY CLAY, olive brown (2.5Y 4/3), moderate toughness, moderate plasticity.
135	X		No Water Recovery			50%	ML		(135-137' off Split Spoon): SILT with CLAY, ~5% Clay, hard, olive (5Y 5/3), moist, low to medium toughness, moderate dilatency, moderate plasticity.
140				-					Off mud return - same as above. Change in color - off mud return.
145	X		OC2PMW17 W-0-09	14:33					(145-147' off Simulprobe): SILT with CLAY, firm (~1/4" penetration), dark greenish gray (Gley 1 4/1), wet, low to moderate toughness, low plasticity, moderate dilatency.
150									

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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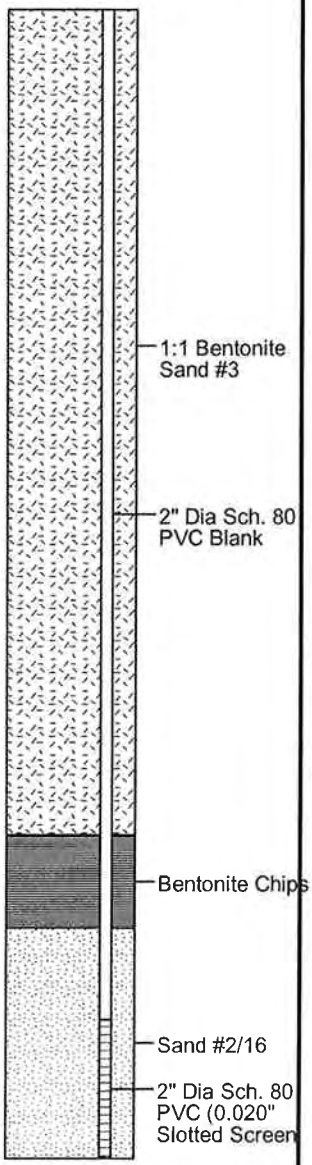
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
150							ML		
							CL		(153-157' Split Spoon): SILTY CLAY, hard (fingernail penetration), dark greenish gray (Gley 1 3/1), with caliche (effervescent/HC1), dry to slightly moist.
155	X								
160									Change in drilling according to driller.
165	X			-		40%	ML		(165-166' Split Spoon): Sandy non-plastic SILT, hard, pale-olive (5Y 6/3) with yellowish brown (10YR 5/8) oxidation stains, moist.
170	X			6/24/05 8:52			SP		(170-171' Split Spoon): Poorly graded SAND-fine grained (0.1-0.2 mm dia.), light olive gray (5Y 6/2), wet, subangular to subrounded sand grains, ~70-80% quartz, ~15% mafic, 5-15% other.
175									



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

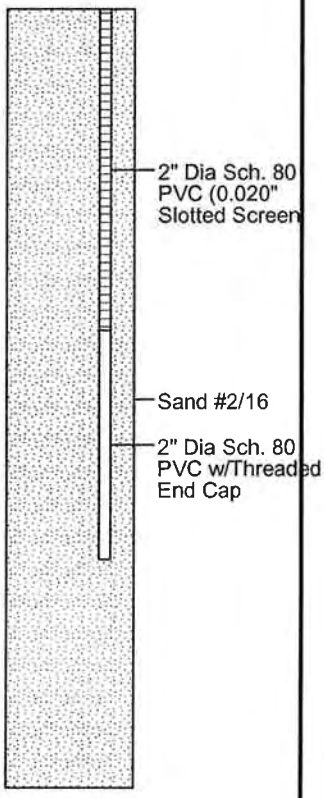
LOG OF BORING MW17

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 28, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Drilling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
175							SP		Change in color at ~175 ft to brownish yellow (10YR 6/6), with reddish brown oxidation planes.
180	X		OC2PMW17 W-0-13	13:55			SP-SM		Driller indicates "GRAVEL" at 180'. (180' off mud return): Poorly graded SAND, ~80-90% fine to medium grained (max 2 mm dia.), ~5% coarse Sand, ~5% fine Gravel (max 14 mm dia.). (180-182' off Simulprobe): Poorly graded SAND with SILT, ~5-10% Silt, 90-95% fine to medium Sand (max 1 mm dia.), light olive brown (2.5Y 5/6), with yellowish brown (10YR 5/6), oxidation planes, wet, no odor.
185									
190	X		OC2PMW17 W-0-15	- 6/27/05 10:55			SP		(190' off mud return): Poorly graded/well graded SAND, ~90% fine to medium-grained Sand (max 2 mm dia.) ~5-10% coarse Sand (max 5 mm dia.), <3% fine Gravel.
							ML-CL		(190-191.5' off Simulprobe): Poorly graded SAND with SILT, ~10% Silt, ~3-5% coarse Sand, 85-90% fine to medium Sand (max 2 mm dia.), oxidation planes, wet, no odor. (191.5-192' off Simulprobe): CLAYEY SILT/SILTY CLAY, moist, _____ (2.5Y 5/6) with yellowish brown oxidation planes (10YR 5/6), no odor, moderate toughness, moderate to high plasticity, low dilatency.
195									Bottom of boring at 192 ft.
200									

Well1: MW17A
Well2: MW17B
Well3: MW17C
Elev.: 159.42



Boring location on southwest sidewalk of Pike Street opposite 12005 Pike Street (behind McMaster Carr).
Elevation noted is ground surface.

A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

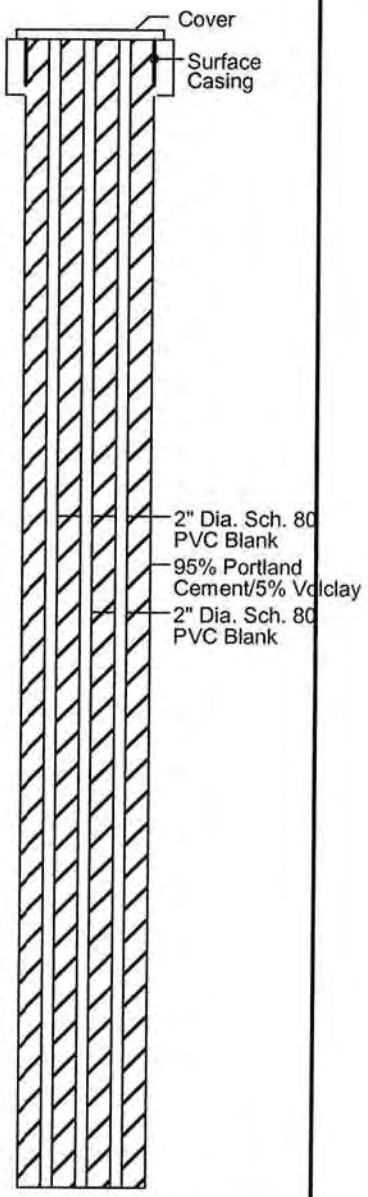
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0	—			6/9/05 16:20					Grass surface to 6"
							CL		(Off cylcone): SILTY CLAY, very dark grayish brown (2.5Y 3/2), moist to wet, low to moderate toughness, low plasticity, no dilatency.
5									(4-8' off cyclone): SILTY CLAY, ~10-15% fine to coarse sand (max 4 mm dia.), thick dark yellowish brown (10YR 4/4), silty clay matrix, slightly moist, rolls, moderate to high toughness, moderate plasticity.
10									(8-17' off cyclone): Well graded SAND with CLAY, ~10-15% strong brown (7.5YR 4/6) clay ~85-90%, fine to coarse sand (max 4 mm dia.), strong brown, slightly moist, no odor.
15	—			16:35 6/10/05 9:15			SW-SC		(17-20' off mud shaker): Same as above.
20									
25									



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

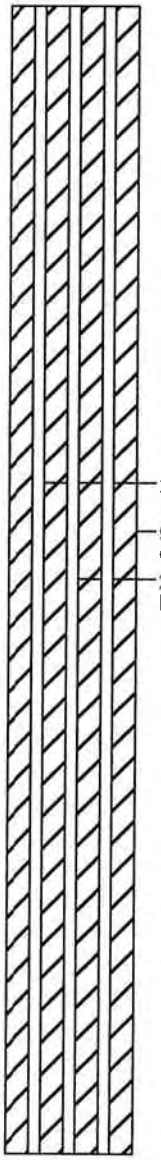
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25				10:17			SP-SM		(Off mud shaker): Poorly graded SAND with silt, ~10-15% silt, ~85-90% fine to medium grained sand, olive brown (2.5Y 4/2).
30				10:40					Poorly graded SAND with SILT, ~10-15% silt, ~85-90% predominantly fine-grained sand with 5% medium-grained sand, olive brown (2.5Y 4/3), wet, single cobble (80 mm dia.), granitic, sub-spherical, subrounded.
35									(Based on E-Logs)
40				10:55 12:40			CL		(40-42' Split Spoon): SILTY CLAY, stiff, <firm (<1/4" penetration), olive gray (5Y 5/2), moist, light gray (5Y 7/1), high toughness, high plasticity, positive ribbon test, blocky fracture, silty features, olive gray matrix with no definite shape.
45									
50									At 50' from mudpan - same as above.

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

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ARCADIS
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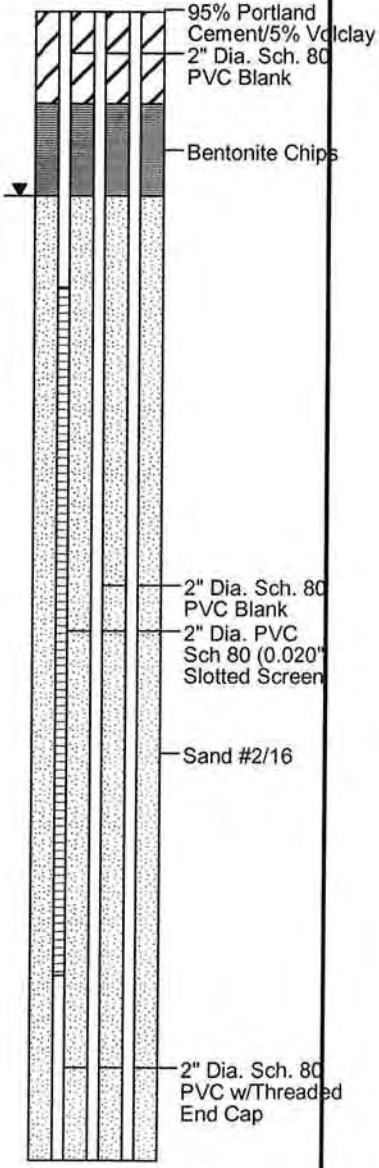
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50				13:35			ML		(50-52' Split Spoon): SILT, firm, light olive brown (2.5Y 5/4), moist, no odor.
							SP-SM		(53' off shaker): Poorly graded fine SAND with SILT, predominantly fine-grained. Wet from 54 feet.
55			OC2-PMW18 W-0-03	14:00			SP		(55-57' off Split Spoon): Poorly graded SAND, ~3-5% clay, 95-98% predominantly fine sand (max 0.5 mm dia.), <5% medium grained (max dia. 1 mm), olive brown (2.5Y 4/3), saturated.
			OC2-PMW18 W-1-04	6/13/05 7:30					(~58' off mud pan): Increase in grain size to fine and medium Sand (max 2 mm dia.).
60				8:00			SW-SM		(62'): Increasing grain size - grades into well graded SAND with SILT, ~3-5% silt, 85-95% fine to coarse sand, ~5-10% fine sub spherical to sub tabular gravel.
65			OC2-PMW18 W-0-06	8:54			GW		(65-66.5' Split Spoon): Well graded GRAVEL, ~5-10% coarse sand, 90-95% fine and coarse gravel (max 30 mm dia.) of igneous and metamorphic origin (quartz, igneiss), gravel, subrounded, sub spherical to elongated.
			OC2-PMW18 W-0-07	10:10			SP		(66.5-67' Split Spoon): Poorly graded SAND, fine-grained (max 0.5 mm dia.), light olive brown (2.5Y 5/3), wet.
70									(72'): Increasing grain size up to 2 mm dia., pale olive (5Y 6/3) with dark mafic minerals.
75									

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

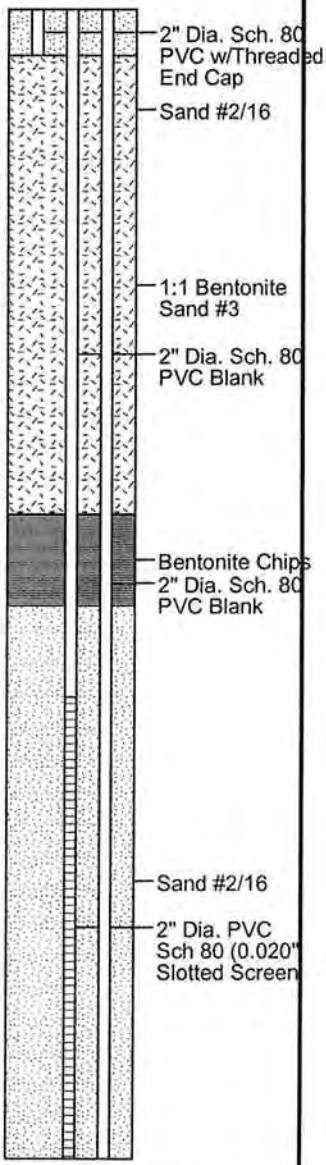
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75	X		OC2-PMW18 W-0-09	11:12 12:25	0.6				(75-77' from Simulprobe): Well graded SAND with Clay and Gravel: ~10-15% silt, ~40% predominantly fine-gravel (max 19 mm dia.), some coarse (up to 35 mm dia.), ~45-50% fine to coarse sand (max 4 mm dia.), light olive brown (2.5Y 5/4), wet; gravel is of igneous and metamorphic origin, subangular to subrounded, platy to sub spherical.
80							SW-SM		Encountered more rocks at ~82' according to driller. (83-85' off shaker): Fine to coarse SAND with SILT, ~5-10% Silt.
85	X		OC2-PMW18 W-0-10	13:40 16:04					(86-87' Split Spoon): Well graded Silty SAND with Gravel: ~10-20% light olive brown (2.5Y 5/4) silt, 30-40% fine and coarse gravel (max 20 mm dia.) subangular and sub spherical, ~40-60% fine to coarse sand, gravel is reworked sediment consisting of gravel-size rocks of igneous metamorphic origin encased in semi-indurated sand and silt layer.
90							SP		(~90' off shaker): Poorly graded SAND, fine to medium, olive (5Y 4/3), saturated.
95	X		OC2-PMW18 W-0-12	6/14/05 7:40			GP-GM		(Possible Slough - 95-96.5'): Poorly graded GRAVEL with Sand and Silt, ~5-10% silt, ~20-25% medium to coarse sand, ~70% predominantly fine gravels (up to ~14 mm), ~5% coarse gravel (max 25 mm dia.) subrounded.
100							SP		(97' Split Spoon and Shaker): Poorly graded SAND: fine to medium-grained (max 2 mm dia.), olive (5Y 7/4), saturated. Increasing grain size w/depth (off shaker).

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

ARCADIS
Infrastructure, environment, facilities

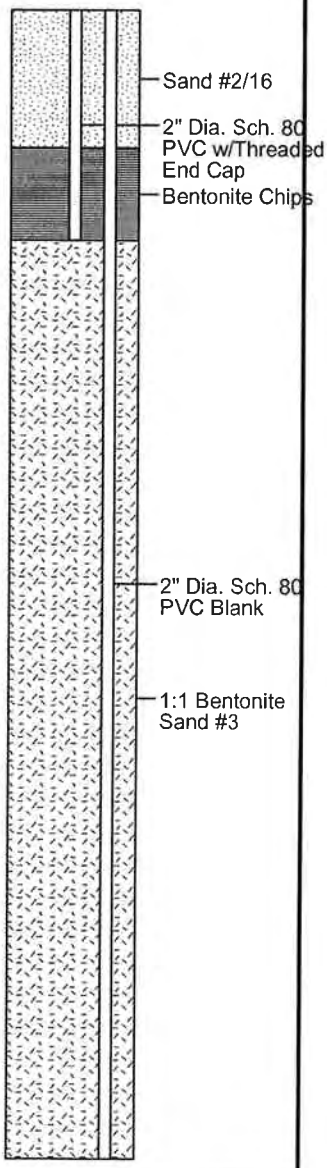
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100							SW-SC		(100' off shaker): Well graded SAND with Clay, ~5-10% fines, ~60% fine to medium Sand, ~40-45% coarse Sand (max 5 mm dia.) subrounded, olive (5Y 7/4), saturated.
105			OC2-PMW18 S-0-13 No Water Recovery	9:45 11:00		0%	ML		(107-109' off Split Spoon): SILT, firm, (<=1/4" penetration), olive (5Y 4/3) with strong brown (7.5YR 4/6), vertical banding, moist to very moist, but no saturated, blocky fragmentation.
110									
115			OC2-PMW18 W-0-14	13:05	0.1		SP-SM		(115-119' off Simulprobe): Poorly graded SAND with Silt, predominantly fine Sand, ~5-10% Silt, moist to very moist, olive brown (2.5Y 4/3 - 2.5Y 4/4).
120							ML		
125									



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

ARCADIS
Infrastructure, environment, facilities

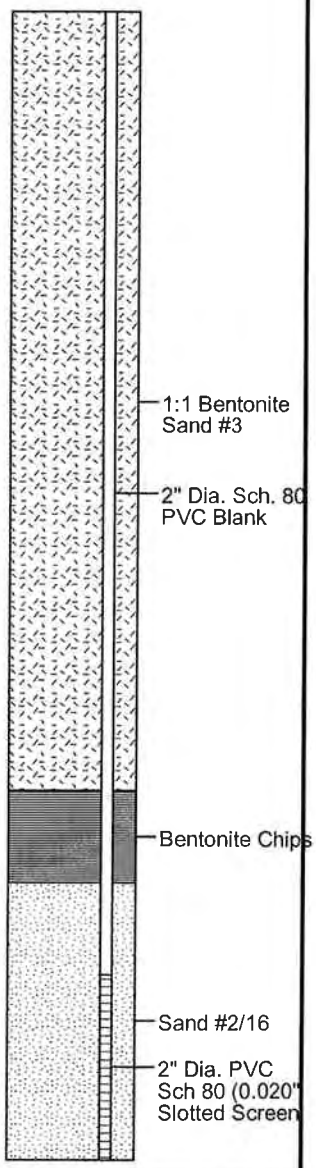
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
125									
			OC2-PMW18 W-0-15	15:30	0.1				(125-128' off Simulprobe): Clayey SILT, ~10-20% clay, ~80-90% silt, moist to very moist, olive brown (2.5Y 4/4), low toughness, medium plasticity, moderate dilatency, low dry strength.
			OC2-PMW18 S-0-16	15:40					
130							ML		
135									(135-137' Split Spoon): SILT, firm (<1/4" penetration), olive (5Y 4/4), moist, some light gray artifacts.
			OC2-PMW18 S-0-18 No Water Recovery	6/15/05 7:55	0.4	0%			
140				-			CL		(~141 off mud return): Silty CLAY, yellowish brown (10YR 5/4).
145			OC2-PMW18 W-0-21	9:35 11:00			ML		(145-147' off Simulprobe): SILT, firm, olive (5Y 4/4), moist, light gray (possible marine) artifacts-looks like wormhole - secondary fill with secondary porosity. Increasing sand content based on E-logs.
150									



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

ARCADIS
Infrastructure, environment, facilities

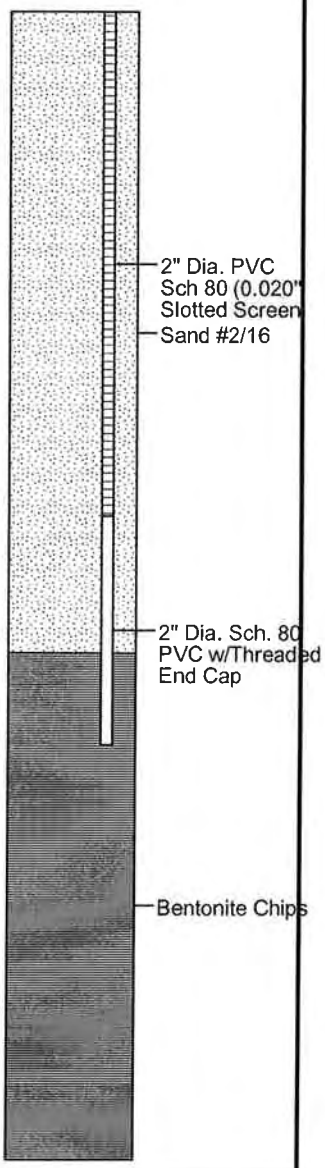
LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
150							SP-SW		Change in soil type based on driller observation and on material from mud return. Poorly to well graded SAND, very fine to high-end medium-grained (max 2 mm dia.)
155			OC2-PMW18 W-0-22	12:15 13:50			ML		(155-157' from Simulprobe): Clayey SILT, firm, (<1/4" penetration), olive (5Y 4/4), wet, low toughness, high plasticity, rapid dilatency, low dry strength with low liquid limit.
160							SP-SW		Driller indicates "gravel" ~2' thick at 157-159. E-logs suggest resistent material from ~158-163'.
165			No Water Recovery	14:20 16:50 6/16/05 7:15		0%	ML		Clayey SILT (with Sand) off mud return at ~162'. (165-167' Simulprobe): Clayey Sandy SILT, ~10% Clay, 50% Silt, 30-40% fine Sand; firm (<1/4" penetration), olive (5Y 4/4), moist to wet but not saturated.
170							SP		(Based on E-logs)
175									

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74



In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

LOG OF BORING MW18

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: June 17, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Steve, Joe, Daniel
Checked By	: Ronald Halpern, PG	Sampling Method	: Simulprobe/Split Spoon
Drilling Company	: WDC	Diameter	: 8 3/4
Drill Rig	: GF Star30 Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW18A
Well2: MW18B
Well3: MW18C
Elev.: 144.74

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
175			OC2-PMW18 W-0-24	9:50	0.1 0.1		SP		(175-176' Simulprobe): Poorly graded SAND, ~5% silt, moist to wet but not saturated, olive gray (5Y 4/2).
							ML		(176-177' Simulprobe): SILT, moist to wet, not saturated, olive gray (5Y 4/2), ~1 cm horizontal layer of yellowish discoloration.
180							SP		(180' off mud return): Poorly graded SAND, fine to medium-grained (up to 1.5 mm), less than 3% coarse, driller indicates some gravel.
185			OC2-PMW18 W-0-26	12:50					(185-187' off Simulprobe): Poorly graded SAND, fine-grained (max 0.2 mm dia.), grayish brown (2.5Y 5/2), saturated; horizontal oxidized banding at ~186.5 ft. (1" thick) with horizontal fracture plane. Oxidized banding is strong brown (7.5YR 4/6) to dark yellowish brown (10YR 4/6).
190									Bottom of boring 190'.
195									
200									

Bentonite Chips

In greenbelt on south side of Ann Street, ~140 ft. East of Santa Fe Springs Road, on north side of Liz Clairborne facility at 9400 Santa Fe Springs Road.

Elevation = finished surface; A = Shallow; B = Intermediate; C = Deep

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Infrastructure, environment, facilities

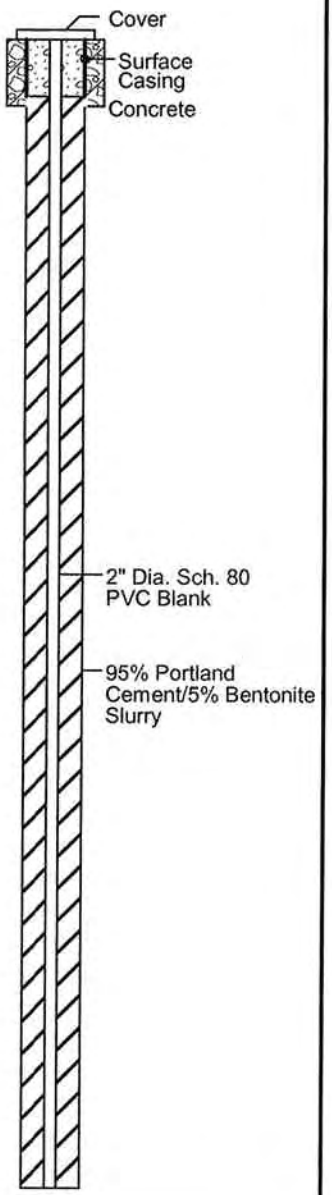
LOG OF BORING MW19

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 3, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Concrete to ~4".
									(0.5-5') SILT with Clay, medium stiff, dark yellowish brown (10YR 3/6) to brown (7.5YR 4/3), slightly moist.
5							ML		(5-9' Core) Silt, medium stiff, brown (10YR 4/3), moist, low toughness, low plasticity, low dry strength.
10							SP-SM		(9-11' Core) Poorly graded SAND with Silt to Silty SAND, ~10-20% Silt, ~80-90% fine Sand, medium dense, dark grayish brown (10YR 4/2), moist.
							ML		(11-12' Core) SILT with Sand; ~20% fine Sand, ~80% Silt, olive gray (5Y 5/2), slightly moist, no odor. (12-18' Core) Non plastic SILT, stiff, dark greenish gray (Gley 1 4/2), mottled with light greenish gray (Gley 1 7/1), moist, no odor.
15									
20									(18-19' Core) Non plastic SILT, soft, dark greenish gray (Gley 1 4/1), wet, no odor, (bordering fine Sand, max. diameter ~0.05 mm).

Well: MW19
Elev.: 158.94



DESCRIPTION OF BORING LOCATION: In sidewalk on southside of McCann, opposite Bell Ranch Drive.

NOTES: Depth in feet below ground surface (bgs). Continuous core; Elevation noted is ground surface elevation.

ARCADIS
Infrastructure, environment, facilities

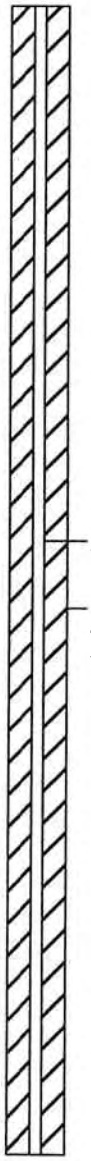
LOG OF BORING MW19

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 3, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW19
Elev.: 158.94

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
20				11:15					(19-25') Clayey SILT with Sand: ~5-10% Clay; ~20% very fine Sand, ~70-75% Silt; hard, very dark grayish brown (10YR 3/2 to 2.5Y 3/2), slightly moist; moderate to high toughness, low to moderate plasticity, slow dilatency.
25							ML		(25-30') Non plastic SILT; medium stiff, dark olive gray (5Y 3/2), moist.
30									(30-32') Non plastic SILT; hard to medium stiff, dark olive gray (5Y 3/2), mottled with olive brown (2.5Y 4/3), slightly moist to moist.
							SP		(32-33) Poorly graded SAND; fine-grained, olive gray (5Y 5/2), slightly moist.
35				12:10			ML		(33-33.5') Non plastic SILT: medium stiff to stiff, dark greenish gray (Gley 1 4/1) mottled with light greenish gray (Gley 1 7/1), moist. (33.5-39) Non plastic SILT bordering very fine Sand (<0.05 mm diameter); olive gray (5Y 5/2), slightly moist.
40							SP-SM		(39-46) Poorly graded SAND with Silt: ~10-20% Silt, 80-90% fine Sand (<0.4 mm diameter), olive gray (5Y 4/2), slightly moist.



DESCRIPTION OF BORING LOCATION: In sidewalk on southside of McCann, opposite Bell Ranch Drive.

NOTES: Depth in feet below ground surface (bgs). Continuous core; Elevation noted is ground surface elevation.

ARCADIS
Infrastructure, environment, facilities

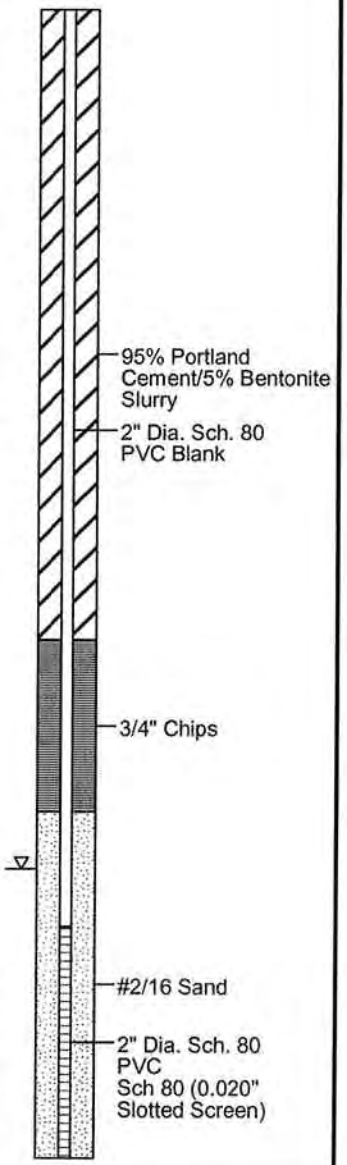
LOG OF BORING MW19

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 3, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
40									
45							SP-SM		(46-55' Core) Poorly graded SAND/Silty SAND; cemented ~20% Silt, ~60% fine Sand, ~20% medium and coarse Sand (subangular); dark greenish gray (Gley 1 4/1), dry; trace subrounded fine gravel (to 8 mm diameter)(igneous).
50									
55				13:05			SW		(55-57' Core) Well graded SAND; fine to coarse grained (max 4 mm diameter) of granitic origin; dark gray, wet.
							SP-SM		(57-58' Core) Poorly graded SAND with Silt/Silty SAND: ~10-20% silt, 80-90% fine to medium grained (max diameter 0.75 mm) Sand, dark greenish gray (Gley 1 4/1), wet.
60							SP		(58-65' Core) Predominantly fine to medium grained (80-85%), some coarse (10%), gray, wet.

Well: MW19
Elev.: 158.94



DESCRIPTION OF BORING LOCATION: In sidewalk on southside of McCann, opposite Bell Ranch Drive.

NOTES: Depth in feet below ground surface (bgs). Continuous core; Elevation noted is ground surface elevation.

ARCADIS
Infrastructure, environment, facilities

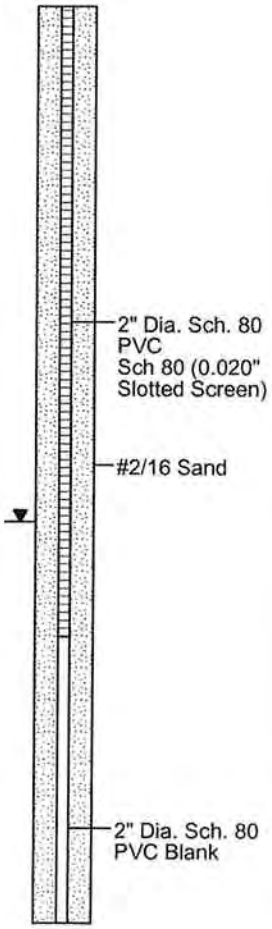
LOG OF BORING MW19

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 3, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	:
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
60									
65									Same as above.
			OC2-PMW19 W-0-3	16:25			SP		(68-75' Core) Poorly graded SAND, fine to medium grained (max 1 mm diameter), olive (5Y 5/4), wet.
70									
75				16:50			CL		(75-76' Core) Silty CLAY; stiff, brown (10YR 4/3), moist.
80									Bottom of boring at 76'.

Well: MW19
Elev.: 158.94



DESCRIPTION OF BORING LOCATION: In sidewalk on southside of McCann, opposite Bell Ranch Drive.

NOTES: Depth in feet below ground surface (bgs). Continuous core; Elevation noted is ground surface elevation.

ARCADIS
Infrastructure, environment, facilities

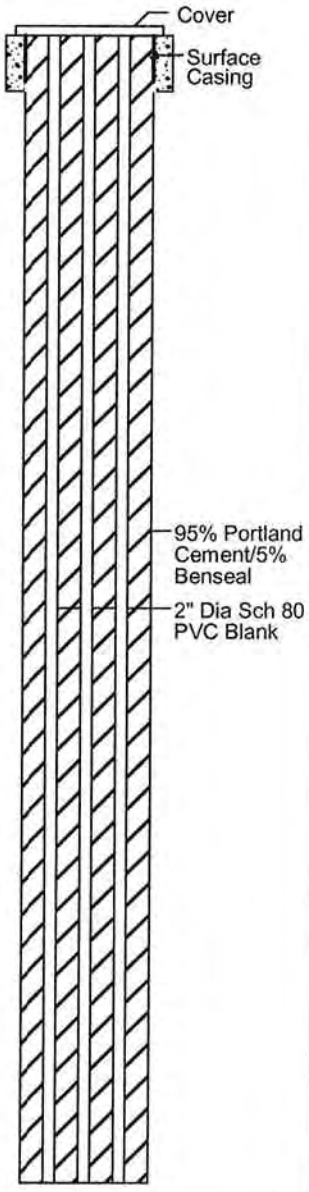
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0							ML		SILT/SILT with Sand and Gravel, ~10-15% medium to coarse sand and fine gravel (1-10 mm diameter) reddish brown, dry.
5									(8') Same as above.
10							SP		Poorly graded SAND; predominantly very fine and fine-grained ~3-5% medium to coarse sand, ~3-5% fine gravel (to 10 mm diameter); reddish brown, slightly moist.
15							SW		Well graded SAND, fine to coarse, subrounded grains (max 5 mm diameter).
20									
25									



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

09-08-2006 _OMMON\MTech5\Omega Chemical\MW-20.BOR

ARCADIS
Infrastructure, environment, facilities

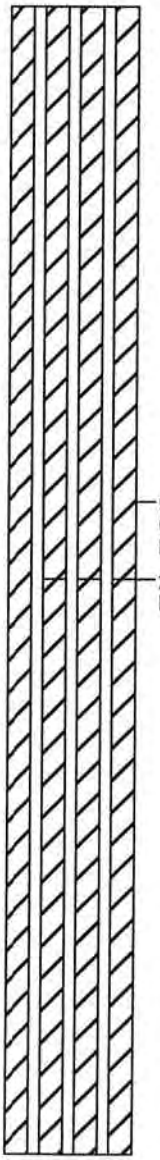
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25							SW		
30									Poorly graded SAND: medium to coarse, poorly graded, subangular-subrounded.
35									
40				-			SP		
45									Ended 5/17/06.
50									Poorly graded SAND with GRAVEL, fine to medium sand;, appears to be increasing in moisture content.



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

ARCADIS
Infrastructure, environment, facilities

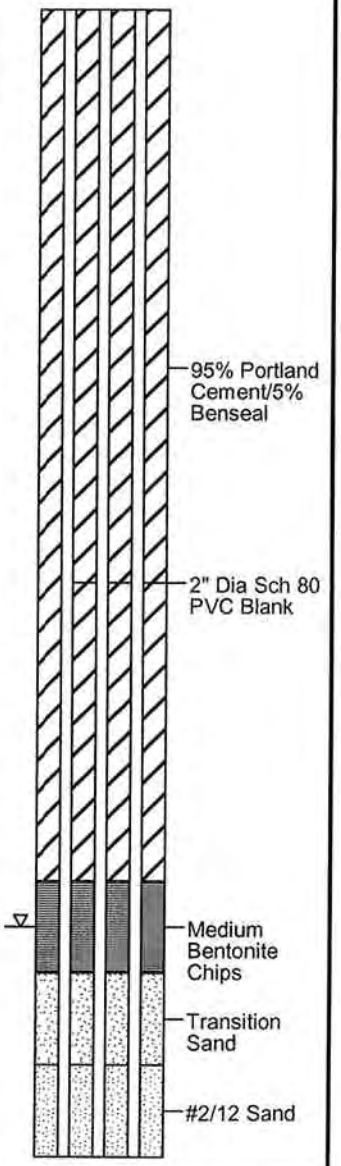
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50									
55							SP		
60							CL-ML		SILTY CLAY with Sand: medium to coarse sand and fine gravel, gravel is subrounded, (max 10 mm diameter). SILTY CLAY, dark gray, passes ribbon test.
65							ML		SILT with CLAY.
70			OC2-PMW20 W-0-1				SP-SM		(Driller notes chatter at 71'). Poorly graded SAND, fine-grained (0.1-0.5 mm diameter), some silt, wet.
75									

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

09-08-2006 _OMMON\MTech5\Omega Chemical\MW-20.BOR

ARCADIS
Infrastructure, environment, facilities

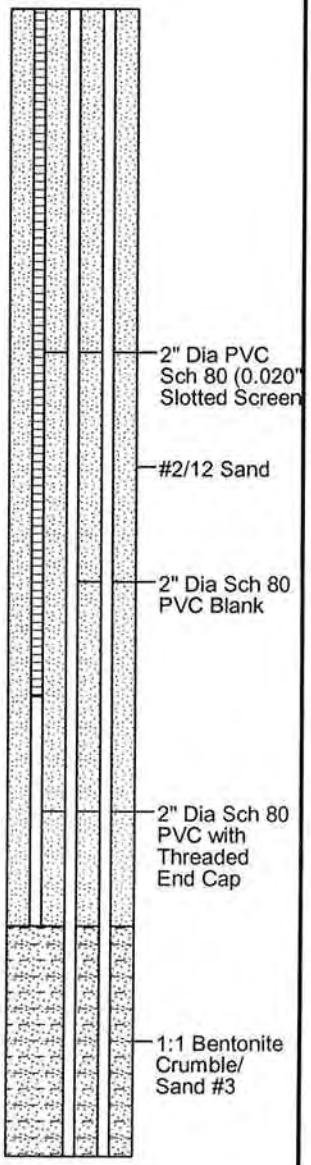
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75									
80			OC2-PMW20 W-1-2						
			OC2-PMW20 W-0-3	13:00			SP-SM		Poorly graded SAND with Silt; fine-grained, wet.
85									
90			OC2-PMW20 W-0-5	15:30					
95							ML		Non plastic SILT, dark olive brown, moist.
100									



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

09-08-2006 J:\COMMON\MTech5\Omega Chemical\MW-20.BOR

ARCADIS
Infrastructure, environment, facilities

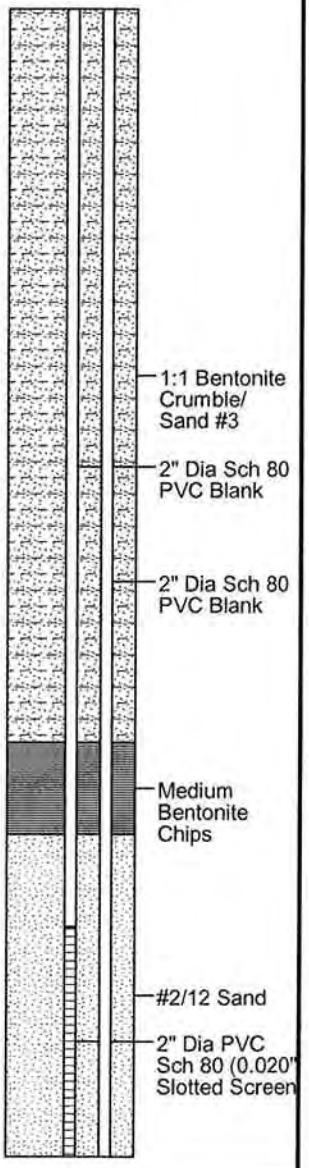
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100							ML		
	X		OC2-PMW20 W-0-6	16:40					
				Resume 5/19/06			SP-SC		Poorly graded SAND with Clay, fine-grained.
105							SP		Chatter from ~105-110, possible Gravel.
110									(111-113' Simulprobe) Poorly graded SAND, fine-grained, olive (5Y 4/3), wet, no odor.
	X		OC2-PMW20 W-0-08	9:30					
							CL		(113' Shoe) SILTY CLAY, medium stiff to stiff, yellowish brown (10YR 5/4), moist to wet, moderately tough, moderate plasticity, medium dilatency, high dry strength, no odor.
115				-					
							SP		(117' Off mud return), SAND, poorly graded, predominantly fine to medium-grained.
120				10:10					
	X		OC2-PMW20 W-0-11	11:35					(122-123' Simulprobe) Poorly graded SAND: ~3-5% Silt, ~95-97% predominantly fine to medium Sand (~0.1-2 mm diameter), ~3-5% coarse Sand (max 5 mm diameter), olive (5Y 4/3), saturated, sand subrounded, ~10-20% mafic minerals, ~60-70% quartz, ~20-30% plags.
125									



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

09-08-2006 ...OMMON\MTech5\Omega Chemical\MW-20.BOR

ARCADIS
Infrastructure, environment, facilities

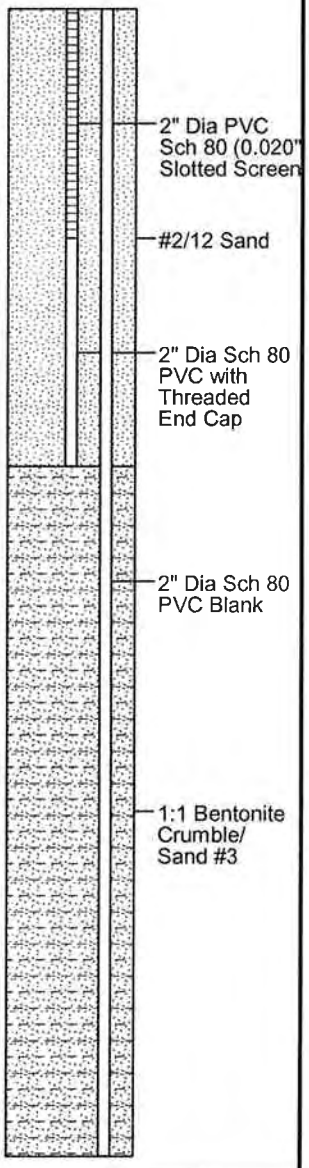
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
125							SP		(Off mud return at ~127'): Poorly graded SAND - as above.
130	X		OC2-PMW20 W-0-12	12:00 13:35			SW		(130-133' Simulprobe) Well graded SAND: ~3-5% Silt, fine to coarse Sand (95%), trace fine gravel (max 10 mm diameter), subrounded, ~25% mafic, ~50-70% quartz, 15-25% plag and other, saturated, no odor.
135							SP-SM		(133' in Shoe) Poorly graded SAND with SILT, ~5-10% Silt, 90-95% fine grained sand, olive (5Y 4/3), wet.
140	X		OC2-PMW20 W-0-14	14:25 5/19/06 5/22/06			ML-SM		SANDY SILT, possible change to Silt from mud return. (142-143' Simulprobe) Poorly graded Sandy non-plastic SILT/SILTY SAND, ~40-60% Silt, ~60-40% fine Sand, (max diametger ~0.3 mm), olive gray (5Y 4/2), with strong brown (7.5Y 4/6 to 5/6) oxidation staining on horizontal planes, wet, micaceous.
145									(148-149' Mud Return) Well graded SAND, fine to coarse grained (max diameter 5 mm), ~20-30% mafic, 20-30% plag, ~5 ortho, 35-55% quartz, subangular, speckled black, white, olive brown, saturated.
150							SW		



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

09-08-2006 ...OMMON\MTech5\Omega Chemical\MW-20.BOR

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Infrastructure, environment, facilities

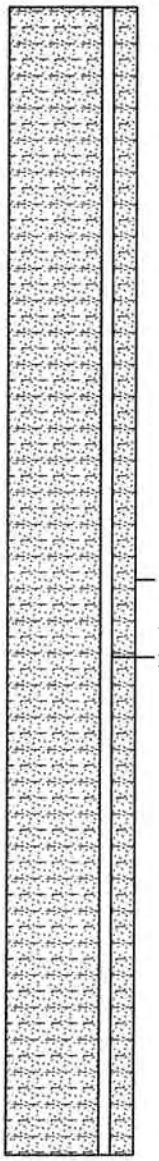
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
150			OC2-PMW20 W-0-16	9:15			SW		
			OC2-PMW20 W-1-17	9:15			ML		(Shoe of Simulprobe and mud return) (153') CLAY with Sand, lean, ~10-20% fine to medium Sand, ~80-90% Silty Clay, dark greenish gray (Gley 1 4/1), wet.
155									
160				9:50					
				11:32		None			(161.5-162.5' Simulprobe) SILT with Clay, hard, dark greenish grey (Gley 1 4/1), moist, moderately plastic.
							CL		(162.5-163') Silty CLAY, hard, dark greenish gray, moist, moderately plastic.
165				-					At 168' off mud return - same as above.
170				13:35		None	ML		(171.5-173 Simulprobe) SILT with Clay, stiff (fingernail impression), dark greenish gray (Gley 1 4/1), moist, low plasticity.
175									



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

09-08-2006 _OMMONIMTech5\Omega Chemical\MW-20.BOR

ARCADIS
Infrastructure, environment, facilities

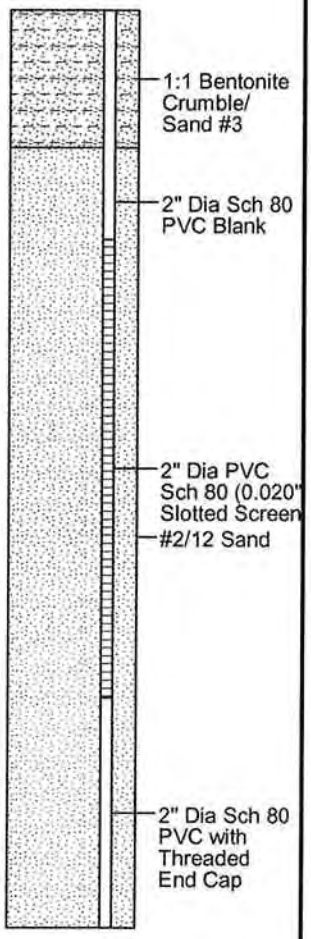
LOG OF BORING MW20

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 22, 2006	OVA	: MiniRae
Logged By	: Jeremy Cook	Driller	:
Checked By	: Ronald Halpern	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 10"
Drill Rig	: SpeedStar 30K Mud Rotary	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW-20A
Well2: MW-20B
Well3: MW-20C
Elev.: 141.99

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
175							ML		
180			OC2-PMW20 W-0-18	14:26 15:47			SP		(181.5-183 Simulprobe) Poorly graded SAND, ~3-5% Silt, ~95-97% fine to medium Sand (max 2 mm diameter), dark greenish gray to dark greenish black (Gley 1 3/1 to 2.5/1), wet.
185									At 187' off mud return - same as above.
190									
				16:25					At 193' off mud return - same as above.
195							SM CL		(194-194.75' Simulprobe) Well graded Silty SAND w/gravel and clay, ~20-25% coarse gravel (~15-25 mm dia., subangular-subrounded igneous), ~50-60% fine to coarse sand, ~20-25% dark greenish gray silt with clay (Gley 1 3/1) matrix. (194.75-195' Shoe) Silty CLAY, ~5-10% fine to medium sand in a silty clay matrix, stiff, dark greenish gray to greenish black (Gley 1 3/1-2.5/1), moist.
200									Bottom of boring 195'.



PMW-20 is in th sidewalk on east side of Geary Road in Santa Fe Springs, adjacent to the southwest corner of Cascade Water Pumps facility. Directly to the east is a oil field with 6 wells.

Elevation noted is ground surface. A = Shallow; B = Intermediate; C = Deep

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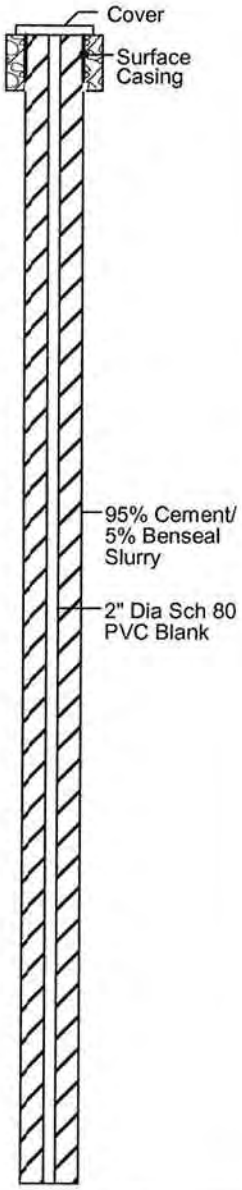
LOG OF BORING MW21

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 1, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Rivera
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm Isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Grass surface to ~6".
									(0.5-3'): SAND and SAND with SILT; ~5-10% silt, 90-95% fine to medium sand, gray (5Y 5/1), moist, strong petroleum odor.
									(3-3.5'): Asphaltic layer, possibly remnant of oil field road (extensive laterally).
5							SP-SM		SAND - same as above, crude petroleum odor.
10					>4000				
					>4000		ML		(12.5-13.5'): SILT, soft, black (5Y 2.5/1), wet, strong petroleum odor, ~3-5% organic (wood chips) debris. (Fill ?).
							SP-SM		(13.5-15'): Poorly graded SAND with Silt, ~5-10% silt, 90-95% fine to medium sand, gray (5Y 5/1), moist, petroleum odor.
15				-	>4000		ML		(15-17'): SILT, soft, black (5Y 2.5/1), wet, low to moderate odor, peat and wood chips ~16.75 ft. (Fill ?).
					50				(17-25'): Well graded SAND with Gravel, ~70% fine to coarse sand, subrounded, ~30% fine and coarse subrounded igneous gravel (max 60 mm diameter), dark yellow brown (10YR 3/6), moist.
20				10:30			SW		
25									

Well: MW21
Elev.: 128.91



DESCRIPTION OF BORING LOCATION: On west side of Pioneer Blvd., in green belt in front of 9929 Pioneer Blvd., ~4 feet from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation = finished surface.

09-12-2006 ...\COMMON\MTech5\Omega Chemical\MW-21.BOR

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Infrastructure, environment, facilities

LOG OF BORING MW21

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 1, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Rivera
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW21
Elev.: 128.91

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25									(~25-36'): Well graded SAND with SILT, ~5% fine subangular gravel (max 15 mm diameter), ~15% silt, ~80% fine to coarse sand, (maximum 5 mm diameter), subangular, cemented, hard, light olive brown (2.5Y 5/4), dry.
30							SW-SM		
35							SW		(36-38'): Well graded SAND with Gravel, ~20% predominantly fine subangular, igneous gravel (max 8 mm diameter), ~80% fine to coarse sand (max 5 mm diameter), subangular, olive brown (2.5Y 4/3), dry.
							CL-CH		(38-40'): Fat CLAY, medium stiff, olive brown (2.5Y 4/3), moist to wet, some black organic staining (crude?), positive ribbon test, moderate toughness, no dilatency, high plasticity, high dry strength.
40				11:10					(40-48'): Poorly graded SAND, fine-grained, trace Silt, light olive brown (2.5Y 5/3), slightly moist.
45							SP		
							SW		(48-49.5'): Cemented,well graded SAND with Gravel, ~5% Silt, 85% fine to coarse sand, ~10% fine subangular igneous gravel, hard, light olive brown (2.5Y 5/6), slightly moist, no odor.
50							ML-SM		

95% Cement/ 5% Benseal Slurry

2" Dia Sch 80 PVC Blank

DESCRIPTION OF BORING LOCATION: On west side of Pioneer Blvd., in green belt in front of 9929 Pioneer Blvd., ~4 feet from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation = finished surface.

09-12-2006 ...OMMON\MTech5\Omega Chemical\MW-21.BOR

ARCADIS
Infrastructure, environment, facilities

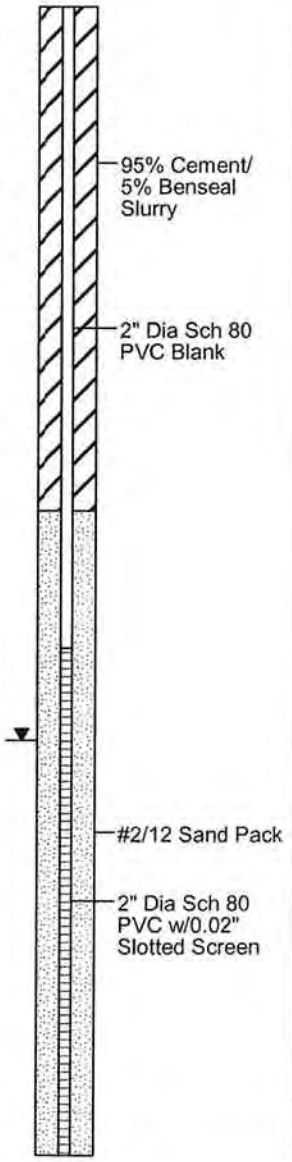
LOG OF BORING MW21

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 1, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Rivera
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50				12:50			ML-SM		
							SM		(50.5-52'): Well graded Silty SAND, ~20% silt, 70-75% fine to coarse rounded Sand (max 5 mm diameter), ~10% fine rounded igneous Gravel, dense, olive brown (2.5Y 4/3), wet (due to cleanout water), w/black org staining (no odor)
							SP		
55							CL		(52-54'): Poorly graded SAND, ~3-5% fine and coarse subrounded igneous Gravel (max 70 mm diameter), brown (7.5YR 5/4), dry.
							ML-SP		(54-56'): Interbedded CLAY and CLAYEY SAND (with iron staining), clay stiff (<1/4" penetration).
60							SP		(56-57'): SILT/Poorly graded SAND. (57-58'): Poorly graded SAND, fine to medium grained (maximum 1 mm diameter), brown.
65									Wet at 66 feet.
				15:00			SW		(68-69' Split Spoon): Well graded SAND, ~3-5% silt, 95-97% fine to coarse sand (maximum 5 mm diameter), subrounded, dense, yellowish brown (10YR 5/4), wet, occasional subangular to subrounded igneous fine and coarse gravel (maximum .28 mm diameter).
				5/1/06					
70			OC2-PMW21 W-0-03	8:15			SP		(69-76'): Poorly graded SAND, ~3-5% subangular to subrounded, igneous, fine to coarse gravel (maximum 50 mm diameter), 95-97% fine to medium sand (maximum 1.5 mm diameter), yellow brown (10YR 5/4), wet.
75									

Well: MW21
Elev.: 128.91



DESCRIPTION OF BORING LOCATION: On west side of Pioneer Blvd., in green belt in front of 9929 Pioneer Blvd., ~4 feet from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation = finished surface.

09-12-2006 ...\COMMON\MTech5\Omega Chemical\MW-21.BOR

ARCADIS
Infrastructure, environment, facilities

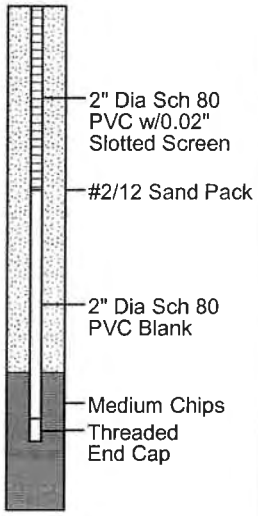
LOG OF BORING MW21

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 1, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Rivera
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW21
Elev.: 128.91

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75							SP		
			OC2-PMW21 W-0-05	9:55			SW		(76-78.5'): Well graded SAND with Gravel, ~3-5% Silt, ~15-20% fine subrounded (granitic) gravel (max 8 mm diameter), ~75-80% fine to coarse sand, grayish brown (10YR 5/2), wet.
80							SP		(78.5-81'): Poorly graded SAND, fine grained (maximum 0.5 mm), olive brown (2.5Y 4/3), wet.
							ML		(81-85.5'): Non plastic SILT, medium stiff, light olive brown (2.5Y 5/4), moist, low to toughness, low plasticity, moderate dilatency, low dry strength.
85							SP-SM		(85.5-86'): Poorly graded SAND with Silt, ~5-10% Silt, ~90-95% predominantly fine sand, with ~3-5% medium grained (maximum 2 mm diameter), occasional fine gravel (maximum 6 mm diameter), olive brown (2.5Y 5/4), moist.
90									Bottom of boring at 86'.
95									
100									



DESCRIPTION OF BORING LOCATION: On west side of Pioneer Blvd., in green belt in front of 9929 Pioneer Blvd., ~4 feet from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation = finished surface.

09-12-2006 ...\COMMON\MTech5\Omega Chemical\MW-21.BOR

ARCADIS
Infrastructure, environment, facilities

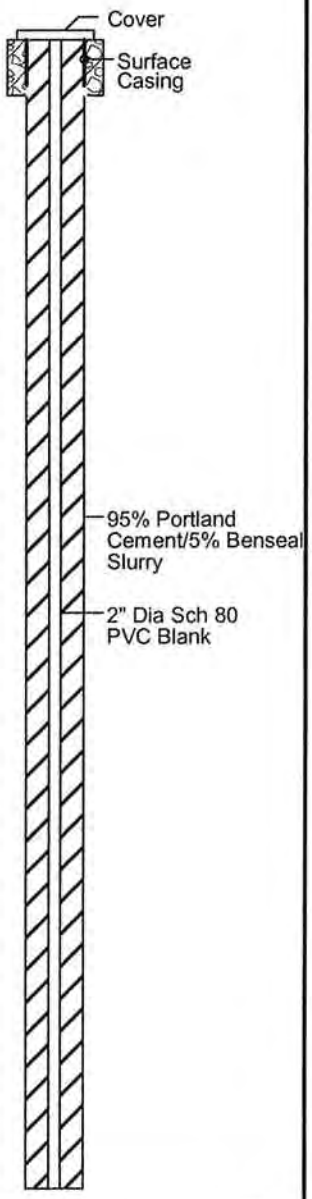
LOG OF BORING MW-22

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: April 27, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW-22
Elev.: 151.36

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0								Sod to ~6".
			4/24/06			SM		SILTY SAND, ~20-30% Silt, ~70-80% fine sand, soft, brown to reddish brown, wet, rootlets (Fill).
5			4/25/06 9:40			SM-SC		Post hole to 5 ft. SILTY SAND with CLAY, CLAYEY SAND with SILT, ~60-80% fine Sand, ~20-40% silt and clay, medium stiff, dark brown (10YR 8/2), moist.
			9:55					Same as above.
10						SP		(10-10.67') Poorly graded SAND, fine-grained (max. 0.5 mm diameter), dark yellowish brown (10YR 4/6), slightly moist.
						ML		(10.67-12.5') Non plastic SILT, medium stiff, friable, ollive brown (2.5Y 4/4), moist.
						SP		(12.5-14') Poorly graded SAND, fine-grained, yellowish brown (10YR 5/4), moist.
						ML		(14-14.67') SILT, stiff to hard, olive brown (2.5Y 4/4), slightly moist, low to medium toughness, low to medium plasticity, low dry strength.
15			10:10			SP-SM		
						ML		
						SP		(14.67-15') Poorly graded SILTY SAND, SAND with SILT, ~10-20% silt, 80-90% fine sand, (max. 0.5 mm diameter), olive brown (2.5Y 4/3), slightly moist.
20						SM		(15-15.3') SILT with CLAY, hard, slightly moist, brown (10YR 4/3), mottled with oxidation stains, low toughness, medium plasticity, low dry strength, and yellowish brown, horizontal lamina.
			11:00					(15.3-16.3') Poorly graded SAND, fine to medium grained, (max 1 mm diameter), light olive brown (2.5Y 5/4), slightly moist.
						SP		(16.3-16.7') Poorly graded SILTY SAND, ~20-30% silt, 80-90% fine to low end medium sand (max 1 mm diameter) hard, friable, (semiconsilidated) brown (10YR 4/3), slightly moist, mottled with oxidation stains.
25								



DESCRIPTION OF BORING LOCATION: On east side of Arlee, just north of Terradell, ~3 1/2 ft. in from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation noted is ground surface/finished surface.

09-12-2006 ...\COMMON\MTech5\Omega Chemical\MW-22.BOR

ARCADIS
Infrastructure, environment, facilities

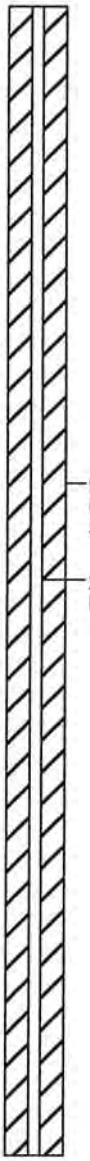
LOG OF BORING MW-22

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: April 27, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW-22
Elev.: 151.36

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25						SP		(23-26') Poorly graded SAND, fine (max 0.3 mm diameter), light olive brown (2.5Y 5/3), slightly moist, trace fine and coarse gravel size rounded, nodules consolidated sand.
						SP-ML		
						SP-SM		(26-26.5') Poorly graded SAND/SILT; very fine sand bordering silt, olive brown, hard, slightly moist, consolidated.
30			11:00			SM-SS		(26.5-29') Well graded SAND with GRAVEL, ~3-5% silt, ~25% fine and coarse gravel (sedimentary) ~70% well-graded fine to coarse sand (max 5 mm diameter), light olive gray (5Y 6/2), slightly moist.
						SW		(29-30') Poorly graded SILTY SAND, ~20-30% silt, ~10-15% med-coarse sand, ~55-70% fine sand consolidated, hard, dark grayish brown (2.5Y 4/2), moist, trace fine gravel (3-5%).
						SW-SM		
35						SP		(30-33') Well graded SAND with GRAVEL, ~60-70% fine to coarse sand (max 5 mm diameter), subangular, ~30-40% fine and coarse subrounded to subangular gravel (max 60 mm diameter), light yellowish brown (2.5Y 6/3), slightly moist, gravel igneous to wet.
			11:55			SW-SM		(33-34') Well graded SAND with SILT and GRAVEL, ~5-10% silt, ~60% fine to coarse sand (max 5 mm diameter), ~30% fine and coarse subangular to angular gravel (max 30 mm diameter), light brownish gray (2.5Y 6/2), slightly moist, gravel is consolidated sedimentary (Sand and Silty Sand).
40								(34-38.5') Poorly graded SAND, predominantly fine to medium (max 2 mm diameter) sand, ~5-10% coarse sand, 3-5% fine subrounded gravel, light olive brown, slightly moist.
45			13:10			SP		(38.5-43') Well graded SAND with GRAVEL, fragmented sand stone, ~5-10% silt, ~50% fine to coarse sand (max 5 mm diameter), ~40% fine gravel size subangular to angular rock chips (sedimentary).
						SW		(43-47.5') Poorly graded SAND, ~5-10% subrounded fine and coarse gravel (igneous and metamorphic), ~90-95% fine to medium sand, slightly moist, increasing grain size to coarse like gravel.
50								



DESCRIPTION OF BORING LOCATION: On east side of Arlee, just north of Terradell, ~3 1/2 ft. in from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation noted is ground surface/finished surface.

09-12-200b ...\COMMON\MTech5\Omega Chemical\MW-22.BOR

ARCADIS
Infrastructure, environment, facilities

LOG OF BORING MW-22

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: April 27, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW-22
Elev.: 151.36

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50			13:10			SW		(47.5-53.5') Well graded SAND with GRAVEL, ~20-30% subangular to subrounded igneous gravel (max 40 mm diameter), ~70-80% fine to coarse sand (max 5 mm diameter), light yellowish brown (2.5Y 6/4), slightly moist. Same as above, light gray (2.5Y 7/2), Gravel fine to coarse (max 20 mm diameter).
55						ML		(54.5-55.5') Non plastic SILT with SAND - SANDY SILT, ~25-35% med-coarse sand (max 5 mm diameter), ~65-75% silt, hard, yellowish brown (10YR 5/4), moist, consolidated, trace fine angular gravel.
			15:05			SP		(56-57') Poorly graded SAND, predominantly fine to medium grained, hard, (consolidated), pale olive (5Y 6/3), moist.
						SP-SM/SW-SM		(57-60) Poorly to well graded SAND with SILT, ~5-10% silt, 50-60% fine sand, ~30-40% coarse sand (max 5 mm diameter), pale olive (5Y 6/3), slightly moist.
60						ML		(60-61') SILT with SAND, ~15-20% medium to coarse sand (max 5 mm diameter), trace fine gravel (max 8 mm diameter), ~80-85% silt borderline v. fine sand, light olive brown (2.5Y 5/4), dry, occasional coarse gravel (to 30 mm diameter).
						SW-SM		(61-63') Well graded SAND with SILT, ~5-10% fine subrounded igneous gravel (max 8 mm diameter), ~10-20% silt, ~70-85% fine to coarse sand; light yellowish brown (2.5Y 6/3), dry, increasing gravel to ~15% by 62.5 feet, gets moist to wet by 64 feet, consolidated.
65						SW		Poorly graded SILTY SAND, ~20% silt, 80% fine sand, hard (fragmented), brown, wet at 66 feet.
		OC2-PMW22 W-0-04	4/26/06 10:42					
		OC2-PMW22 W-1-05	10:43					
70			11:30			SP		(66-76') Poorly graded SAND, fine to medium (max 1 mm diameter), dark olive brown (2.5Y 3/3), wet, occasional coarse gravel (subrounded gneiss and/or igneous max 60 mm), micaceous sand with biotite and mafic minerals.
75								

95% Portland Cement/5% Benseal Slurry
2" Dia Sch 80 PVC Blank
Medium Chips
#2/16 Sand Pack
2" Dia. PVC Sch 80 (0.020" Slotted Screen)

DESCRIPTION OF BORING LOCATION: On east side of Arlee, just north of Terradell, ~3 1/2 ft. in from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation noted is ground surface/finished surface.

09-12-200... ...\COMMON\MTech5\Omega Chemical\MW-22.BOR

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Infrastructure, environment, facilities

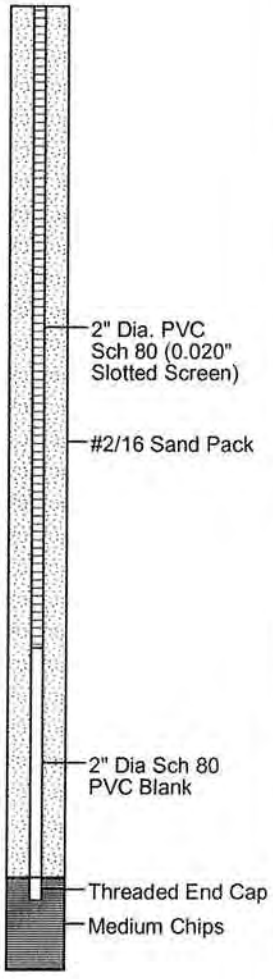
LOG OF BORING MW-22

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: April 27, 2006	OVA	: MiniRae
Logged By	: Ronald Halpern	Driller	:
Checked By	: Ronald Halpern	Drilling Method	: Sonic
Drilling Company	: WDC	Diameter	: 6"
Drill Rig	: Sonic SpeedStar 15K	Calibration Gas/Conc	: 100 ppm isobutylene

Well: MW-22
Elev.: 151.36

Depth in Feet	Samples	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75								
		OC2-PMW22 w-0-06	13:40					(76-88') Same as above - increasing grain size - predominantly, fine to medium (0.1 to 2 mm), occasional coarse sand (up to 4 mm diameter), occasional coarse subrounded igneous Gravel (max 30 mm diameter).
80						SP		
85			15:00					
		OC2-PMW22 W-0-07	16:40 4/27/06			ML		(88-88.5') Non plastic SILT, stiff, light olive brown, moist.
90				-		SP		(88.5-91') Poorly graded SAND, fine to medium (max 2 mm diameter).
			9:00			ML-SM		(91-92') SILT borderline SILTY SAND v. fine Sand <0.1 mm with ~5-10% ~0.1-0.2 mm diameter sand, hard, olive brown, moist to wet, laminar black (organic?) layers, horizontal separation.
						SP		(92-94') Poorly graded SAND, fine to medium grained (max 2 mm diameter).
95						ML		(94-96') Non plastic SILT, ~3-5% fine sand, ~95-97% silt, medium stiff, friable, olive brown (2.5Y 4/3), moist, horizontal laminations.
100								Bottom of boring at 96'.



DESCRIPTION OF BORING LOCATION: On east side of Arlee, just north of Terradell, ~3 1/2 ft. in from curb.

NOTES: Depth in feet below ground surface (bgs). Elevation noted is ground surface/finished surface.

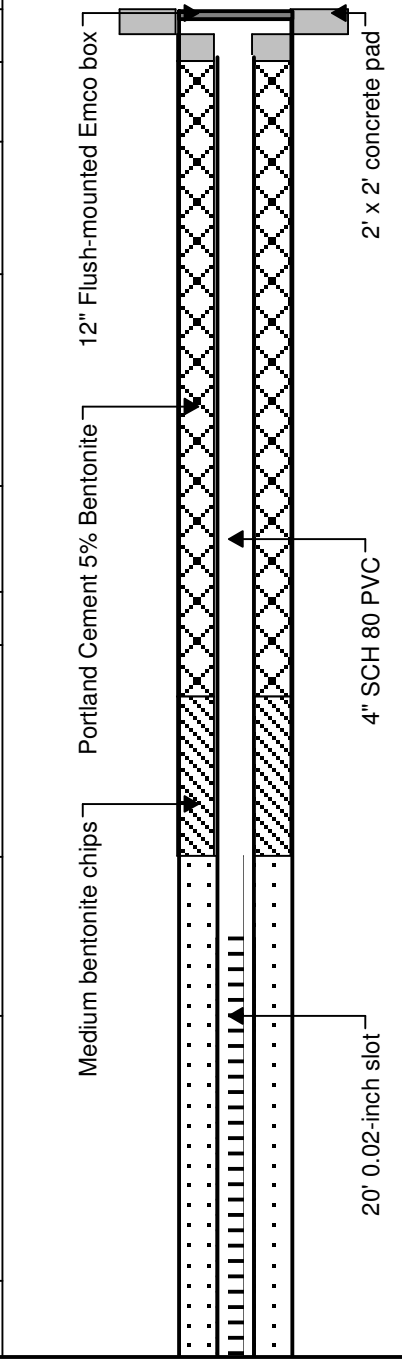
CH2MHILL

Well Number: MW-23A

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Beasor Dr. & Burke St., Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/16/07 to 5/17/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
				Ground Surface	
0	1030	0.0			0
				SILT (ML) very dark grayish brown (2.5 Y 3/2), moist, stiff	2
5				**SANDY LEAN CLAY (CL)** dark yellowish brown (10 YR 4/6), moist, stiff	5
10	1050	0.0		**LEAN CLAY (CL)** dark grayish brown (10 YR 4/2), moist, 90% fines, 5% fine sand, very stiff	10
15					
				LEAN CLAY (CL) as above	18
20	1110	0.0			
				LEAN CLAY (CL) as above, except soft, low plasticity	22
25				**LEAN CLAY (CL)** dark grayish brown (10 YR 4/2), moist, 90% fines, 10% fine sand, very stiff	24
30	1130	0.0			
				POORLY GRADED SAND WITH SILT (SP-SM brown (10 YR 5/3), moist, 90% medium sand, 10% fines	32
35					
				POORLY GRADED SAND (SP) as above, 10% rounded gravel up to 30 mm	38
40	1145	0.0			
45					
				POORLY GRADED SAND (SP) as above	48
50	1150	0.0			



Drilling Comments

Hand Auger to 5' bgs

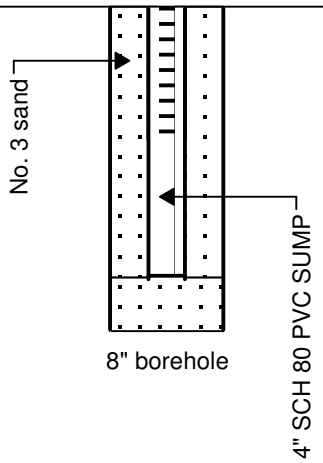
Depth to water at 35' bgs

Well Number: MW-23A

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Beasor Dr. & Burke St., Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/16/07 to 5/17/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
55							
60	1205	0.0		**POORLY GRADED SAND WITH GRAVEL (SP** brown (10 YR 5/3), wet, 70% medium to coarse sand, 30% subrounded gravel up to 60 mm	58		
65							
70	1310	0.0		**SANDY LEAN CLAY (CL)** brown (10 YR 4/3), wet, 60% fines, 40% fine sand, stiff	68		
75				End of Log			
80							
85							
90							
95							
100							



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Infrastructure, environment, facilities

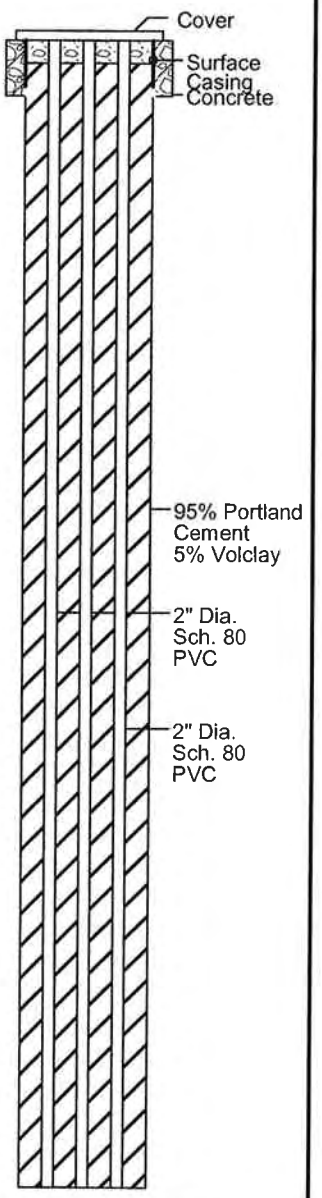
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
0									Sod
				5/16/05 @ 16:00					
5									
10									
				16:05	0.2		ML		(Off cyclone cuttings). SILT with Clay; olive brown, wet, very soft, no odor.
15									
20				16:10					(Off cyclone). Same as above.
25									



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
Elevation noted is finished surface grade. B = Intermediate; C = Lower Intermediate; D = Deep

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Infrastructure, environment, facilities

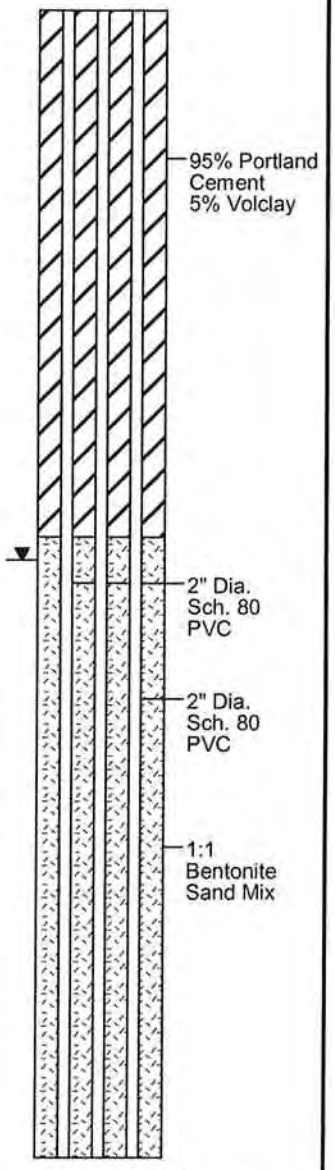
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
25							CL		(Off cyclone). SILTY CLAY, brown (10YR 4/3), moist, soft, no odor; medium tough, moderate plasticity, no dilatency.
30				16:30	0.3				(Off cyclone). Same as above, dark brown to brown.
35				16:33	0.2		SP-SM		(Off cyclone). SAND with Silt; approx. 5-10% brown silt; 90-95% fine-grained sand; dark brown (10YR 3/3), moist, no odor. Groundwater apprx. 37 feet bgs based on water staining on drill rods.
40			OC2-PMW23 W-0-03	16:40			SW		(38-40' Off cyclone). Well graded SAND, apprx. 2-5% silt; 95-98% fine to coarse sand (max diam. 5 mm), occassional fine gravel (max. diam. 20 mm); brown (10YR 4/4), wet, no odor.
45				5/17/05 7:30			GW		Well graded GRAVEL with Sand; apprx. 30% fine to coarse sand, 70% fine and coarse gravel (max. diam. 30 mm), subrounded igneous (granitic) gravel.
50				7:40			SP		



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
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Infrastructure, environment, facilities

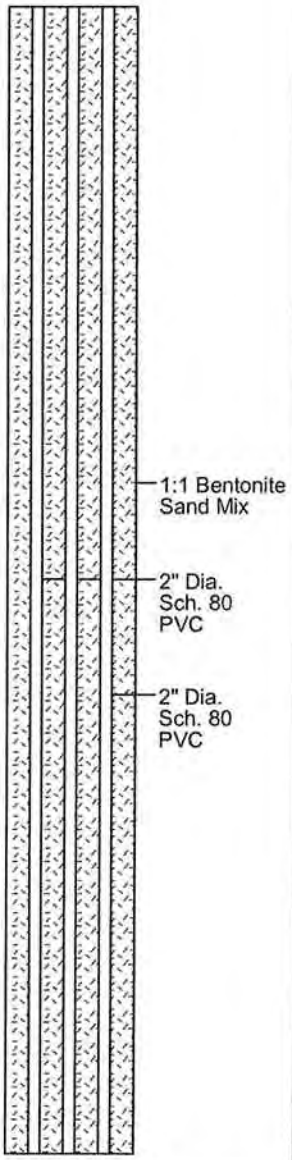
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
50	X		OC2-PMW23 W-0-05	13:20	2.0		SP		(~50' Off cyclone). Poorly graded SAND, ~95-98% fine to medium grained (max. diam. 1 mm), brown, saturated, trace silt, occasional fine and coarse gravel (max. 35 mm diam). (From Simulprobe): Poorly graded SAND with Gravel; ~30% fine to coarse gravel, ~70% fine to medium sand (max. diam. 1.5 mm), brown (10YR 4/3) wet to saturated, no odor, Gravel is subangular to subrounded igneous with max. diam. of 25 mm
55									
60	X		OC2-PMW23 W-0-07	13:40 16:20	2.2		SW		(Off split-spoon). Well graded SAND, ~5% silt, 95% fine to coarse sand (max. diam. 5 mm), trace fine gravel (max diam. 7 mm), dark grayish brown (10YR 4/2), saturated, no odor.
							GW		Well graded GRAVEL with Sand; 60-80% fine and coarse gravel.
65				-			SW		Well graded SAND, fine to coarse, brown, saturated. Alternating layers of SP, SW and GW as described above, max. diam. 35-40 mm, subangular to subrounded igneous and metamorphic (gneiss) gravel.
70	X			17:41	1.9	No Water Recovery	SP		Poorly graded SAND, ~3-5% silt, 95-97% fine to medium sand (max diam 2 mm), brown to dark grayish brown (10YR 4/3-4/4), wet, no odor.
75									



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Infrastructure, environment, facilities

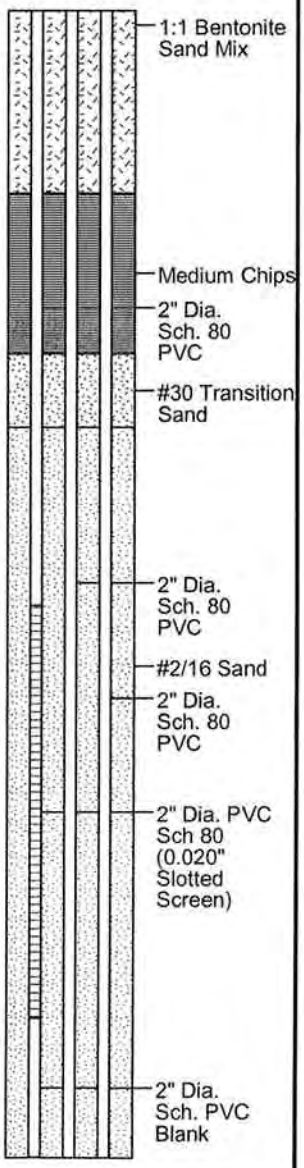
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
75				5/18/05 7:50			SP-SM		(Off cyclone). Poorly graded SAND with Silt; ~5-10% brown silt, 90-95% predominately fine to medium sand (max diam 1 mm), very dark grayish brown (2.5Y 3/2), saturated, no odor.
				7:55	1.5				
80									Driller noted changes in drilling conditions at 79' bgs.
		90	OC2-PMW23 W-0-013		1.3		ML		SILT, very dense, olive (5Y 4/3), wet, no odor, rapid dilatency, low toughness, moderate plasticity.
85									Driller felt change in drilling conditions.
							SP-SM		(88-90' Off cyclone). Poorly graded SAND, Sand with Silt; ~3-10% silt, very fine to fine sand (max 0.2 mm), speckled brown and black, saturated, no odor, micaceous.
90			OC2-PMW23 W-0-16	13:25					
				14:28	1.1		SP		(Split-spoon). Poorly graded SAND, fine grained (max 0.5 mm), very dense, olive brown (2.5 YR 4/3), saturated, micaceous, mafic gravels.
95							GP		(Off cyclone). Poorly graded GRAVEL with Sand, ~80% fine gravel (max 18 mm), ~20% coarse sand, saturated, subrounded, igneous.
				14:48			ML		(Off cyclone). SILT, brown, saturated.
100									



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
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ARCADIS
Infrastructure, environment, facilities

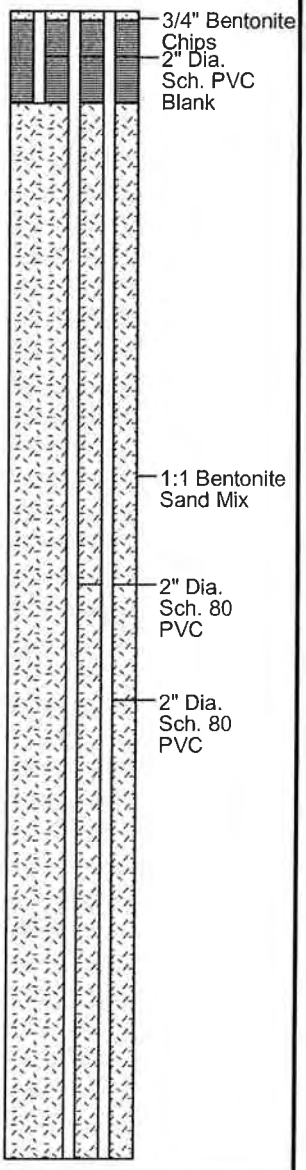
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
100				15:38	0.3	No Water Sample	ML		(101-102' from split spoon). SILT, very stiff (<1/4" penetration); olive brown (2.5 YR 4/3), moist, no odor, rapid dilatency, moderate toughness, low plasticity, low liquid limit, low dry strength.
105									
110		100		16:15	0.1	No Water Sample	CL		SILTY CLAY, stiff to very stiff (~1/4" penetration), olive brown (2.5 YR 4/3), moist, occasional gray (organic) staining/marine-trace shell molds, moderate tough, high plasticity, no dilatency.
115				-					
120				17:00	0.3	No Water Sample			SILTY CLAY - Same as Above.
125									



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
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ARCADIS
Infrastructure, environment, facilities

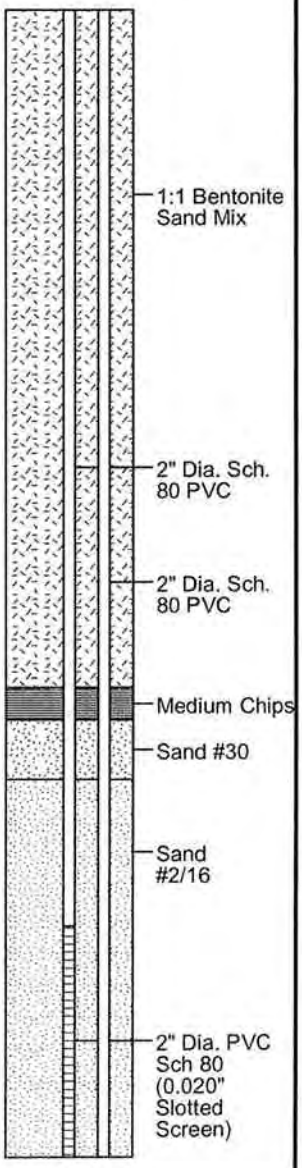
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
125							CL		Set Simulprobe 130-132 on 5/18/05. End drilling 5/18/05.
130			OC2-PMW23 W-0-21	5/19/05 7:20	0.8		ML		SILT with Clay, stiff, brittle, olive (5Y 4/4), moist, no odor.
135							SP		(Off cyclone). Poorly graded SAND, predominantly medium grained (80%) with fine (3-5%) and coarse (~15%) sand and trace silt, olive brown, saturated, no odor.
140			OC2-PMW23 W-0-27	11:49	1.0		SW		(139' Off cyclone). Poorly graded SAND, same as above. (141-142' Off split spoon). SAND, Well Graded, ~40% fine to medium-grained, ~60% coarse sand (max 5 mm) to fine gravel (12 mm), olive brown (2.5Y 4/3), saturated.
145							SP		(Off split spoon). Poorly graded SAND, fine to medium-grained (max 1 mm diameter), olive brown.
150									

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
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ARCADIS
Infrastructure, environment, facilities

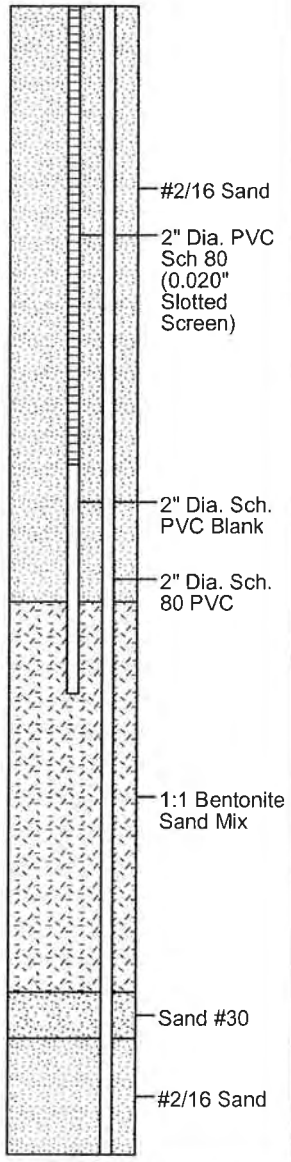
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
150			OC2-PMW23 W-0-29	12:52	0.7				(151-152' off split spoon). Poorly graded SAND with Silt, fine to medium grained. Stopped drilling 5/20/05 152'. Resumed drilling 5/23/05 at 7:30 a.m.
155							SP-SM		
160			OC2-PMW23 W-0-32	5/20/05 8:45	0.4		GW		(160.5-161' from split spoon). Well graded GRAVEL, fine to coarse gravel (max 30 mm), subrounded, subangular, igneous.
							ML		(161-162' off split spoon). SILT, stiff, olive brown (2.5Y 4/3 to 4/4), moist, low toughness, rapid dilatency, low plasticity.
165				-	0.7		ML-CL		(166-167' off split spoon). CLAYEY SILT, SILTY CLAY, hard, light olive brown (2.5 Y 5/4), moist, no odor, brittle, low to moderate plasticity, low to moderate toughness, slow to moderate dilatency.
170			OC2-PMW23 W-0-34	13:40	0.6		GP		Poorly Graded GRAVEL, predominatly fine, (4-10 mm diam), subangular to subrounded, igneous origin (quartz, orthoclase, mafic), saturated (possible sluff).
							ML-CL		(171.5-172' off split spoon). CLAYEY SILT, SILTY CLAY, hard (<1/8" indentation), olive (5Y 4/4), moist to wet, no odor; Thin lamina (1-2 cm) gravelly clay, with fine to coarse gravel.
175									



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
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ARCADIS
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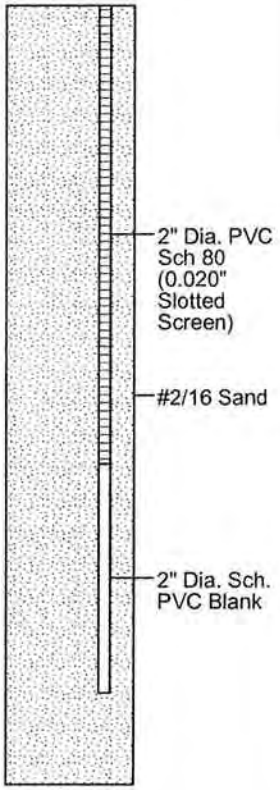
LOG OF BORING MW23

Omega Chemical Operable Unit 2
Project No. CA000646.0001

Date Completed	: May 20, 2005	OVA	: MiniRae
Logged By	: Ronald Halpern, PG	Driller	: Mark Green
Checked By	: Ronald Halpern, PG	Sampling Method	: Core/Simulprobe
Drilling Company	: WDC	Diameter	: 9 3/4 inches
Drill Rig	: Faline Star SOK-CH ARCH/Mud	Calibration Gas/Conc	: 100 ppm isobutylene

Well1: MW23B
Well2: MW23C
Well3: MW23D
Elev.: 149.35

Depth in Feet	Samples	Blow Count	Lab No.	Time	OVA	Recovery %	USCS	GRAPHIC	DESCRIPTION
175									
180	X		OC2-PMW23 W-0-36	16:40	0.5		SP-SM		(180.5-182' off split spoon). Poorly graded SAND with Silt, ~5-10% silt, ~90-95% fine and medium-grained sand (max 1 mm diam), very dense, light yellowish brown (2.5Y 6/3), thin lamina (2-3") of predominantly fine gravel (<19 mm) some coarse (max 30 mm) subrounded, igneous origin from 180.5 to 180.75 ft bgs.
185									
190	X		OC2-PMW23 W-0-39	17:20			GP		(191-191.5 off split spoon). Poorly graded GRAVEL with Sand, ~60-70% fine gravel (5 to 10 mm diam), 30-40% fine to coarse sand, ~3-5% silt, olive (5Y 4/4), very dense, saturated, no odor, possible slough.
							SP		(191.5-192' off split spoon). Poorly graded SAND, predominantly fine grained, (~80%), ~15% medium grained, 3-5% silt, olive brown, very dense, wet, no odor.
195									Bottom of boring at 192'.
200									



In greenbelt on the northeast side of Burke Street, just northwest of Beasor Road (near PPO34).
Elevation noted is finished surface grade. B = Intermediate; C = Lower Intermediate; D = Deep

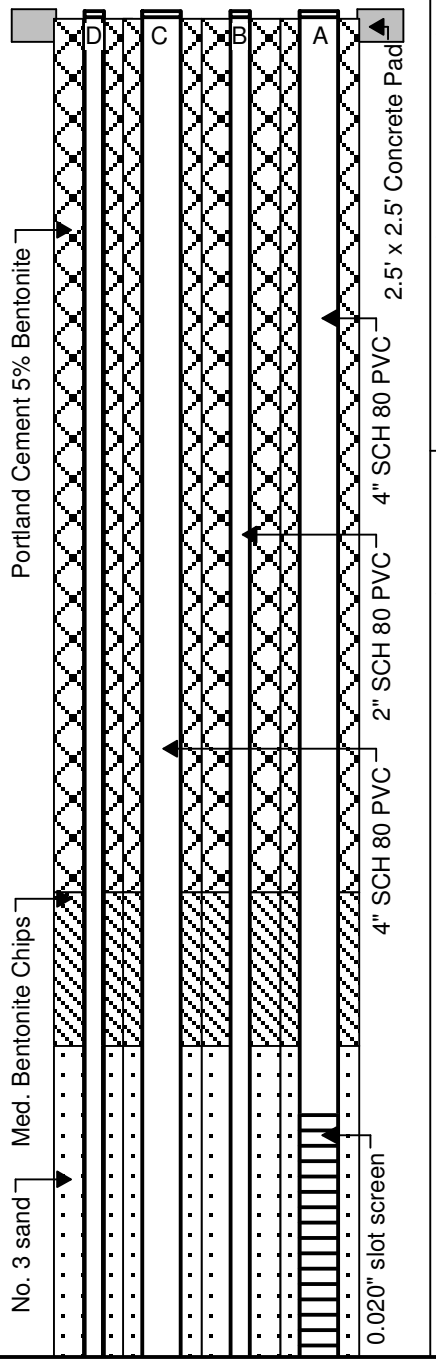
CH2MHILL

Well Number: MW-24

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Washington Blvd. & Lambert Dr., Whittier, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab and Simulprobe
Logged by: J. Ockerman
Start/Finish Date: 5/25/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: Simulprobe	Soil Log	Soil Description	Depth / Elev
				Ground Surface	0
10	1015			**CLAYEY SAND (SC)** strong brown (7.5 YR 5/6), moist, 70% medium sand, 30% fines	10
20	1050			**SILTY SAND (SM)** strong brown (7.5 YR 5/6), moist, 70% medium sand, 30% fines	20
30	0850			**POORLY GRADED SAND (SP)** brown (10 YR 4/3), medium sand	30
40	0910			**POORLY GRADED SAND (SP)** as above, medium to coarse sand	40
50	0925			**POORLY GRADED SAND (SP)** as above	50
55				**POORY GRADED GRAVEL (GP)** vari-colored, mottled appearance, subangular up to 20 mm	55
60					60



Drilling Comments

Hand auger to 5' bgs

Use 20" cookie cutter to advance boring to 20' bgs

5/25/07

5/29/07

Remaining borehole advanced with mud rotary

No water in simulprobe

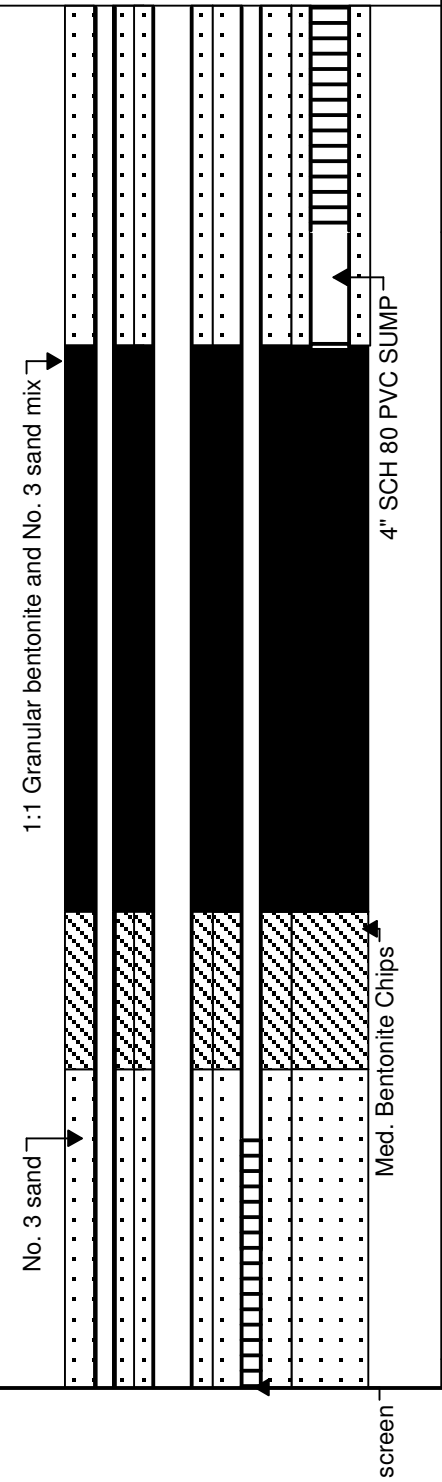
CH2MHILL

Well Number: MW-24

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Washington Blvd. & Lambert Dr., Whittier, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab and Simulprobe
Logged by: J. Ockerman
Start/Finish Date: 5/25/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: Simulprobe	Soil Log	Soil Description	Depth / Elev	Drilling Comments
65	1330			**POORLY GRADED SAND (SP)** brown (10 YR 4/3), fine to medium sand		collect water sample from simulprobe 5/29/07
70	1615			**POORLY GRADED SAND WITH GRAVEL (** 70% coarse sand, 20% subrounded gravel up to 40 mm, 10% fine to medium sand	70	5/30/07 no water in simulprobe
75						
80	0945			**SANDY LEAN CLAY (CL)** dark grayish brown (10 YR 4/2), 85% fines, 15% fine sand, medium plasticity, soft	81	collect water sample from simulprobe
85						
90	1200			**CLAYEY SAND WITH GRAVEL (SC)** brown (7.5 YR 4/4), 60% medium to coarse sand, 20% fines, 20% gravel up to 20 mm, subangular	90	no water in simulprobe
95						
100	1415			**SILT WITH SAND (ML)** very dark grayish brown (10 YR 3/2), dry, 80% fines, 20% fine sand, low toughness, stiff	100	no water in simulprobe
105						
110	1620			**POORLY GRADED SAND (SP)** dark yellowish brown (10 YR 4/4), 95% fine sand, 5% fines	110	no water in simulprobe 5/30/07
115						
120					120	



CH2MHILL

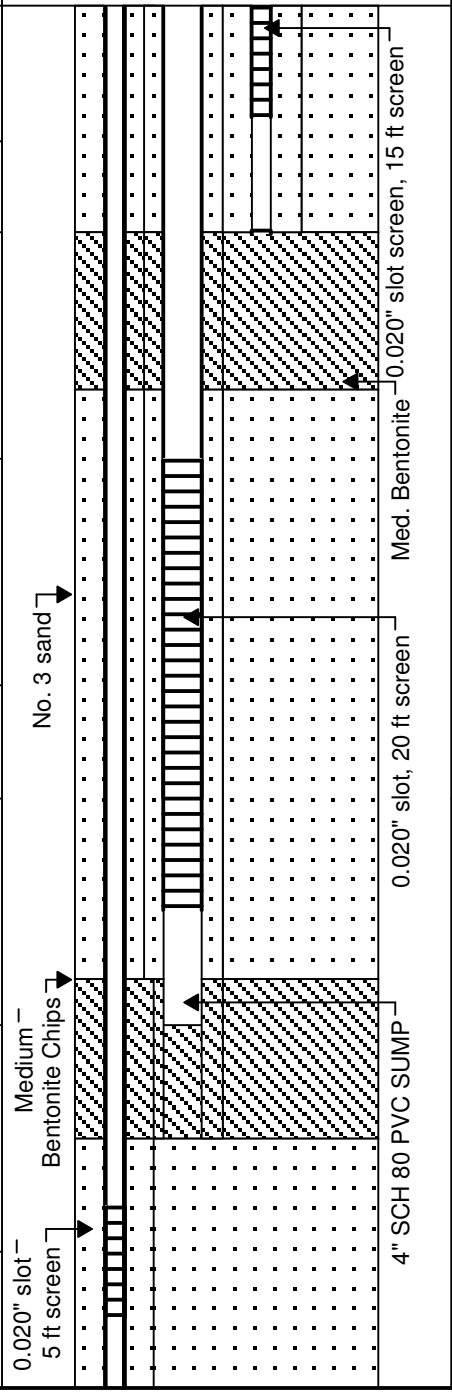
Well Number: MW-24

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Washington Blvd. & Lambert Dr., Whittier, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab and Simulprobe
Logged by: J. Ockerman
Start/Finish Date: 5/25/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: Simulprobe	Soil Log	Soil Description	Depth / Elev	Drilling Comments
125				**POORLY GRADED SAND (SP)** as above, olive brown (2.5 Y 4/3), 60% medium sand, 40% fine sand		5/31/07
				POORLY GRADED SAND (SP) as above	126	no water in simulprobe
130	1300			**SANDY LEAN CLAY (CL)** dark yellowish brown (10 YR 4/4), 80% fines, 20% fine sand	130	
135						
140	1515			**POORLY GRADED SAND (SP)** dark yellowish brown (10 YR 4/4), medium sand	140	collect water sample from simulprobe
145						
150	1730			**POORLY GRADED SAND (SP)** as above, gray (10 YR 5/1), dry, 80% medium sand, 20% fine sand	150	no water in simulprobe
155	0945			**POORLY GRADED SAND (SP)** brown (10 YR 5/3), 50% fine sand, 50% medium sand	155	5/31/07 6/1/07 collect water sample
160						
165	1200			**SILT WITH SAND (ML)** dark yellowish brown (10 YR 3/4), 80% fines, 20% fine sand	165	no water in simulprobe
170						
175	1245			**SANDY LEAN CLAY (CL)** dark yellowish brown (10 YR 4/4), 80% fines, 20% fine sand	175	
180						

Well Drawing

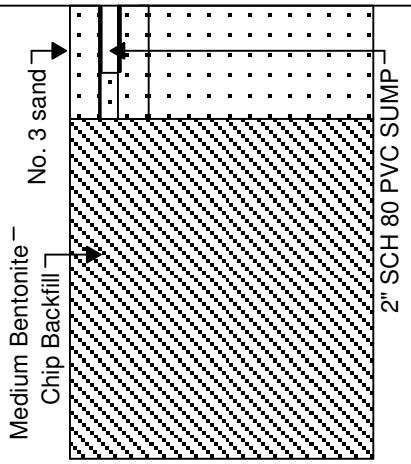


Well Number: MW-24

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Washington Blvd. & Lambert Dr., Whittier, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab and Simulprobe
Logged by: J. Ockerman
Start/Finish Date: 5/25/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: Simulprobe	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
185	1330						
				SANDY LEAN CLAY (CL) as above	186		
190							
195							
200	1415			End of Log	200		
205							
210							
215							
220							
225							
230							
235							
240							



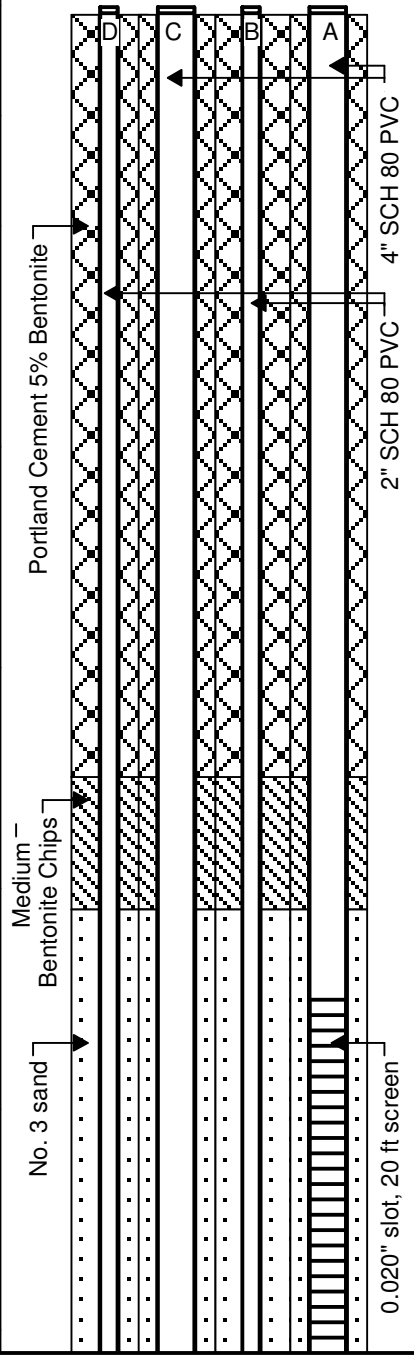
CH2MHILL

Well Number: MW-25

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: 901 Sorensen Ave. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/28/07 to 3/6/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
				Ground Surface	0
0	1315				
5		0.1		**SILT WITH SAND (ML)** dark yellowish brown (10YR 3/4), moist, 90% fines, 10% fine sand, low plasticity, no toughness or dry strength	5
10	1340	0.6		**SILT WITH SAND (ML)** as above, slightly more clay	10
15					
20	1352	0.0		**SILT WITH SAND (ML)** as above, low plasticity, low toughness, rapid dilitancy	20
25					
30	1500			**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/3), wet, 90% fine to medium sand, 5% fines	30
35					
40	1525			**POORLY GRADED SAND WITH SILT (SP-SM** light olive brown (2.5Y 5/4), 90% fine to medium sand, 10% fines, minor amounts of marly clay/silt with medium plasticity	40
45					
50				**POORLY GRADED SAND (SP)** same as above	50
55					
60					60



Drilling Comments

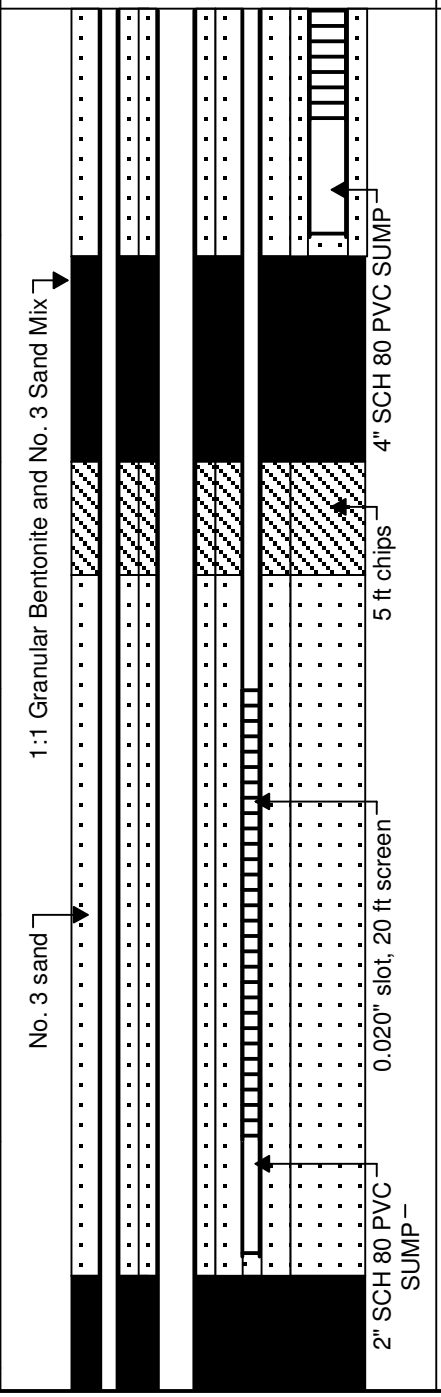
hand auger to 5 ft bgs

Well Number: MW-25

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: 901 Sorensen Ave. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/28/07 to 3/6/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
65	1610	0.0		**SILTY SAND (SM)** light olive brown, (2.5Y 5/4), 75% fine to medium sand, 25% fines, trace of marly clay	
70	1630	0.0		**WELL GRADED SAND (SW)** light olive brown 2.5Y 5/3), 50% medium sand, 40% fine sand, 5% coarse sand, 5% fines, subrounded to subangular, clean, hard	70
75					
80	1645	0.0		**SILT WITH SAND (ML)** light olive brown (2.5Y 5/4), 75% fines, 25% fine sand, no plasticity, trace marly clay	80
85					
90	1705	0.0		**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/4), 95% fine sand, 5% fines, trace marly clay	90
95					
100	0735	0.0		**POORLY GRADED SAND WITH SILT (SP-SM** light olive brown, (2.5Y 5/3), 60% fine sand, 30% medium sand, 10% fines	100
105					
110	0800	0.0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), 50% medium sand, 40% fine sand, 10% coarse sand, trace fines, clean sand, hard, subrounded to subangular grains	110
115					
120					120



Well Drawing

Drilling Comments

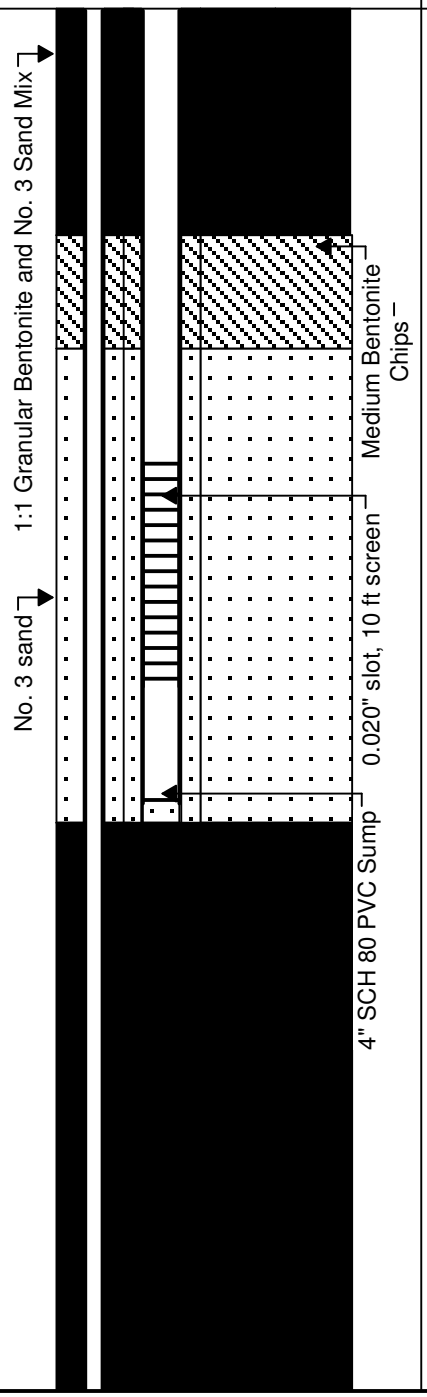
Well Number: MW-25

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: 901 Sorensen Ave. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/28/07 to 3/6/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
125	0820	0.0		**SILTY SAND (SM)** light olive brown (2.5Y 5/3), 70% fine sand, 30% fines	
130	0850	0.0		**SILTY SAND (SM)** as above, 60% fine sand, 40% fines	130
135					
140	0920	0.0		**SILT WITH SAND (ML)** light olive brown (2.5Y 5/3), 90% fines, 10% fine sand, low plasticity, minor amounts marly clay with medium plasticity	140
145					
150	0945	0.0		**SILT WITH SAND (ML)** as above	150
155					
160	1010	0.0		**LEAN CLAY WITH SAND (CL)** light olive brown (2.5Y 5/4), 95% fines with low to medium plasticity, 5% fine sand, very soft, low toughness, marly clay present	160
165					
170	1035	0.0		**LEAN CLAY WITH SAND (CL)** as above, slight increase in plasticity	170
175					
180					180

Well Drawing



Drilling Comments

CH2MHILL

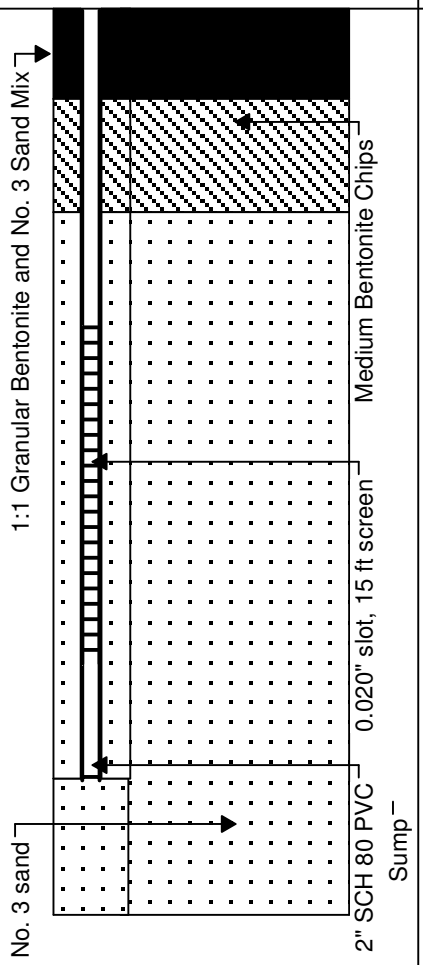
Well Number: MW-25

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: 901 Sorensen Ave. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/28/07 to 3/6/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
185	1150	0.1		**LEAN CLAY WITH SAND (CL)** as above, trace of marly clay, clay is stiff with medium plasticity, medium toughness	
190	1220	0.1		**LEAN CLAY WITH SAND (CL)** as above, slight increase in yellowish brown clay	190
195				**POORLY GRADED SAND (SP)** light olive brown (2.5YR 5/4), 95% fine to medium sand, 5 % fines, hard, subrounded, quartz, trace marly clay	195
200					
205					
210	1305	0.2		**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/4), 95% fine to medium sand, 5% fines, subrounded to subangular, quartz, clean	210
215	1330	0.4			
220				**SILT WITH SAND (ML)** light olive brown (2.Y 5/4), 75% fines, 25% fine sand, no plasticity	220
225					
230				End of Log	230
235					
240					

Well Drawing



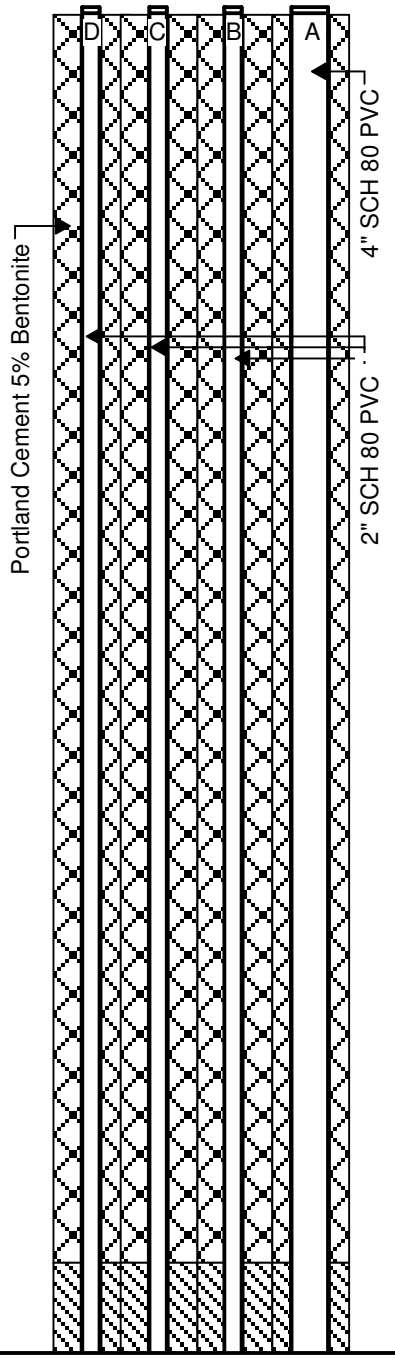
Drilling Comments

Well Number: MW-26

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Bell Ranch Rd. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/19/07 to 2/23/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
				Ground Surface			
0	0805			**SILTY SAND (SM)** dark yellowish brown (10YR 3/4), moist, 60% fine sand, 40% fines	0		Hand auger to 5' bgs
10	0820			**SILT WITH SAND (ML)** yellowish brown (10YR 4/6), moist, 90% fines, 10% fine sand, low plasticity	10		
15				**SILT WITH SAND (ML)** as above	15		
20	0845			**SILTY SAND (SM)** yellowish brown (10YR 4/6), 80% fines, 20% fine sand, trace fine gravel, subrounded, granitic	20		2/19/07 2/20/07 Initiate mud drilling at 20' bgs
30	1120			**WELL GRADED SAND WITH SILT (SW-SM)** dark yellowish brown (10YR 4/6), 90% fine to coarse sand, 10% fines	30		
40	1204			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), 95% fine grained sand, 5% fines	40		
50	1220			**POORLY GRADED SAND (SP)** as above, color change to olive brown (2.5Y 4/4)	50		rig chatter
60					60		



Well Number: MW-26

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Bell Ranch Rd. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/19/07 to 2/23/07

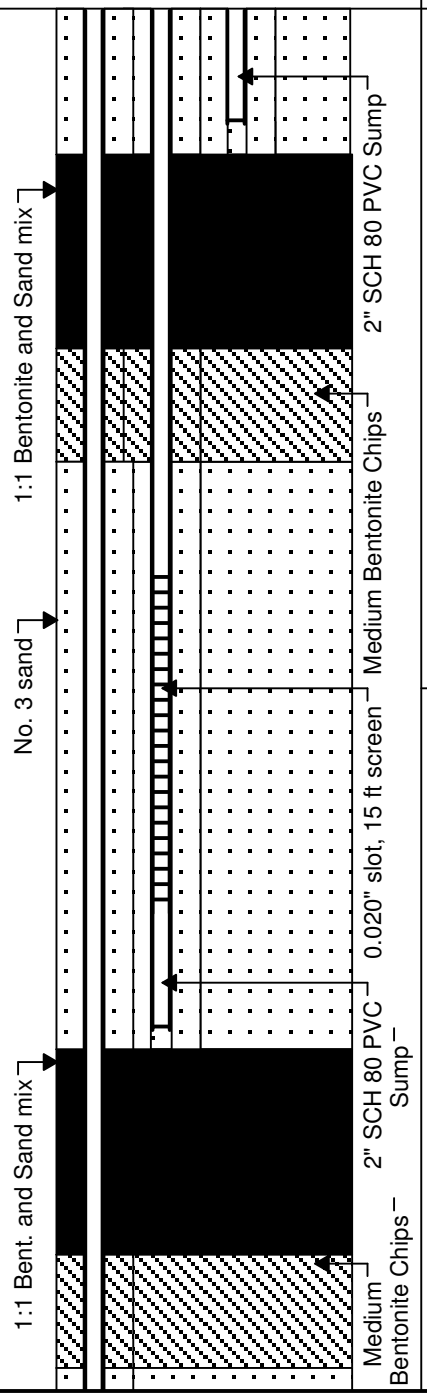
Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
65				**POORLY GRADED SAND (SP)** as above, 95% fine to medium grained sand, 5% fines		Medium Bentonite Chips	
70	1325			**POORLY GRADED SAND (SP)** as above	70		rig chatter
75						No. 3 sand	
80	1350			**POORLY GRADED SAND (SP)** as above	80		rig chatter
85							
90				**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/4), 95% fine sand, 5% fine gravel, subrounded	90		
95						Medium Bentonite Chips	
100				**POORLY GRADED SAND WITH CLAY (SP-SC** olive brown (2.5Y 4/3), 70% fine sand, 20% fines, 10% silt, trace fine gravel (10mm), subrounded	100		
105						0.020" slot, 20 ft screen	
110				**POORLY GRADED SAND WITH SILT (SP-SM** olive brown (10YR 4/4), 90% fine sand, 10% fines, trace fine gravel, subangular	110	4" SCH 80 PVC Sump	
115							
120	1545				120	No. 3 sand	
						0.020" slot, 15 ft screen	

Well Number: MW-26

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Bell Ranch Rd. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/19/07 to 2/23/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
125				**POORLY GRADED SAND (SP)** olive brown (2.5YR 4/4), 95% medium sand, 5% fines	
130				**SILTY SAND (SM)** olive brown (2.5YR 4/3), 80% fine sand, 20% fines	130
135					
140	1650			**LEAN CLAY WITH SAND (CL)** dark greenish gray (4/5GY),90% fines, 10% fine sand, low plasticity, very soft, no dilitancy, salt and pepper appearance	137
145					
150	0743			**SILTY SAND (SM)** olive (5Y 5/3), 60% fine sand, 40% fines, some greenish gray marly clay with low plasticity, and pepper appearance, very soft	150
155					
160	0815			**SILTY SAND (SM)** olive (5Y 5/3), 70% fine sand, 30% fines, trace marly clay with low plasticity	160
165					
170	0850			**SILTY SAND (SM)** as above, 80% fine sand, 20% fines	170
175					
180					180



Drilling Comments
no rig chatter
2/20/07
2/21/07
no rig chatter

Well Number: MW-26

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Bell Ranch Rd. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/19/07 to 2/23/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
185	0930			**POORLY GRADED SAND WITH SILT (SP-SM** dark greenish gray (GLEY1 4/10Y), 90% fine sand, 10% fines, trace dark greenish gray marly clay			
190	0955			**POORLY GRADED SAND WITH SILT (SP-SM** as above, 90% fine to medium sand, 10% fines	190	0.020" slot, 20 ft screen; No. 3 sand	rig chattering
195							
200	1020			**POORLY GRADED SAND WITH SILT (SP-SM** as above, fine sand	200		
205							
210				**SILTY SAND (SM)** dark greenish gray (GLEY1 4/5GY), 70% fine sand, 30% fines, dark greenish gray marly clay	210	2" SCH 80 PVC Sump	strong rig chatter at 208 ft bgs
215							
220	1125			**LEAN CLAY WITH SAND (CL)** dark greenish gray (GLEY1 4/5GY), 60% fines, 40% fine sand, low plasticity, poorly graded sand, minor dark greenish gray marly clay, very soft, sticky	220		
225							
230	0800			**LEAN CLAY WITH SAND (CL)** dark greenish gray (GLEY1 4/5GY), 80% fines, 20% fine sand, low to medium plasticity, minor dark bluish gray marly clay, soft, sticky, trace fine gravel, 10-15 mm diameter, subrounded	230	Medium Bentonite Chip Backfill	2/21/07 2/22/07
235							
240	0900				240		

CH2MHILL

Well Number: MW-26

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Bell Ranch Rd. Santa Fe Springs, CA
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Direct Mud Rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 2/19/07 to 2/23/07

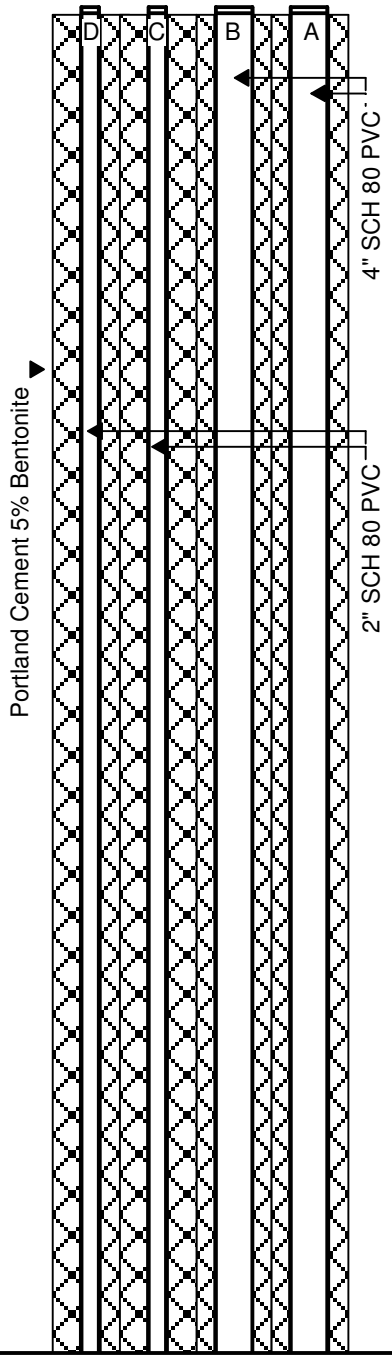
Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
245				**LEAN CLAY WITH SAND (CL)** as above			
250	1015				250		
				End of Log			
255							
260							
265							
270							
275							
280							
285							
290							
295							
300							

Well Number: MW27

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Clark St. & Norwalk Blvd., Santa Fe Springs
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Mud rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 4/9/07 to 4/16/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Drilling Comments
				Ground Surface		
0	1209				0	hand auger to 5 bgs
10	1243	0.1		**POORLY GRADED SAND WITH SILT (SP-SM)** very dark greenish gray (5GY 3/1), moist, 90% fine sand, 10% fines, no odor or staining	10	drill with cookie cutter, no mud
20	1445	0.0		**LEAN CLAY (CL)** olive gray (5Y 5/2), moist, low plasticity, soft, low toughness	20	drill with cookie cutter, add water, begin drilling with mud rotary 4/9/07
30	0940	0.0		**POORLY GRADED SAND WITH CLAY (SP-SC)** light olive brown (2.5Y 5/4), 90% fine to medium sand, 10% fines (marly clay), clay yellowish brown (10YR 5/6), minor cemented sand, subangular	30	4/10/07
40	1000	0.0		**CLAYEY SAND (SC)** light olive brown (2.5Y 5/4), 60% fine to medium sand, 40% fines (marly clay), clay is strong brown (2.5YR 4/6)	40	
50	1030	0.0		**CLAYEY SAND (SC)** light olive brown (2.5Y 5/4), 50% fine to medium sand, 40% clay, 10% fine gravel, subangular to subrounded, primarily quartz, clay is strong brown (2.5YR 4/6) with low plasticity	50	
60					60	



CH2MHILL

Well Number: MW27

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Clark St. & Norwalk Blvd., Santa Fe Springs
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Mud rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 4/9/07 to 4/16/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
65	1044	0.0		**POORLY GRADED SAND (SP)** greenish gray (GLEY1 5/10Y), salt and pepper appearance, 95% fine sand, 5% fines with trace brown marly clay			
70		0.0		**POORLY GRADED SAND (SP)** gray (2.5Y 5/1), 95% fine to medium sand, 5% fines, trace fine granitic gravel (granite, quartz, feldspar)	70		
75							
80	1205	0.0		**POORLY GRADED SAND (SP)** as above	80	Medium Bentonite Chips	
85							
90	1300	0.0		**POORLY GRADED SAND (SP)** as above	90	No. 2/12 sand	drilling slow and difficult
95							
100	1325	0.0		**POORLY GRADED SAND (SP)** as above, medium sand	100	0.020" slot, 20 ft screen	
105							
110	1345	0.0		**WELL GRADED SAND (SW)** gray (2.5Y 5/1) to light olive brown (2.5Y 5/3) to black (GLEY1 2.5/N), 60% coarse sand, 30% medium sand, 10% fine sand, subangular to subrounded granitic clast (primarily quartz)	110	4" SCH 80 PVC Sump	
115							
120					120		

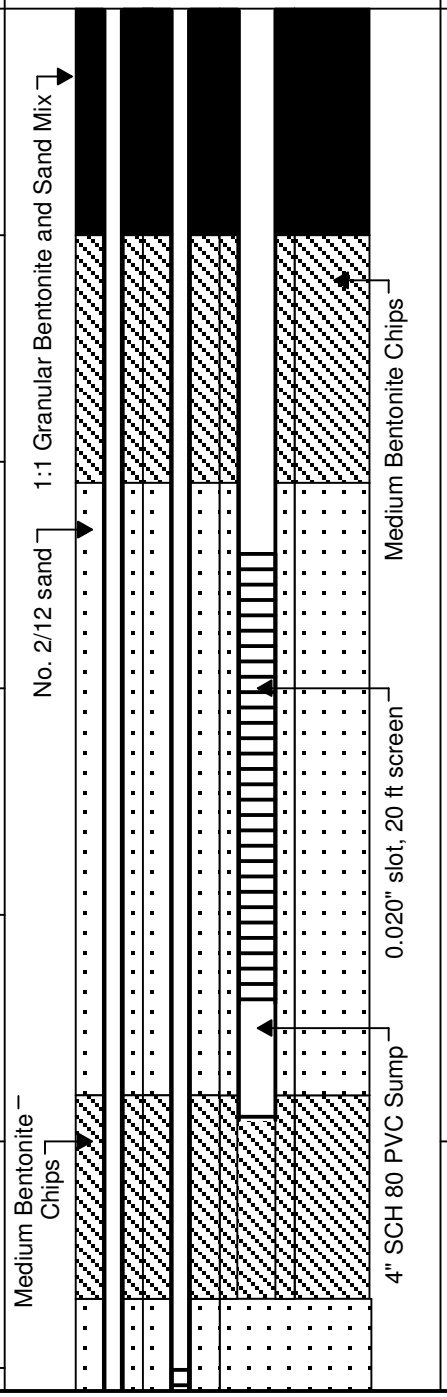
CH2MHILL

Well Number: MW27

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Clark St. & Norwalk Blvd., Santa Fe Springs
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Mud rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 4/9/07 to 4/16/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Drilling Comments
125	1404	0.0		**WELL GRADED SAND (SW)** pale yellow (2.5Y 8/1) to black (GLEY1 2.5/N), 40% medium sand, 30% coarse sand, 30% fine sand, subangular to subrounded clast (feldspar, quartz, mafic minerals)		
130	1440	0.0		**WELL GRADED SAND (SW)** dark greenish gray (GLEY1 4/5GY), 40% fine sand, 40% medium sand, 15% coarse sand, 5% fine granitic gravel, clean, primarily quartz, feldspar and mafic minerals, angular to subrounded	130	
135						
140	1500	0.0		**WELL GRADED SAND WITH CLAY (SW-SC)** dark greenish gray (GLEY1 4/5GY), 90% fine to coarse sand, 10% fines (marly clay) soft, granitic clast (quartz, feldspar, mafic minerals)	140	
145						
150	1530	0.0		**POORLY GRADED SAND (SP)** dark greenish gray (GLEY1 4/5GY), 95% fine to medium sand, 5% fines, trace marly green clay	150	
155						
160	1550	0.0		**POORLY GRADED SAND (SP)** as above	160	
165						
170	0740	0.0		**POORLY GRADED SAND (SP)** as above, 95% fine to medium sand, 5% fines, trace of bluish green clay with low plasticity	170	4/10/07 4/11/07
175						
180					180	

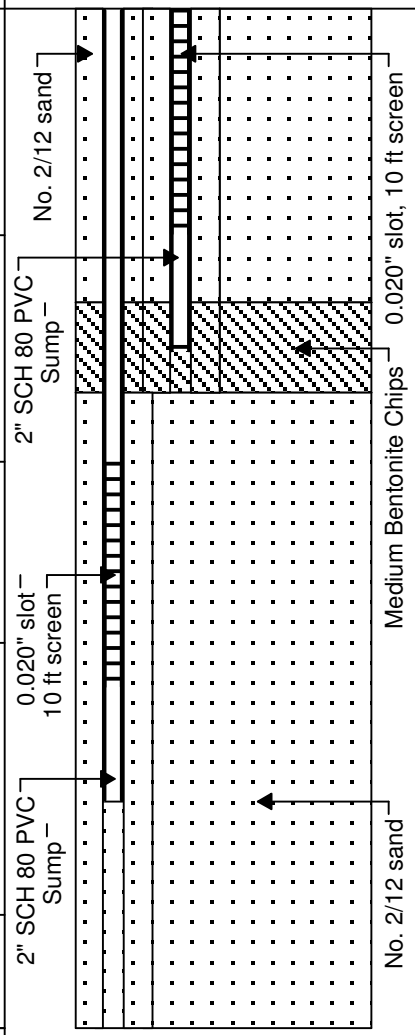


Well Number: MW27

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Clark St. & Norwalk Blvd., Santa Fe Springs
Project Number: 335392.FI.01

Driller: WDC
Drilling Method: Mud rotary
Sampling Method: Grab
Logged by: D. Jablonski
Start/Finish Date: 4/9/07 to 4/16/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Drilling Comments
185	0815	0.0		**SILT (ML)** greenish gray (GLEY2 5/10BG), 90% fines, 10% fine to medium sand, trace coarse sand, no plasticity or toughness, very soft		
190	0845	0.0		**SANDY SILT (ML)** as above, 70% fines, 30% fine to medium sand, trace bluish green clay and coarse sand	190	
195						
200	0855	0.0		**LEAN CLAY WITH SAND (CL)** greenish gray (GLEY2 5/10BG), 95% fines, 5% fine sand, low plasticity, low toughness, very soft	200	drilling hard at 203 ft bgs
205						
210	0930	0.0		**POORLY GRADED SAND WITH SILT (SP-SM)** greenish gray (GLEY2 5/5BG), 80% medium sand, 10% coarse sand, 10% fines, trace of bluish green clay with low plasticity, granitic clast	208	rig chatter
215						drilling softer at 215 ft bgs
220	0945			**SILT WITH SAND (ML)** greenish gray (GLEY2 5/5 BG), 80% fines, 20% medium to coarse sand, no plasticity or toughness, very soft	220	
225	0955			End of Log	225	
230						
235						
240						



Well Drawing

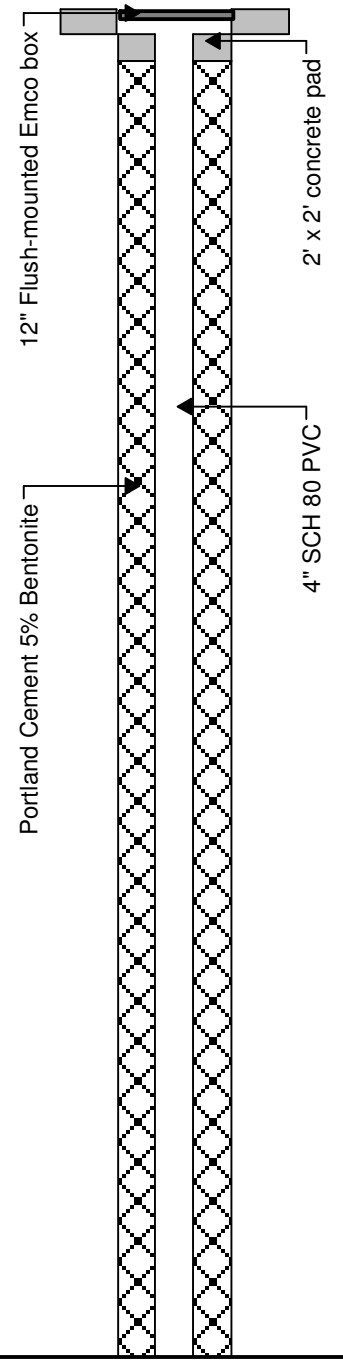
CH2MHILL

Well Number: MW-28

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Pioneer and Lakeland Blvd, Santa Fe Springs
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/14/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
				Ground Surface			Hand auger to 5' bgs
0					0		
	1130	0.0		**SILTY SAND (SM)** dark grayish brown (10 YR 4/2), dry, 70% fine sand, 30% fines	2		
5	1145	0.0					
				POORLY GRADED SAND (SP) pale brown (10 YR 6/3), dry, 95% fine sand, 5% fines	8		
10							
15							
				POORLY GRADED SAND (SP) as above	18		
20	1200	0.0					
25							
				POORLY GRADED SAND (SP) as above	26		
				POORLY GRADED SAND (SP) as above, except with occasional gravel up to 40 mm, rounded	28		
30	1220	0.0					
				SANDY LEAN CLAY (CL) brown (10 YR 4/3), moist, low plasticity	32		
35				**POORLY GRADED SAND (SP)** pale brown (10 YR 6/3), moist, occasional gravel up to 30 mm subrounded	34		
				POORLY GRADED SAND (SP) as above	38		
40	1330	0.0					
				SANDY LEAN CLAY (CL) brown (10 YR 4/3), moist, medium stiffness	44		
45							
					48		
50					50		



CH2MHILL

Well Number: MW-28

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Pioneer and Lakeland Blvd, Santa Fe Springs
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/14/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev
	1400	0.0		**POORLY GRADED SAND (SP)** brown (10 YR 5/3), moist, 90% fine sand, 10% fines	
55				**POORLY GRADED SAND (SP)** as above	54
				SANDY LEAN CLAY (CL) brown (10 YR 4/3), moist, 70% fines, 30% medium sand, medium stiffness	58
60	1420	0.0		**CLAYEY SAND (SC)** brown (10 YR 4/3), moist, rounded gravel up to 50 mm	
65					
				CLAYEY SAND (SC) as above	66
70	1455	0.0		**POORLY GRADE SAND (SP)** yellowish brown (10 YR 5/4), moist, fine sand	70
75					
				CLAYEY SAND (SC) brown (10 YR 5/3), moist, 70% medium sand, 30% fines, low plasticity	76
80	1455	0.0			
85	1520	0.0		**CLAYEY SAND (SC)** as above except wet	84
				POORLY GRADED SAND (SP) brown (10 YR 5/3), wet, 90% medium sand, 10% gravel up to 10 mm, rounded	88
90	0810	0.0			
95					
				POORLY GRADED SAND (SP) as above	96
100	0840				100

Well Drawing: Medium bentonite chips 2-50 lb. bags; 20' 0.02-inch slot

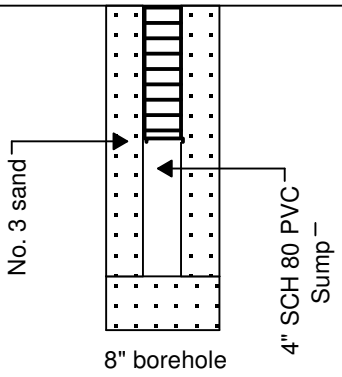
Drilling Comments: depth to water at 84' bgs 5/14/07; 5/15/07

Well Number: MW-28

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Pioneer and Lakeland Blvd, Santa Fe Springs
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/14/07

Depth (ft)	Sample Info: Time	Sample Info: OVA	Soil Log	Soil Description	Depth / Elev	Well Drawing	Drilling Comments
105	0910	0.0		**POORLY GRADED SAND (SP)** as above, except no gravel			
110	1000	0.0		**POORLY GRADED SAND (SP)** as above	108		
				End of Log	110		
115							
120							
125							
130							
135							
140							
145							
150							



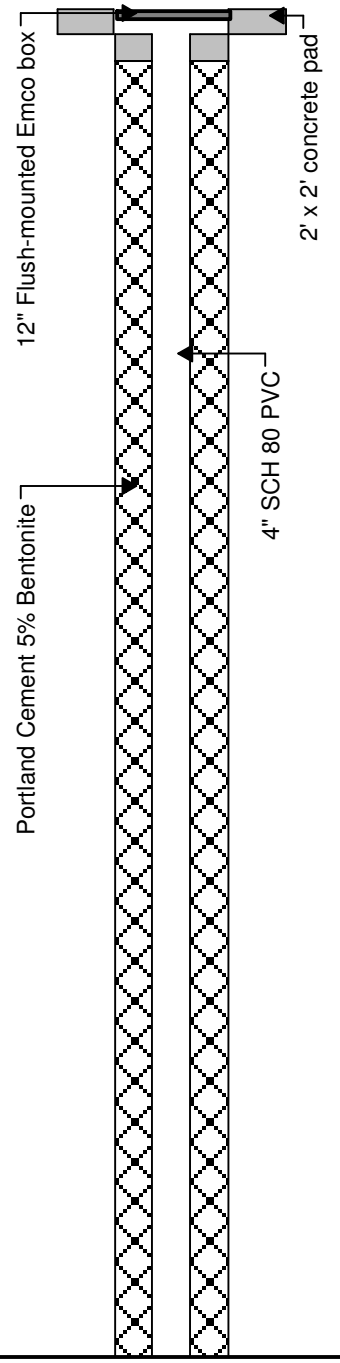
CH2MHILL

Well Number: MW-29

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Gettysburg Dr. and Norwalk Blvd, Norwalk, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/31/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Soil Log	Soil Description	Depth / Elev
				Ground Surface	
0		1.6		**SILT (ML)** light olive brown (2.5 Y 5/4), dry, roots present	0
				POORLY GRADED SAND (SP) light yellowish brown (2.5 Y 6/3), moist, 60% fine sand, 40% medium sand	3
5	0944				
10		0.3			
15		0.2		**SILT (ML)** dark yellowish brown (10 YR 4/6), moist, low plasticity, low toughness, 5% fine sand, weak cementation	15
					18
20	1033			**SILT (ML)** as above	20
				SILTY SAND (SM) dark yellowish brown (10 YR 4/6), moist	22
25		0.3		**POORLY GRADED SAND (SP)** dark yellowish brown (10 YR 4/4), moist, 90% fine sand, 5% medium sand, 5% fines	
30		0.2			
				SILTY SAND (SM) light olive brown (2.5 Y 5/4), moist, 50% medium to coarse sand, 50% fines, fine to coarse gravel (55 mm maximum) present	32
35					
				POORLY GRADED SAND WITH GRAVEL (SP light olive brown (2.5 Y 5/6), moist, 70% fine sand, 20% fine to coarse (5 mm to 30 mm), 10% medium sand	37
40	1115	0.1			
45					
				SILTY SAND (SM) light olive brown (2.5Y 5/4), moist, soft	47
50	1130				50



Drilling Comments

Hand auger to 5' bgs

CH2MHILL

Well Number: MW-29

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Gettysburg Dr. and Norwalk Blvd, Norwalk, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/31/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Soil Log	Soil Description	Depth / Elev
55				**SILTY SAND (SM)** light olive brown (2.5 Y 5/4), moist	
				SILTY SAND (SM) olive brown (2.5 Y 4/3), moist, very fine sand	57
60				**SILT (ML)** light olive brown (2.5 Y 5/4), moist, low plasticity	60
					62
		0.2		same as above, color change to greenish gray (GLEY 1 5/10Y), Fe oxide mottling	64
65				**LEAN CLAY (CL)** greenish gray (GLEY 1 5/10Y), medium plasticity	66
		0.1		**SILTY SAND (SM)** greenish gray (GLEY 1 5/10Y), moist	68
70				**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/6), moist, fine sand, 5% fines, 76 to 77 ft: 40% medium sand	
75					
				SILTY SAND (SM) olive brown (2.5Y 4/3), moist, fine sand, 79 to 81 ft: medium sand, sand wet at 80 ft	78
80					
85	1300			**SILT (ML)** olive brown (2.5Y 4/3), moist, cemented, Fe-oxide, mottling	85
					87
90		0.0		**SILTY SAND (SM)** light olive brown (2.5 Y 5/6), wet, 80% medium sand, 20% fine sand, clean	
95				**POORLY GRADED SAND (SP)** as above, color change to light olive brown (2.5 Y 5/3), wet	95
	1330				
100					

Well Drawing: Medium bentonite chips; 20' 0.02-inch slot

Drilling Comments

CH2MHILL

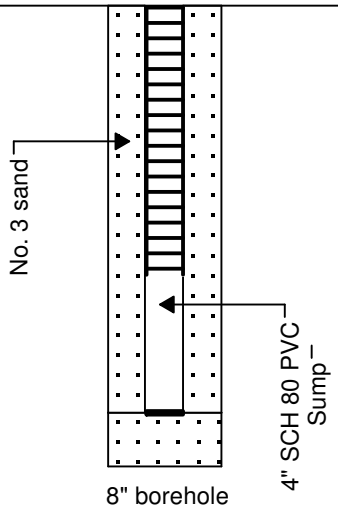
Well Number: MW-29

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Gettysburg Dr. and Norwalk Blvd, Norwalk, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 5/31/07 to 6/1/07

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Soil Log	Soil Description	Depth / Elev
105	1400			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), moist, 95% fine sand, 5% fines	103 / 104 / 105
				SILT (ML) olive brown (2.5Y 4/3), moist, low plasticity, Fe-oxide mottles	
110		0.0		**POORLY GRADED SAND (SP)** same as above, olive brown (2.5 Y 4/3), 95% fine sand, 5% fines	
				SILTY SAND (SM) yellowish brown (10 YR 5/6), moist, 10% fine sand	113
115	1425	0.0		End of Log	117
120					
125					
130					
135					
140					
145					
150					

Well Drawing



Drilling Comments

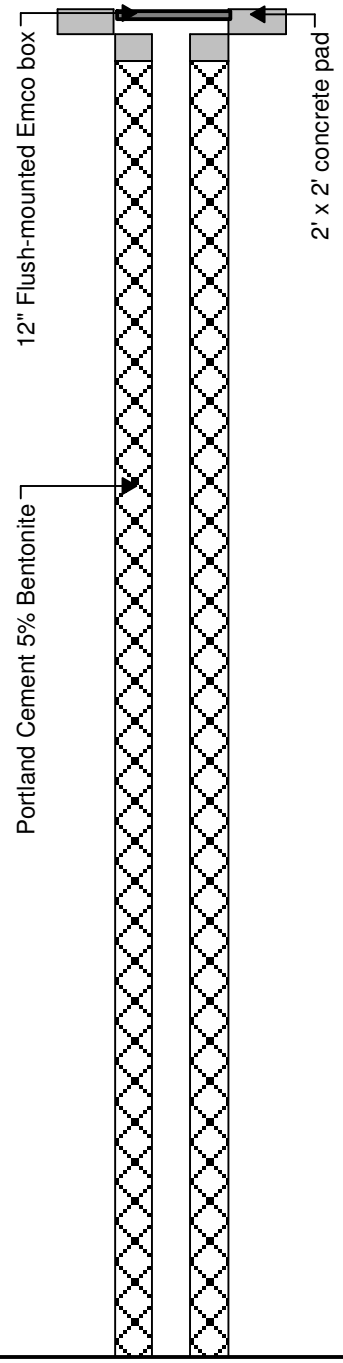
CH2MHILL

Well Number: MW-30

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Civic Center Drive, Norwalk, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 6/11/07 to 6/12/07

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Soil Log	Soil Description	Depth / Elev
				Ground Surface	
0					0
		0.0		**SILTY SAND (SM)** dark reddish brown (5 YR 3/3), moist, 80% fine sand, 20% fines	2
5					
				POORLY GRADED SAND (SP) brown (7.5 YR 4/4), moist, fine sand	8
10	0900	0.0			
15					
				POORLY GRADED SAND WITH GRAVEL (SP as above, dark yellowish brown (10 YR 4/4), moist, 80% medium to coarse sand, 20% gravel (up to 10 mm)	18
20	0930	0.0			
25	0945			**CLAYEY SAND (SC)** olive brown (2.5 Y 4/4), 80% fine sand, 20% fines, low plasticity	24
				POORLY GRADED SAND (SP) strong brown (7.5 YR 4/6), moist, medium sand	28
30	0950	0.0			
35					
				POORLY GRADED SAND (SP) olive gray (5Y 4/2), moist, fine to medium sand, salt and pepper appearance	38
40	1015	0.0			
45	1045	0.0		**LEAN CLAY (CL)** olive gray (5 Y 4/2), moist, low to medium plasticity, stiff	44
50					



Well Drawing

Drilling Comments

Hand auger to 5' bgs

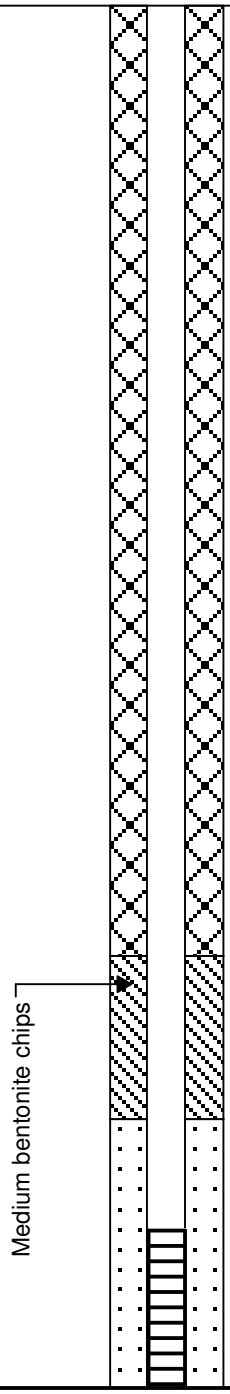
CH2MHILL

Well Number: MW-30

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Civic Center Drive, Norwalk, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 6/11/07 to 6/12/07

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Soil Log	Soil Description	Depth / Elev
				POORLY GRADED SAND (SP) olive gray (5 Y 4/2), moist, fine sand	52
55	1105	0.0			
				POORLY GRADED SAND (SP) as above, salt and pepper appearance	58
60	1125	0.0			
				POORLY GRADED SAND WITH CLAY (SP-SC greenish gray (GLEY 1 5/1 10GY), moist, 90% fine sand, 10% fines	64
65	1150	0.0			
				POORLY GRADED SAND (SP) olive brown (2.5Y 4/3), moist, fine sand	68
70	1200	0.0			
75					
				POORLY GRADED SAND (SP) olive brown (2.5 Y 4/4), moist, 95% fine sand, 5% fines	78
80	1345	0.0			
85					
				POORLY GRADED SAND (SP) light olive brown (2.5 Y 5/4), moist, medium sand	88
90	1455	0.0			
95					
					98
100					



Drilling Comments
DTW at 92.5' bgs

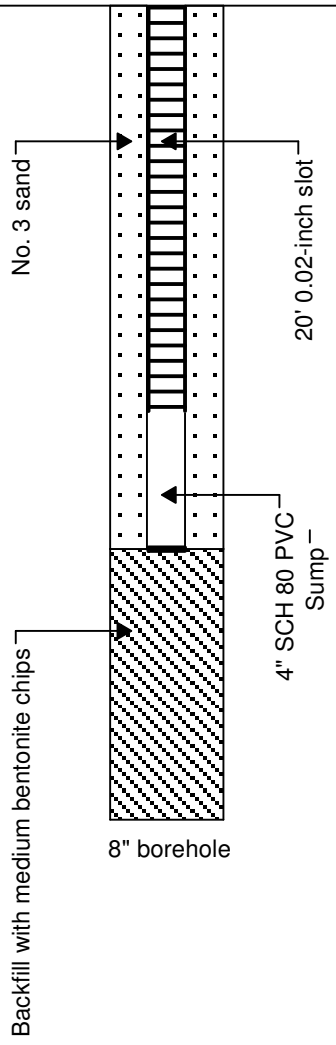
CH2MHILL

Well Number: MW-30

Client: U.S. EPA
Project: Omega Chemical OU-2
Location: Civic Center Drive, Norwalk, CA
Project Number: 335392.FI.01

Driller: Boart Longyear
Drilling Method: Rotosonic
Sampling Method: Continuous Core
Logged by: J. Ockerman
Start/Finish Date: 6/11/07 to 6/12/07

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Soil Log	Soil Description	Depth / Elev	Drilling Comments
105				**POORLY GRADED SAND (SP)** very dark greenish gray (GLEY2 3/1 5BG), moist, fine sand		
110	1620	0.0		**POORLY GRADED SAND (SP)** as above	108	
115	1700	0.0		**POORLY GRADED SAND (SP)** as above, except medium sand	114	
120	0830	2.0		**POORLY GRADED SAND (SP)** very dark greenish gray (GLEY2 3/1 5BG), wet, fine sand	118	120 to 130 ft: strong hydrocarbon odor
125						
130	0900	3.8		**POORLY GRADED SAND WITH SILT (SP-SM** dark greenish gray (GLEY2 4/1 10BG), wet, 90% fine sand, 10% fines	128 / 130	
135				End of Log		
140						
145						
150						



Well Drawing

MONITORING WELL: OW-1

PROJECT NAME: Omega

PROJECT NUMBER: 445.2

LOCATION: See Figure 1.

DATE DRILLED: 6/4/96

SURFACE ELEVATION: 207.9 feet msl

BOREHOLE DIA.: 6.5-inch, reamed to 10"

TOTAL DEPTH OF BORING: 80 feet bls

DRILLING COMPANY: Gregg Drilling

METHOD: Hollow Stem Auger

DRILLER'S NAME: C. Winegarner

DRILL RIG: Mobile Drill B-61

LOGGED BY: G. Cranham (R.G.# 5897)

CHECKED BY: M. Palmer (R.G.# 5915)

COMMENTS: Sampler:2.5 foot continous core sampler & 1⅜-inch SPT sampler.

Weather: Hazy sunshine, wind 0-5 mph from east, 70° F.

WELL DETAILS

COVER: Above-ground locking steel vault

DATE WELL INSTALLED: 6/4/96

WATER LEVEL: 67.6 feet bls, (6/5/96)

SCREEN: 4-inch ID, 0.020-inch, stainless steel wire-wrap well screen.

SCREEN INTERVAL: 62.5 to 77.5 feet bls

CASING: 4-inch ID, flush threaded, schedule 40 PVC blank well casing.

CASING INTERVAL: 0 to 62.5 feet bls

DNAPL SUMP: 4-inch ID, flush threaded, stainless steel well casing

DNAPL SUMP CASING INTERVAL: 77.5 to 80 feet bls

FILTER PACK MATERIAL: No. 2/12 Monterey Sand

FILTER PACK INTERVAL: 59 to 77.5 feet bls

SEAL: Concrete 0 to 3.5 feet bls
Neat Portland Cement 3.5 to 56.2 feet bls
Medium Bentonite tablets 56.2 to 59 feet bls

COMMENTS Filter pack separated from cement seal surrounding DNAPL sump by canvas cementing basket.

DEPTH (feet)	SAMPLE	RECOVERY %	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL DIAGRAM
1			ML CH		Concrete Slab Clayey Silt to Silty Clay. Very dark brown, moist to very moist, loose.	
2						
3						
4						
5		72	ML		Silt with Sand, yellowish brown (10 YR 5/4), moist to very moist, soft to firm (crumbly), low plasticity, medium dry strength, low toughness, sand very fine, some carbonate pore fillings. [5-6.8': UV-no]	
6						
7					[7.5-10': UV-no]	
8		100				
9						
10		84			[10-12.1': UV-no]	
11						

RPT NO.

SHEET 1 OF 5

FIGURE B-3. LITHOLOGIC LOG FOR MONITORING WELL OW-1

PROJECT NAME: Omega

PROJECT NUMBER: 445.2

DATE DRILLED: 6/4/96

MONITORING WELL: OW-1

DEPTH (feet)	SAMPLE	RECOVERY %	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL DIAGRAM
13		100	ML		[12.5–15': UV–no]	
14					Root casts or soil pores common at 14 to 15 feet.	
15		84			Very moist at approximately 15 feet. [15–17.1': UV–no; Dye–no reaction]	
16					Granitic pebble at 15.7 feet	
17						
18		100			[17.5–20': UV–no]	
19						
20		92			[20–22.3': UV–no; Dye–no reaction]	
21						
22						
23		36			[22.5–23.4: UV–no]	
24						
25		0				
26						
27						
28		8				
29					(Clay ball in auger bit may have interfered with recovery.)	
30		88			Increased clay content at 30.1 to 30.4 feet.	
31						
32			CH		Clay, brown (10 YR 4/3), moist, very stiff, medium to high plasticity, medium toughness, high dry strength; trace silt, trace sand, occasional pebbles	
		72			[31.5–32.5: UV–no; Dye–no reaction] [32.5–34.3': UV–no]	

RPT NO.

SHEET 2 OF 5

FIGURE B–3. LITHOLOGIC LOG FOR MONITORING WELL OW–1

PROJECT NAME: Omega

PROJECT NUMBER: 445.2

DATE DRILLED: 5/4/96

MONITORING WELL: OW-1

DEPTH (feet)	SAMPLE	RECOVERY %	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL DIAGRAM
34			CH		Slickensided Structure at 33 feet.	
35		40			Increased silt content at 35.1 to 35.5 feet, stiff [35-36': UV-no; Dye-no reaction]	
36						
37			ML		Silt with Sand, same as 5 to 14 feet.	
38		52			[37.5-38.8': UV-no]	
39						
40		40			[40-41': UV-no; Dye-no reaction]	
41						
42						
43		92			[42.5-44.8': UV-no]	
44					43.6 to 44 feet: grades downward to clay.	
45			CH		Clay, same as 31.2 to 37 feet.	
46		76			Increased silt content at 45 to 46 feet and 47.5 to 48 feet. [45-46.9': UV-carbonates; Dye-no reaction]	
47						
48		84			[47.5-49.6': UV-carbonate]	
49					Carbonate streaks common at 49 to 52 feet.	
50		100			Slickensided structure at 50 to 51.5 feet [50-52.5': UV-carbonate; Dye-no reaction]	
51						
52						
53						

RPT NO.

SHEET 3 OF 5

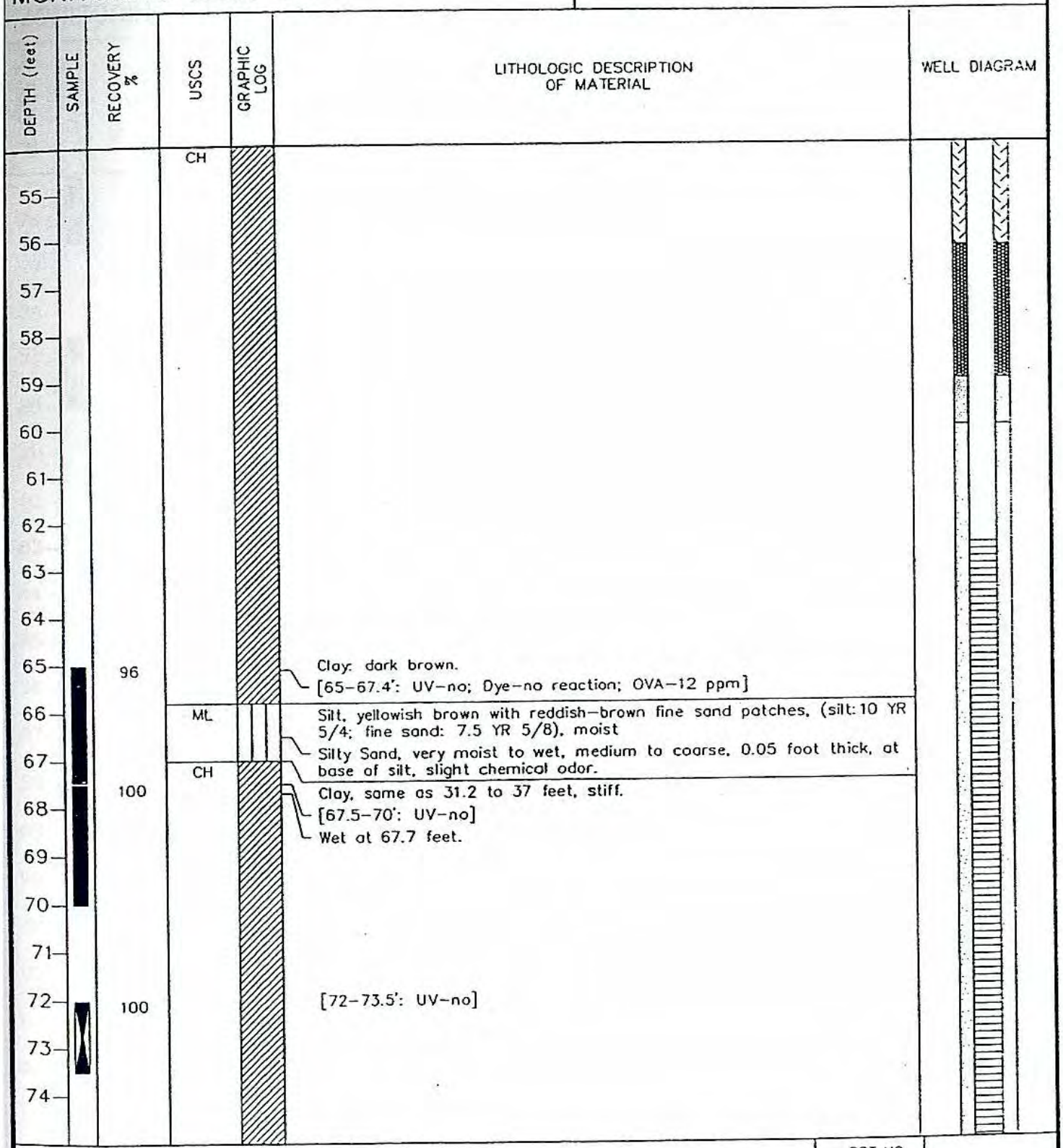
FIGURE B-3. LITHOLOGIC LOG FOR MONITORING WELL OW-1

PROJECT NAME: Omega

PROJECT NUMBER: 445.2

DATE DRILLED: 6/4/96

MONITORING WELL: OW-1



RPT NO.

SHEET 4 OF 5

FIGURE B-3. LITHOLOGIC LOG FOR MONITORING WELL OW-1

PROJECT NAME: Omega

PROJECT NUMBER: 445.2

DATE DRILLED: 6/4/96

MONITORING WELL: OW–1

DEPTH (feet)	SAMPLE	RECOVERY %	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL DIAGRAM
76		100	CH		Carbonate steaks common at 75 to 79.5 feet. Carbonate layer at 75.5 to 75.6 feet. Increased silt content below 75 feet, firm to stiff. [75–76.5': UV–carbonate]	
77						
78					[78.5–80': UV–no]	
79		100			Granitic pebble at 78.7 feet	
80					TOTAL DEPTH OF BORING = 80 FEET BELOW LAND SURFACE	
81						
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

RPT NO.

SHEET 5 OF 5

FIGURE B–3. LITHOLOGIC LOG FOR MONITORING WELL OW–1

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-24699-T4.FIELD	BORING/WELL NUMBER	OW-1b
PROJECT NAME	Omega Chemical	DATE DRILLED	6/16/99-6/18/99
LOCATION	12504 East Whittier Blvd, Whittier, CA	CASING TYPE/DIAMETER	4" Sch 40, MS Blank
DRILLING METHOD	Hollow Stem Auger	SCREEN TYPE/SLOT	4" SS, 20-slot
SAMPLING METHOD	Modified CA Split Spoon	GRAVEL PACK TYPE	Lonestar #2/12
GROUND ELEVATION		GROUT TYPE/QUANTITY	Portland Cement/5% Bentonite/495 gal
TOP OF CASING		DEPTH TO WATER	59.00
LOGGED BY	Mike Hoffman	GROUND WATER ELEVATION	
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (Inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0					0	CL		CONCRETE is 4 inches thick. SILTY CLAY: brown (10YR4/3); low plasticity, soft, no UV illumination, dry to moist, no odor.	0.3	
0.0	4 6 9	18			5	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, no UV illumination, dry to moist, no odor.	5.0	
0.0		18	OC-SG-OW1b-10-061699	SG	10	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated small fragments, dry to moist, no odor.	10.0	Cement-Bentonite Grout (0-96 ft bgs).
9.4	5 9 14	18			15	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft; trace pebbles to 1/2" diameter; UV illuminated small fragments and streaks, dry to moist, no odor.	15.0	
0.0		18	OC-SG-OW1b-20-061699	SG	20	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft; trace pebbles to 1/2" diameter; no UV illumination, dry to moist, no odor.	20.0	
9.4	9 16 20	18			25	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, no UV illumination, dry to moist, no odor.	25.0	4", Sch 40, MS Blank (0-110 ft bgs).
9.4		18	OC-SG-OW1b-30-061699	SG	30	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, no UV illumination, dry to moist, no odor.	30.0	
					35				35.0	

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-24699-T4.FIELD **BORING/WELL NUMBER** OW-1b

PROJECT NAME Omega Chemical **DATE DRILLED** 6/16/99-6/18/99

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
75.2	10 18 22	18	OC-S-OW1b-35-061699		40	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, no UV illumination, dry to moist, no odor.	40.0
18.8		18	OC-SG-OW1B-40-061699	SG	45	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated small fragments, dry to moist, no odor.	45.0
47.0	12 17 25	18	OC-S-OW1b-45-061699		50	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated small fragments, dry to moist, no odor.	50.0
23.5		18	OC-SG-OW1b-50-061699	SG	55	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated small fragments, dry to moist, no odor.	55.0
84.7	15 22 27	18	OC-S-OW1b-55-061699		60	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated small streaks, dry to moist, no odor.	60.0
211.7		18	OC-SG-OW1b-60-061699	SG	65	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated precipitate, dry to moist, moderate to strong hydrocarbon odor.	65.0
122.3	7 18 24	18	OC-S-OW1b-65-061699		70	CL		SILTY CLAY: dark yellowish brown (10YR4/4); low plasticity, soft, UV illuminated precipitate and fragments, dry to moist, moderate to strong hydrocarbon odor.	70.0
28.2	15 20 22	18	OC-S-OW1b-70-061699		75	CL		SILTY CLAY: brown (10YR4/3); low plasticity, stiff, UV illuminated fragments and streaks, dry to moist, no odor.	75.0

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WELL DIAGRAM

- Cement-Bentonite Grout (0-96 ft bgs).
- 4", Sch 40, MS Blank (0-110 ft bgs).

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-24699-T4.FIELD
BORING/WELL NUMBER OW-1b
PROJECT NAME Omega Chemical
DATE DRILLED 6/16/99-6/18/99

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
21.5	14 28 30	18	OC-S-OW1b-75-061699		75	CL		SILTY CLAY: brown (10YR4/3); low plasticity, stiff, UV illuminated fragments and streaks, dry to moist, no odor.
21.5	12 28 31	18	OC-S-OW1b-80-061699		80	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated streaks, dry to moist, no odor.
4.7	10 11 13	18			85	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, UV illuminated streaks, dry to moist, no odor.
28.2	11 14 20	18	OC-S-OW1b-90-061699		90	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft, no UV illumination, dry to moist, no odor.
0.0	3 4 4	18			95	CL		SILTY CLAY: brown (10YR4/3); low plasticity, stiff, no UV illumination, dry to moist, no odor.
0.0	3 4 6	18	OC-S-OW1b-100-061899		100	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft to firm; traces of coarse sand to fine gravel; no UV illumination, dry to moist, no odor.
0.0	3 3 6	18			105	CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft to firm; traces of coarse sand to fine gravel; no UV illumination, dry to moist, no odor.
0.0	5 5 9	18	OC-S-OW1b-110-061899		110	CL		SILTY CLAY: brown (10YR4/3); low plasticity, firm, no UV illumination, dry to moist, no odor.
					115			

Continued Next Page

CONTACT DEPTH	WELL DIAGRAM
80.0	Cement-Bentonite Grout (0-96 ft bgs).
85.0	
90.0	4", Sch 40, MS Blank (0-110 ft bgs).
95.0	Bentonite Pellets (96-99 ft bgs).
100.0	Lonestar #2/12 Filter Pack (99-130 ft bgs).
105.0	
110.0	4", SS, 20-slot, Screen (110-120 ft bgs).
115.0	

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BORING/WELL CONSTRUCTION LOG

JECT NUMBER 10500-24699-T4.FIELD
JECT NAME Omega Chemical
BORING/WELL NUMBER OW-1b
DATE DRILLED 6/16/99-6/18/99

Continued from Previous Page

BLOW COUNTS	RECOVERY (Inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
10 14 17	18				CL		SILTY CLAY: brown (10YR4/3); low plasticity, firm, no UV illumination, dry to moist, no odor.		4", SS, 20-slot, Screen (110-120 ft bgs).
				120				120.0	
4 8 12	18	OC-S-OW1b-120-061899			CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft to firm; traces of coarse sand to fine gravel; no UV illumination, dry to moist, no odor.		
				125				125.0	Lonestar #2/12 Filter Pack (99-130 ft bgs).
8 18 24	18				CL		SILTY CLAY WITH GRAVEL: brown (10YR4/3); 85% silty clay, low plasticity, soft; 15% gravel in matrix, up to 1/2" diameter, angular to subrounded, low to moderate sphericity; no UV illumination, moist, no odor.		
				130				130.0	TD = 130 ft bgs.
6 8 14	18				CL		SILTY CLAY: brown (10YR4/3); low plasticity, soft to firm; traces of coarse sand to fine gravel; no UV illumination, dry to moist, no odor.	131.5	

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-24699-T4.FIELD	BORING/WELL NUMBER	OW-2
PROJECT NAME	Omega Chemical	DATE DRILLED	6/17/99
LOCATION	12504 East Whittier Blvd, Whittier, CA	CASING TYPE/DIAMETER	4" Sch 40, MS Blank
DRILLING METHOD	Hollow Stem Auger	SCREEN TYPE/SLOT	4" SS, 20-slot
SAMPLING METHOD	Modified CA Split Spoon	GRAVEL PACK TYPE	Lonestar #2/12
GROUND ELEVATION		GROUT TYPE/QUANTITY	Portland Cement/5% Bentonite/205 gal
TOP OF CASING		DEPTH TO WATER	
LOGGED BY	Mike Hoffman	GROUND WATER ELEVATION	
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0					0	CL		CONCRETE is 3 inches thick. SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity,stiff, soft, moist, no odor.	0.3	
0.0	5 9 10	18			5	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	5.0	
0.0	5 5 14	18			10	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	10.0	Cement-Bentonite Grout (0-50 ft bgs).
0.0	10 13 15	18			15	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	15.0	
0.0	6 8 19	18			20	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	20.0	
0.0	13 15 21	18			25	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	25.0	4", Sch 40, MS Blank (0-60 ft bgs).
10.6	NA	18			30	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	30.0	
					35				35.0	

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-24699-T4.FIELD
BORING/WELL NUMBER OW-2
PROJECT NAME Omega Chemical
DATE DRILLED 6/17/99

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
16.5	8 12 19	18				CL		SILTY CLAY: dark brown (10YR4/3); 100% silty clay, low plasticity; trace coarse sand to 1/4" diameter gravel; firm, moist, no odor.		Cement-Bentonite Grout (0-50 ft bgs).
16.5	15 19 22	18			40	CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, low plasticity, soft, moist, no odor.	40.0	
49.3	16 23 29	18	OC-S-OW2-45-061799		45	CL		SILTY CLAY: dark brown (10YR4/3); 100% silty clay, low plasticity; trace coarse sand to 1/4" diameter gravel; firm, moist, no odor.	45.0	4", Sch 40, MS Blank (0-60 ft bgs).
32.9	8 17 20	18			50	CL		SILTY CLAY: dark brown (10YR4/3); 100% silty clay, low plasticity; trace coarse sand to 1/4" diameter gravel; firm, moist, no odor.	50.0	Bentonite Pellets (50-55 ft bgs).
0.0	9 14 20	18			55	ML		SILT WITH SAND: brown (10YR4/3); 85% silt, loose, soft, slightly cohesive; 15% very fine sand; slightly moist, no odor.	55.0	Lonestar #2/12 Filter Pack (55-85 ft bgs).
27.4	7 7 20	18	OC-S-OW2-60-061799		60	SP SM		POORLY GRADED SAND WITH SILT: brown (10YR4/3); 90% sand, very fine to fine; 10% silt in matrix,; slightly moist, no odor.	60.0	
21.9	10 14 22	18			65	SP SM		POORLY GRADED SAND WITH SILT: gray (10YR5/1); 95% sand, very fine to fine; 5% silt in matrix; very moist, slightly cohesive, no odor. ▽	65.0	4", SS, 20-slot, Screen (60-80 ft bgs).
0.0	10 10 17	18			70	SP SM		POORLY GRADED SAND WITH SILT: gray (10YR5/1); 95% sand, very fine to fine; 5% silt in matrix; very moist, slightly cohesive, no odor.	70.0	
					75				75.0	

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-24699-T4.FIELD
BORING/WELL NUMBER OW-2
PROJECT NAME Omega Chemical
DATE DRILLED 6/17/99

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (Inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0	13 21 30	18				CL		SILTY CLAY: dark grayish brown (10YR4/2); 100% silty clay, low plasticity, soft, moist, no odor.		4", SS, 20-slot, Screen (60-80 ft bgs).
					80				80.0	
0.0	12 18 24	18	OC-S-OW2-80-061799			SC		CLAYEY SAND: brown (10YR4/3); 80% sand, very fine to fine: 20% clay in matrix and as balls, moderate plasticity; saturated, no odor.		Lonestar #2/12 Filter Pack (55-85 ft bgs).
					85				85.0	TD = 85 ft bgs.
0.0	NA	18				CL		SILTY CLAY: dark grayish brown (10YR4/2); 100% silty clay, low plasticity, soft, moist, no odor.	86.5	

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-24699-T4.FIELD	BORING/WELL NUMBER	OW-3
PROJECT NAME	Omega Chemical	DATE DRILLED	6/15/99
LOCATION	12504 East Whittier Blvd, Whittier, CA	CASING TYPE/DIAMETER	4" Sch 40, MS Blank
DRILLING METHOD	Hollow Stem Auger	SCREEN TYPE/SLOT	4" SS, 20-slot
SAMPLING METHOD	Modified CA Split Spoon	GRAVEL PACK TYPE	Lonestar #2/12
GROUND ELEVATION		GROUT TYPE/QUANTITY	Portland Cement/5% Bentonite/210 gal
TOP OF CASING		DEPTH TO WATER	59.00
LOGGED BY	Mike Hoffman	GROUND WATER ELEVATION	
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0						CL		CONCRETE is 3 inches thick. SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft, moist, no odor.	0.3	
0.0	3 3 4	18			5	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft, moist, no odor.	5.0	
0.0	4 6 10	18			10	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft, moist, no odor.	10.0	Cement-Bentonite Grout (0-53 ft bgs).
0.0	5 5 14	18			15	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff, moist, no odor.	15.0	
0.0	5 7 13	18			20	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff, moist, no odor.	20.0	
0.0	10 12 17	18			25	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft, moist, no odor.	25.0	4", Sch 40, MS Blank (0-63 ft bgs).
0.0	8 12 16	18			30	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff, moist, no odor.	30.0	
					35				35.0	

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-24699-T4.FIELD
BORING/WELL NUMBER OW-3
PROJECT NAME Omega Chemical
DATE DRILLED 6/15/99

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.0	10 13 20	18			0	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff, moist, no odor.	
13.3	10 13 19	18	OC-S-OW3-45-061599		40	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff, moist, no odor.	40.0
0.0	12 16 22	18			45	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff, moist, no odor.	45.0
0.0	14 19 29	18	OC-S-OW3-50-061599		50	SW		WELL GRADED SAND: dark yellowish brown (10YR3/4); 95% sand, very fine to very coarse, angular to rounded, low to high sphericity; 5% gravel to 1/4" diameter, angular to subrounded, low to moderate sphericity; trace silt in matrix; moist, no odor.	50.0
0.0	22 28 31	18			55	SW		NO RECOVERY: assuming sand and gravel.	55.0
0.0	21 28 31	18			60	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft, moist, no odor.	60.0
0.0	17 25 40	18			65	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft, moist, no odor.	65.0
0.0	12 17 23	18			70	GC		CLAYEY GRAVEL: brown (10YR4/3); 60% gravel, angular to subrounded, low to moderate sphericity; 35% silty clay, low plasticity; 5% well graded sand, very fine to coarse; moist, no odor.	70.0
					75				75.0

WELL DIAGRAM
- Cement-Bentonite Grout (0-53 ft bgs).
- 4", Sch 40, MS Blank (0-63 ft bgs).
- Bentonite Pellets (53-58 ft bgs).
- Lonestar #2/12 Filter Pack (58-85 ft bgs).
- 4", SS, 20-slot, Screen (63-83 ft bgs).

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-24699-T4.FIELD
BORING/WELL NUMBER OW-3
PROJECT NAME Omega Chemical
DATE DRILLED 6/15/99

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0	8 18 20	18	OC-S-OW3-75-061599			CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft; trace gravel; moist, no odor.		4", SS, 20-slot, Screen (63-83 ft bgs).
					80				80.0	
0.0	5 9 14	18				CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, soft; trace gravel; moist, no odor.		Lonestar #2/12 Filter Pack (58-85 ft bgs).
					85				85.0	TD = 85 ft bgs.
0.0	10 31 21	18				CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, low plasticity, stiff; trace gravel; moist, no odor.	86.5	

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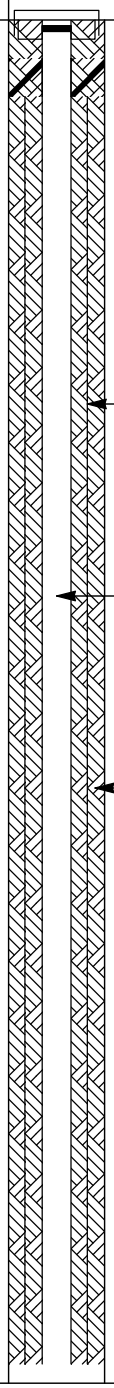
BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW-OW3B
BORING/WELL NUMBER OW-3B
PROJECT NAME Omega Chemical
DATE DRILLED 3/6/06
LOCATION 12511 Putnam St, Whittier, CA
CASING TYPE/DIAMETER Sch 40, PVC / 4"
DRILLING METHOD Mud Rotary
SCREEN TYPE/SLOT 4" Stainless Steel Wire Wrap / 0.010"
SAMPLING METHOD Mud Rotary Cuttings
GRAVEL PACK TYPE Monterey #2/12
GROUND SURFACE ELEVATION (FT MSL) 195.57
GROUT TYPE/QUANTITY Portland Cement/5% Bentonite
TOP OF CASING ELEVATION (FT MSL) 195.14
STATIC WATER LEVEL (FT BELOW TOC) 73.76
LOGGED BY W.F. Grove
GROUND WATER ELEVATION (FT MSL) 121.38
REMARKS The lithology was based on geophysical log and cuttings to the total depth of 139'.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
								Concrete is 7" thick	0.6
								Roadbase	1.0
								SILT: brown (7.5 YR 4/4); silt, moist, low density, nonplastic, no odor	
0					5	ML			
0									
0					10				10.0
								CLAY: brown, (7.5 YR 4/2); low density, low plasticity.	
					15	CL			
0									
									19.0
					20			CLAY: brown, (7.5 YR 4/2); low density, low plasticity.	
				G					
						CL			
0					25				
									29.0
					30			CLAY: brown, (7.5 YR 4/2); low density, low plasticity.	
						CL			
0					35			CLAY: brown, (7.5 YR 4/2); low density, low plasticity.	

Continued Next Page

WELL DIAGRAM



NEWGINT OMEGA.GPJ NEWGINT.GDT 3/17/06

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW-OW3B **BORING/WELL NUMBER** OW-3B
PROJECT NAME Omega Chemical **DATE DRILLED** 3/6/06

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
								CLAY: brown, (7.5 YR 4/2); low density, low plasticity.		
									39.0	
					40			CLAY: brown, (7.5 YR 4/2); low density, low plasticity.		
0						CL				
					45					12" x 3/8" mild steel conductor casing
									48.0	
								SAND: light brown, (7.5 YR 6/4); poorly graded, fine to medium grained, subangular to subrounded.		
					50	SP				4" sch 40 pvc, blank casing
0				G						
									54.0	
								SAND: light brown, (7.5 YR 6/4); poorly graded, fine to medium grained, subangular to subrounded.		
					55					Portland cement w/ 5% bentonite gel grout
						SP				
					60					
									61.0	
0								CLAY: yellowish brown, (10 YR 5/4); 90% clay, medium density, low plasticity; 10% sand, poorly graded, fine to medium grained, subangular to subrounded.		
					65					
						CL				
					70					
0										
									74.0	
								CLAY: brown, (7.5 YR 4/2); medium density, low plasticity.		
					75					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW-OW3B **BORING/WELL NUMBER** OW-3B

PROJECT NAME Omega Chemical **DATE DRILLED** 3/6/06

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
					80	CL		CLAY: yellowish brown, (10 YR 5/4); 90% clay, medium density, low plasticity; 10% sand, poorly graded, fine to medium grained, subangular to subrounded.	81.0	Portland cement w/ 5% bentonite gel grout
0					85	CL		SANDY CLAY: brown, (7.5 YR 4/2); 70% clay, slightly plastic, medium density, low plasticity; 30% sand, poorly graded, fine to medium grained, angular to subrounded, rock fragments.	86.0	4" sch 40 pvc, blank casing
0						CL		CLAY: brown, (7.5 YR 4/2); medium density, low plasticity.	89.0	
				G	90	CL		SANDY CLAY: brown, (7.5 YR 4/2); 90% clay, low density, medium plasticity; 30% sand, poorly graded, fine to medium grained, angular to subrounded.		12" x 3/8" mild steel conductor casing
0					95	CL		SANDY CLAY: brown, (7.5 YR 4/2); 60% clay, low density, medium plasticity; 40% sand, poorly graded, fine grained, subangular to subrounded.	96.0	
									99.0	
					100	ML		SANDY SILT: brown, (7.5 YR 4/2); 60% silt ; 20% sand, poorly graded, fine to medium grained, subangular to subrounded; 20% clay, low density, low plasticity.		Hydrated bentonite chips
0									104.0	
					105	ML		SANDY SILT: brown, (7.5 YR 4/2); 85% silt ; 10% sand, poorly graded, fine to medium grained, subangular to subrounded; 5% clay, low density, low plasticity.		Transition sand, #0/30 sand
0									109.0	No. 2/12 Monterey sand (106 - 126 feet bgs)
					110	ML		SANDY SILT: brown, (7.5 YR 4/2); 75% silt ; 15% sand, poorly graded, fine to medium grained, subangular to subrounded; 10% clay, low density, medium plasticity.	112.0	4" stainless steel, 0.010" wire wrap screen (112 - 122 ft bgs)
0						SP		SAND: light brown, (7.5 YR 6/4); 95% sand, poorly graded, very fine to medium, subangular to subrounded; 5% silt, nonplastic.	114.0	
					115					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW-OW3B **BORING/WELL NUMBER** OW-3B
PROJECT NAME Omega Chemical **DATE DRILLED** 3/6/06

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0					120	SP		SAND: light brown, (7.5 YR 6/4); 95% sand, poorly graded, very fine to medium, subangular to subrounded; 5% silt, nonplastic.	122.0
0					125	SC		CLAYEY SAND: brown (7.5 YR 4/2); 60% sand, poorly graaded, fine to medium grained, subangular to subround; 40% clay, low density, low plasticity.	129.0
0					130	SP		GRAVELLY SAND: light brown (7.5 YR 6/4); 85% sand, fine to coarse, mostly medium, angular to subrounded; 15% gravel, poorly graded, fine, angular to subrounded.	139.0
					135				
					140				
					145				
					150				
					155				

WELL DIAGRAM

NEWGINT OMEGA.GPJ NEWGINT.GDT 3/17/06

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-30697-TO5B.INSTALL	BORING/WELL NUMBER	OW-4A
PROJECT NAME	Omega Chemical	DATE DRILLED	3/15/01
LOCATION	12504 East Whittier Blvd, Whittier, CA	CASING TYPE/DIAMETER	Sch 40, Mild Steel / 4"
DRILLING METHOD	Hollow Stem Auger	SCREEN TYPE/SLOT	4" Stainless Steel Wire Wrap / 0.020"
SAMPLING METHOD	CME Continous Core	GRAVEL PACK TYPE	Lonestar #2/12
GROUND ELEVATION	182.73	GROUT TYPE/QUANTITY	Portland Cement/5% Bentonite/210 gal
TOP OF CASING	182.47	STATIC WATER LEVEL (feet btoc)	54.87
LOGGED BY	W.F. Grove	GROUND WATER ELEVATION	127.60
REMARKS	Well is on north side of Washington Blvd., east of Lambert Rd.		

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
								ASPHALT is 4-inches thick.	0.3
								ROAD BASE	2.0
0.0						CL		SILTY CLAY: dark brown (10YR3/3); 100% silty clay, slightly plastic, soft, moist, no odor.	5.0
0.0		60			5	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, slightly plastic, soft, moist, no odor.	
								Trace gravel at 9-feet, fine to coarse, 1-inch maximum diameter.	10.0
0.0		30			10	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, slightly plastic, soft, moist, no odor; increasing gravel, fine to coarse, 1-inch maximum diameter. Probable rock, no recovery below 12.5 feet.	12.5
								NO RECOVERY	15.0
		0			15			NO RECOVERY: Rock probably in front of sampler.	20.0
		0			20			NO RECOVERY: Rock probably in front of sampler. Cuttings indicate a silty clay.	25.0
0.0		18			25	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, slightly plastic, firm, moist.	26.5
								NO RECOVERY	30.0
0.0		12			30	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, slightly plastic, firm, moist.	31.0
								NO RECOVERY: attached a standard split spoon to resample.	32.0
0.0		12				CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, slightly plastic, firm, moist.	33.0
								NO RECOVERY: Broke some of a rock up and out, may work now.	35.0
					35			Continued Next Page	

WELL DIAGRAM

- 4", Sch 40, MS Blank (0.3 - 49.8 ft bgs)
- Portland Cement w/5% Bentonite Grout (2 - 42.5 ft bgs)

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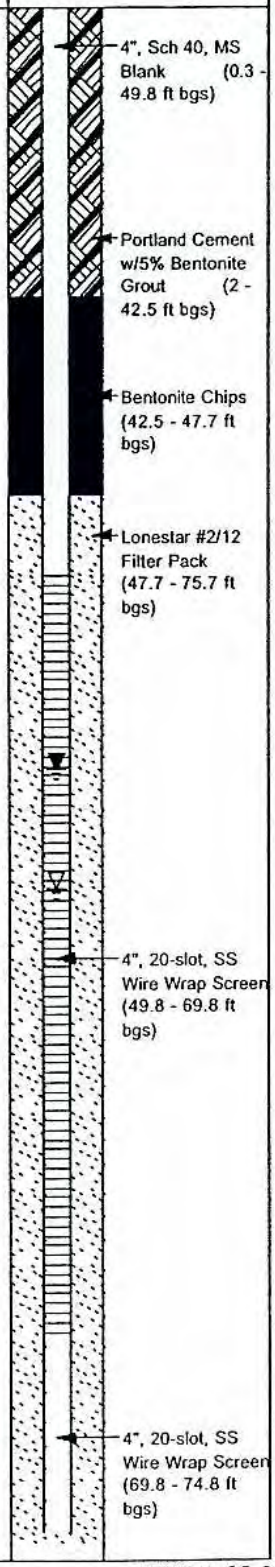
BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL
BORING/WELL NUMBER OW-4A
PROJECT NAME Omega Chemical
DATE DRILLED 3/15/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		0						NO RECOVERY: Rock probably in front of sampler.	40.0
0.0		24			40	CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, slightly plastic, firm, moist.	41.0
						ML		CLAYEY SILT: brown (10YR4/3); 100% clayey silt, inelastic, soft, moist, no odor.	42.0
								NO RECOVERY	45.0
		50.4			45	ML		CLAYEY SILT: brown (10YR4/3); 100% clayey silt, inelastic, soft, moist, no odor.	46.0
						CL		SILTY CLAY: brown (10YR4/3); 100% silty clay, nonplastic, soft to moderately hard, firmer, moist, no odor.	49.2
								NO RECOVERY	50.0
0.0		45.6			50	ML		SANDY SILT: yellowish brown (10YR5/4); 70% silt, soft; 30% poorly graded sand, very fine to fine, subrounded.	52.2
						SM		SILTY SAND: brown (10YR5/3); 85% poorly graded sand, very fine to fine, subrounded; 15% silt, soft.	53.8
								NO RECOVERY	55.0
0.0		51.6			55	SM		SILTY SAND: brown (10YR5/3); 85% poorly graded sand, very fine to fine, subrounded; 15% silt, soft.	57.0
						CL		SILTY CLAY WITH SAND: brown (10YR4/3); 55% clay, nonplastic, firm; 25% silt; 20% poorly graded sand, very fine to fine, subrounded; moist, no odor.	58.0
						SP		POORLY GRADED SAND: brown (10YR4/3) and pale brown (10YR6/3); 100% sand, fine to medium, subangular to subrounded; very moist. Encountered groundwater at 58-feet bgs.	59.3
0.0		50.4			60	SP		NO RECOVERY	60.0
								POORLY GRADED SAND: brown (10YR4/3) and pale brown (10YR6/3); 100% sand, fine to medium, subangular to subrounded; saturated. Encountered groundwater at 58-feet bgs.	63.4
						SM		SILTY SAND: pale brown (10YR6/3); 65% poorly graded sand, very fine, subrounded; 35% silt, enough to limit permeability; moist, no odor.	64.2
0.0		39.6			65	SM		NO RECOVERY	65.0
						SW		SILTY SAND: pale brown (10YR6/3); 65% poorly graded sand, very fine, subrounded; 35% silt, enough to limit permeability; moist, no odor.	66.2
								WELL GRADED SAND: pale brown (10YR6/3); 100% sand, fine to coarse, subangular to subrounded, saturated, no odor.	68.3
								NO RECOVERY	70.0
0.0		60			70	SW		WELL GRADED SAND (possible sluff): pale brown (10YR6/3); 100% sand, fine to coarse, subangular to subrounded, saturated, no odor.	73.0
						SP		POORLY GRADED SAND: pale brown (10YR6/3); 100% sand, fine to medium, increasing fineness with depth, subangular to subrounded, saturated, no odor.	75.0
					75				



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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL
BORING/WELL NUMBER OW-4A
PROJECT NAME Omega Chemical
DATE DRILLED 3/15/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0		48				SP		POORLY GRADED SAND: pale brown (10YR6/3); 100% sand, fine to medium, increasing fineness with depth, subangular to subrounded, saturated, no odor.	76.0	
						SW		WELL GRADED SAND WITH GRAVEL: brown (10YR4/3); 70% sand, fine to coarse, subrounded to subangular, low to moderate sphericity; 30% gap graded gravel, fine to coarse, 2-inch maximum diameter, angular to subrounded, low to moderate sphericity; saturated, no odor.	78.0	Fill (76 - 80 ft bgs)
						CL		GRAVELLY CLAY: brown (10YR4/3); 60% clay, nonplastic, moderately firm; 25% gap graded gravel, fine to coarse, 2-inch maximum diameter, angular to subrounded, low to moderate sphericity; 15% gap graded sand, fine to coarse, subangular to subrounded, low to moderate sphericity; moist to saturated, no odor.	79.0	
					80			NO RECOVERY	80.0	
								Total Depth of Borehole is 80 feet bgs.		

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-30697-TO5B.INSTALL	**BORING/WELL NUMBER**	OW-5
PROJECT NAME	Omega Chemical	**DATE DRILLED**	8/6/01
LOCATION	12504 East Whittier Blvd, Whittier, CA	**CASING TYPE/DIAMETER**	Sch 40, PVC / 4"
DRILLING METHOD	Hollow Stem Auger	**SCREEN TYPE/SLOT**	4" Stainless Steel Wire Wrap / 0.020"
SAMPLING METHOD	CME Continous Core	**GRAVEL PACK TYPE**	Monterey #2/12
GROUND ELEVATION	152.68	**GROUT TYPE/QUANTITY**	Portland Cement/5% Bentonite/210 gal
TOP OF CASING	151.96	**STATIC WATER LEVEL (feet btoc)**	28.18
LOGGED BY	Mike Hoffman	**GROUND WATER ELEVATION**	123.78
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
		60			0	SM		ASPHALT is 6-inches thick. SILTY SAND; very dark gray (10YR3/1); 85% poorly graded sand, fine grained; 15% silt in matrix; moist; slightly cohesive; organic odor.	0.5
3.8		60			5	CL		CLAY; very dark brown (10YR3/2); 100% clay, nonplastic, medium stiff; moist; numerous white inclusions.	5.0
0		60			10			CLAY; as above except brown (10YR4/3) and contains trace fine gravel with subangular clasts.	
0		60			15			CLAY WITH SAND; dark yellow brown (10YR4/4); 85% clay, nonplastic, medium stiff; 15% fine sand; moist.	15.0
								CLAY; brown (10YR4/3); 100% clay; nonplastic, medium stiff; moist; numerous white inclusions.	16.5
0		60			20			CLAY; as above except dark yellow brown (10YR3/4).	
0		60			25			NO RECOVERY (25-26.5 feet)	
								CLAY; as above except is low plastic; contains trace black inclusions; trace reddish (Fe) staining (weathering).	
0		42			30			CLAY; as above except dark greenish brown (10YR4/2); abundant mica; wet; lacks black and white inclusions.	
					35				

Continued Next Page

WELL DIAGRAM

- 4-inch, Sch 40 PVC, blank casing (0-30 ft bgs)
- Neat Cement with 5% Bentonite Grout (0-20 ft bgs)
- Bentonite Seal (20-25 ft bgs)
- #2/12 Monterey Sand Filter Pack (25-51 ft bgs)
- 4", 20-slot, SS Wire Wrap Screen (30-50 ft bgs)

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL
BORING/WELL NUMBER OW-5
PROJECT NAME Omega Chemical
DATE DRILLED 8/6/01

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0		48						NO RECOVERY (35-36 feet)		
						ML		SILT; very dark brown (10YR3/2); 100% silt, low plasticity, medium stiff; abundant mica; wet.	36.0	#2/12 Monterey Sand Filter Pack (25-51 ft bgs)
0		42			40	SM		SILTY SAND; very dark green brown (10YR3/2); 70% sand, fine; 30% silt in matrix; micaceous; wet. NO RECOVERY (40-41.5 feet) SILTY SAND; as above.	39.0	
2.3						SW		SAND; olive brown (2.5Y4/3); 100% sand, fine to coarse grained, subrounded to subangular, well graded; trace fine gravel, diameters to 1/4 inch, subangular.	42.5	#2/12 Monterey Sand Filter Pack (25-51 ft bgs)
					45	SP		SAND: lithology based on the response of the drill rig.	45.0	
					50				52.0	Slough

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-30697-TO5B.INSTALL	BORING/WELL NUMBER	OW-6
PROJECT NAME	Omega Chemical	DATE DRILLED	3/16/01
LOCATION	12504 East Whittier Blvd, Whittier, CA	CASING TYPE/DIAMETER	Sch 40, Mild Steel / 4"
DRILLING METHOD	Hollow Stem Auger	SCREEN TYPE/SLOT	4" Stainless Steel Wire Wrap / 0.020"
SAMPLING METHOD	CME Continous Core	GRAVEL PACK TYPE	Lonestar #2/12
GROUND ELEVATION	170.94	GROUT TYPE/QUANTITY	Portland Cement/5% Bentonite/210 gal
TOP OF CASING	170.54	STATIC WATER LEVEL (feet btoc)	43.95
LOGGED BY	W.F. Grove	GROUND WATER ELEVATION	126.59
REMARKS	Well is on west side of Lambert Rd., south of Washington Blvd.		

(ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
								ASPHALT is 4-inches thick.	0.3
								ROAD BASE	2.0
						CL		SILTY CLAY: dark grayish brown (10YR4/2); 100% silty clay, slightly plastic, moist, no odor.	5.0
0.0		36			5	CL		SILTY CLAY: brown (10YR5/3) with heavy mottling from 7' to 8'; 100% silty clay grading to clay, slightly plastic; trace gravel, fine, 1/2-inch maximum diameter; moist, no odor.	8.0
								NO RECOVERY	10.0
0.0		55.2			10	CL		SILTY CLAY: brown (10YR4/3) moderate to heavy mottling; 85% clay, 15% silt, slightly plastic; trace gravel; moist, no odor.	12.0
						CL		CLAY: brown (10YR4/3) mottled; 90% clay, slightly plastic; 10% gravel, fine, 1/2-inch maximum diameter, increasing with depth; moist, no odor.	14.6
								NO RECOVERY	15.0
0.0		36.08			15	ML		CLAYEY SILT: brown (10YR4/3) mottling; 100% clayey silt, firm; trace gravel, fine, 3/4-inch maximum diameter; moist, no odor.	18.1
								NO RECOVERY	20.0
0.0		60			20	CL		SILTY CLAY: brown (10YR4/3) slight mottling; 100% clay, nonplastic, firm, moist, no odor.	
0.0		55.2			25	CL		SILTY CLAY: brown (10YR4/3) slight mottling; 100% clay, nonplastic, firm, moist, no odor.	29.6
								NO RECOVERY	30.0
0.0		47			30	CL		SILTY CLAY: brown (10YR4/3) slight mottling; 100% clay, nonplastic, firm, moist, no odor.	33.9
								NO RECOVERY	35.0
					35			Continued Next Page	

WELL DIAGRAM

- 4", Sch 40, MS Blank (0.3 - 38 ft bgs)
- Portland Cement w/5% Bentonite Grout (2 - 30.5 ft bgs)
- Bentonite Chips (30.5 - 36 ft bgs)

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL **BORING/WELL NUMBER** OW-6

PROJECT NAME Omega Chemical **DATE DRILLED** 3/16/01

Continued from Previous Page

(ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.0		60				CL		SILTY CLAY: brown (10YR4/3) slight mottling; 100% clay, nonplastic, firm, moist, no odor.	36.8	
						ML		SANDY SILT: brown (10YR4/3); 70% silt, moderately soft; 30% poorly graded sand, very fine, subrounded; moist, no odor.	38.2	
						SM		SILTY SAND: brown (10YR4/3); 70% poorly graded sand, very fine, subrounded; 30% silt, soft; moist, no odor.	39.2	
						ML		SANDY SILT: brown (10YR4/3); 70% silt, moderately soft; 30% poorly graded sand, very fine, subrounded; moist, no odor.	40.0	
0.0		39.6			40	SP		POORLY GRADED SAND: brown (10YR4/3); 100% sand, very fine to fine, subrounded; trace silt; moist, no odor.	42.2	4", 20-slot, SS Wire Wrap Screen (38 - 58 ft bgs).
						SM		SILTY SAND: brown (10YR4/3); 70% sand, very fine to fine, subrounded; 30% silt, soft; moist, no odor.	42.8	
						SP		POORLY GRADED SAND: pale brown (10YR6/3); 100% sand, fine to medium, subangular to subrounded; trace silt; wet, no odor	43.3	
		0			45			NO RECOVERY		
0.0		42			50	SP		POORLY GRADED SAND (SLUFF): brown (10YR5/3); 100% flowing sand, fine, some medium, trace coarse, saturated, no odor.	50.0	Lonestar #2/12 Filter Pack (36 - 59 ft bgs)
								NO RECOVERY	53.5	
0.0		60			55	SP		POORLY GRADED SAND (SLUFF): brown (10YR5/3); 100% flowing sand, fine, some medium, trace coarse, saturated, no odor.	55.0	
0.0		18			60			Total Depth of Borehole is 61.5 feet bgs.	61.5	Fill (59 - 60 ft bgs).

NEWGINT OMEGA.GPJ NEWGINT.GDT 12/20/01

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-30697-TO5B.INSTALL	**BORING/WELL NUMBER**	OW-7
PROJECT NAME	Omega Chemical	**DATE DRILLED**	3/13/02
LOCATION	12504 East Whittier Blvd, Whittier, CA	**CASING TYPE/DIAMETER**	Sch 40, Mild Steel / 4"
DRILLING METHOD	Hollow Stem Auger	**SCREEN TYPE/SLOT**	4" Stainless Steel Wire Wrap / 0.020"
SAMPLING METHOD	Modified CA Split Spoon	**GRAVEL PACK TYPE**	Monterey #2/12
GROUND ELEVATION	213.34	**GROUT TYPE/QUANTITY**	Portland Cement/5% Bentonite
TOP OF CASING	212.01	**STATIC WATER LEVEL (feet btoc)**	76.00
LOGGED BY	W.F. Grove	**GROUND WATER ELEVATION**	136.01
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
								CONCRETE is 8 inches thick.	0.7
								ROADBASE	1.0
								CLAY: brown (7.5YR4/3); slightly plastic, soft, moist; minor rock.	
						CL			
	8,9, 10	12			5				
									6.5
	4,7, 11	14				ML		CLAYEY SILT: brown (7.5YR4/3); very slightly plastic, soft, moist; 30% clay, 70% silt.	7.5
0	5,6, 11,12	20						SILTY CLAY: brown (7.5YR4/3); very slightly plastic, soft, moist; approximately 15% coarse sand; trace gravel to 25 mm.	
	3,11, 13	12			10				
						CL			
	7,14, 16	14							
0	9,7, 14,16	21							
									15.0
	11,12, 19	14			15			CLAY: brown (7.5YR4/3); slightly plastic, moderately firm, moist; 15% silt; trace rock to 25mm; no staining or odor.	
	9,14, 16	16							
0	12,18, 20,22	23				CL			
	3,9, 14	18			20			1" thick, medium to coarse sand lens.	
									21.5
	10,16, 21	18						SILTY CLAY: brown (7.5YR4/3); slightly plastic, soft, moist; 35% silt; trace gravel to 10 mm; no staining or odor.	
0	11,14, 20,22	22							
	5,9, 16	10			25	CL			
	11,16, 23	16							
0	8,12, 15,26	24							29.0
						ML		SILT: brown (7.5YR5/4); nonplastic to very slightly plastic; 20% clay; 5% gravel to 25 mm. Sand stringer at 29.6 feet bgs, fine to coarse, well graded, angular to subrounded.	30.0
	9,13, 21	18			30				
	6,18, 20	13				CL		CLAY: brown (7.5YR4/3); nonplastic to very slightly plastic, firm, moist; 15% silt; no staining or odor.	
									33.0
0	12,13, 22,30	22				CL		CLAY: brown (7.5YR4/3), slightly mottled; nonplastic to very slightly plastic, firm, moist; 15% silt; no staining or odor.	
					35				35.0

WELL DIAGRAM:
- 4" diameter, sch 40, mild steel blank (0-70.89 ft bgs).
- Portland cement w/5% bentonite grout (2-60.6 ft bgs).

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NEWGINT_OMEGA.GPJ NEWGINT.GDT 5/20/02

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL **BORING/WELL NUMBER** OW-7

PROJECT NAME Omega Chemical **DATE DRILLED** 3/13/02

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
	7,7, 22	12						SILTY CLAY: brown (7.5YR4/3); very slightly plastic, firm, moist; 30% silt; no staining or odor.	
	12,17, 24	10							
0	10,17, 20,24	23				CL			
	18,20, 30	18			40				
	12,19, 22	18				ML		CLAYEY SILT: brown (7.5YR4/3); very slightly plastic, soft, moist; 35% clay; 5% very fine sand; no staining or odor.	41.5
0	10,11, 16,30	18						SILTY CLAY: brown (7.5YR4/3); very slightly plastic, firm, moist, root structures filled with very light brown clay; 20% silt; trace coarse sand; no staining or odor.	43.0
	5,7, 21	12			45				
	17,18, 20	18							
0	11,20, 22,23	18				CL			
	5,19, 20	16			50				
	16,22, 25	16							
0	14,27, 30,34	18						Increase in very light brown clay filling cracks.	
	17,20, 32	16			55				55.0
	29,30, 57	15				CL		SILTY CLAY: brown (7.5YR4/3); very slightly plastic, firm, moist, root structures filled with very light brown clay; 20% silt; 5% gravel, 5 to 25 mm diameter, angular; trace coarse sand; no staining or odor. Sandy silt stringer at 57 feet bgs.	
0	12,18, 21,27	20				ML		SANDY SILT: brown (7.5YR5/4); nonplastic, soft, moist; 35% very fine sand, poorly graded, subrounded; very light brown clay filling fractures and other voids; no staining or odor.	58.0
	13,17, 23	17			60				60.5
	16,18, 25	17						SILTY CLAY: brown (7.5YR4/3); very slightly plastic, firm, moist; 20% silt; fractures filled with very light brown clay; no staining or odor; silt and moisture content increase with depth.	
0	5,7, 20,23	19				CL			
	10,19, 26	18			65				
	15,16, 23	18							67.0
0	4,16, 17,24	24				CL		SILTY CLAY: brown (7.5YR4/3); very slightly plastic, very firm, moist; 20% silt; minor very light brown clay in fractures; no staining or odor.	
	18,22, 29	18			70	SM		SILTY SAND: brown (7.5YR5/4); 70% sand, very fine to coarse, well graded, subangular to subrounded; 25% silt; 5% gravel to 25 mm; no odor, moist.	69.7 70.2
	15,28, 30	18				CL		CLAY: brown (7.5YR4/3); moist; 15% silt; very light brown clay in minor fractures or root structures; trace gravel to 25 mm, angular to subangular; no staining or odor.	
0	16,20, 45,_	20							
					75				75.0

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WELL DIAGRAM

- 4" diameter, sch 40, mild steel blank (0-70.89 ft bgs).
- Portland cement w/5% bentonite grout (2-60.6 ft bgs).
- 3/8" pressed, uncoated bentonite pellets (60.6-65 ft bgs).
- #2/12 Monterey sand (65-92.5 ft bgs).
- 4" diameter, 0.020", stainless steel, wire wrap screen (70.89-90.89 ft bgs).

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL
BORING/WELL NUMBER OW-7
PROJECT NAME Omega Chemical
DATE DRILLED 3/13/02

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
	7,9, 11	18						SILTY CLAY: brown (7.5YR5/4); slightly plastic, moist; 25% silt; trace gravel to 25 mm; no staining or odor.		
	3,14, 16	18								
0	3,8, 14,21	23				CL		Vertical crack filled with sand and very light clay from 79 to 80 ft bgs.		
	11,17, 20	18			80			Groundwater at 81 ft bgs, saturated sand and gravel lens.		4" diameter, 0.020", stainless steel, wire wrap screen (70.89-90.89 ft bgs).
	13,16, 27	17							82.5	
0	8,14, 16,24	24				ML		SANDY CLAYEY SILT: brown (7.5YR4/3); nonplastic to very slightly plastic, saturated; 20% clay; 15% very fine sand; minor very light brown clay; no staining or odor.	84.0	
	6,14, 13	18			85			SANDY CLAYEY SILT: brown (7.5YR4/3); nonplastic, hard, moist; very minor very light brown clay in voids; no staining or odor. No water in this material.		
	10,16, 21	18				ML				#2/12 Monterey sand (65-92.5 ft bgs).
0	5,7, 10,12	20								
					90				90.0	
								Total Depth of 8-inch pilot hole is 90 ft bgs, no further samples collected.		
									92.0	
								Total depth of 10-inch borehole is 92 ft bgs.		

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	10500-30697-TO5B.INSTALL	**BORING/WELL NUMBER**	OW-8
PROJECT NAME	Omega Chemical	**DATE DRILLED**	3/13/02
LOCATION	12511 Putnam St, Whittier, CA	**CASING TYPE/DIAMETER**	Sch 40, Mild Steel / 4"
DRILLING METHOD	Hollow Stem Auger	**SCREEN TYPE/SLOT**	4" Stainless Steel Wire Wrap / 0.020"
SAMPLING METHOD	Modified CA Split Spoon	**GRAVEL PACK TYPE**	Monterey #2/12
GROUND ELEVATION	199.03	**GROUT TYPE/QUANTITY**	Portland Cement/5% Bentonite
TOP OF CASING	198.42	**STATIC WATER LEVEL (feet btoc)**	65.00
LOGGED BY	W.F. Grove	**GROUND WATER ELEVATION**	133.42
REMARKS			

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
								CONCRETE is 7 inches thick.	0.6
								ROADBASE	1.0
						CL		SILTY CLAY: brown (7.5YR4/3); 70% clay with minor rock fragments to 3-inch diameter (probable fill), very slightly plastic, firm, hard to dig, moist; 30% silt; moist, no odor.	2.0
								SILT: light brown (7.5YR6/4); nonplastic, soft, moist to damp, no odor.	
	5,6, 7	18			5				
	3,4, 5	18							
0	9,10, 11,12	23				ML			
	8,10, 12	18			10				
	7,9, 11	17							
0	50,50	17							14.0
						CL		CLAY: brown (7.5YR4/2); very slightly plastic, hard, firm, no staining or odor.	15.0
	21,40, 50	17			15			SILTY CLAY: brown (7.5YR4/2); very slightly plastic, firm, moist; 30% silt; gravel/clay lens - trace gravel to 20 mm through out	
	17,21, 25	18				CL			
0	16,22, 25,30	23							
	12,17, 21	18			20				21.0
	13,18, 24	17						CLAY: brown (7.5YR4/2); very slightly plastic, hard, moist; less than 10% silt.	
2/0	22,29, 50,	18				CL			
	15,16, 20	17			25				26.0
						SW		SAND: brown (7.5YR4/3); fine to coarse, well graded, subangular to subrounded, moist; grading to very fine to fine, poorly graded, subrounded at 27 feet, no odor.	27.0
	15,22, 29	18				ML		SILT: brown (7.5YR4/3); nonplastic, soft, no staining or odor.	28.0
4/0	18,20, 25,30	23				CL		CLAY: brown (7.5YR4/3); very slightly plastic, hard; trace coarse sand to 5 mm; trace light brown clay in voids and cracks, no staining or odor.	
	41,50	14			30				30.5
	25,26, 31	18						SILTY CLAY: brown (7.5RY4/3); very slightly plastic, firm/hard, moist; 30% silt; trace coarse sand; no staining or odor.	
4/0	18,23, 26,30	18				CL			
					35				

WELL DIAGRAM:
- 4" diameter, sch 40, mild steel blank (0-60.38 ft bgs).
- Portland cement w/5% bentonite grout (2-51 ft bgs).

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NEWGINT_OMEGA.GPJ NEWGINT.GDT 5/20/02

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL
BORING/WELL NUMBER OW-8
PROJECT NAME Omega Chemical
DATE DRILLED 3/13/02

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PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
	14,17, 22	18								
	16,19, 26	17							37.0	
	20,24, 29,40	20				ML		SILT: brown (7.5YR4/3); nonplastic to very slightly plastic, soft to medium; interbedded with 3-inch thick clay stringers.		
18/0	23,27, 41	18			40				40.0	4" diameter, sch 40, mild steel blank (0-60.38 ft bgs).
	20,25, 32	14				CL		SILTY CLAY: brown (7.5YR4/3); very slightly plastic, firm to hard, moist; trace gravel to 5 mm; no staining or odor.		
	22,25, 27,27	22							44.5	
10/0	8,12, 15	17			45	ML		SILT: brown (7.5YR4/3); nonplastic, medium soft, moist; trace clay; no staining or odor.		Portland cement w/5% bentonite grout (2-51 ft bgs).
	12,15, 21	16							47.0	
	19,23, 26,28	20						SANDY SILT: light brown (7.5YR6/4); soft, moist; 35% very fine sand, poorly graded, subrounded; no staining or odor.		
18/2	17,21, 27	17			50	ML				
	15,20, 24	17								3/8" pressed, uncoated bentonite pellets (60.6-65 ft bgs).
4/2	29,50, 50,	18							54.0	
	19,24, 28	16			55			SAND: light brown (7.5YR6/4); clean sand, very fine to fine, poorly graded, subrounded, moist, no staining or odor.		
	17,20, 25	14								
4/2	50,50	12				SP				
	37,50	12			60					#2/12 Monterey sand (55-81 ft bgs).
	42,50	14								
									63.0	
2/0	50,50	12				SP		SAND: light brown (7.5YR6/4); clean sand, very fine to medium, poorly graded, subrounded, moist, no staining or odor.		
	29,50	15			65				65.0	
	28,50	14						SAND: light brown (7.5YR6/4); clean sand, very fine to medium, poorly graded, subrounded, saturated, no staining or odor. Groundwater encountered at 65 ft bgs.		
28/0	18,21, 25,30	22				SP				
	20,23, 28	16			70					4" diameter, 0.020", stainless steel, wire wrap screen (60.38-79.98 ft bgs).
	15,19, 22	15							72.0	
4/0	13,15, 19,22	24				SW		SAND: light brown (7.5YR6/4); fine to coarse, well graded, subangular to subrounded, saturated; no staining or odor. Sand heaving at 75 ft bgs.		
					75				75.0	

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NEWGINT_OMEGA.GPJ_NEWGINT.GDT_5/20/02

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-30697-TO5B.INSTALL **BORING/WELL NUMBER** OW-8

PROJECT NAME Omega Chemical **DATE DRILLED** 3/13/02

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
	50	18				SW		SAND: light brown (7.5YR6/4); medium to coarse, minor fine, well graded, subangular to subrounded, saturated.		4" diameter, 0.020", stainless steel, wire wrap screen (60.38-79.98 ft bgs).
	50	18								
									78.0	
2/0	50	10				ML		SANDY SILT: brown (7.5YR4/3); nonplastic, firm, moist; 25-30% very fine sand; 5% gravel to 10 mm; light brown clay filling cracks and fractures.	80.0	
					80			Total Depth of 8-inch pilot hole is 80 ft bgs, no further samples collected.	81.0	
								Total Depth of 10-inch borehole is 81 ft bgs.		

NEWGINT OMEGA.GPJ NEWGINT.GDT 5/20/02

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW.Phase1a
PROJECT NAME Omega Chemical
LOCATION 12511 Putnam St, Whittier, CA
DRILLING METHOD Mud Rotary
SAMPLING METHOD Mud Rotary Cuttings
GROUND SURFACE ELEVATION (FT MSL) NA
TOP OF CASING ELEVATION (FT MSL) NA
LOGGED BY W.F. Grove

BORING/WELL NUMBER OW-8B REV
DATE DRILLED 8/16/04
CASING TYPE/DIAMETER Sch 40, PVC / 4"
SCREEN TYPE/SLOT 4" Stainless Steel Wire Wrap / 0.020"
GRAVEL PACK TYPE Monterey #2/12
GROUT TYPE/QUANTITY Portland Cement/5% Bentonite
STATIC WATER LEVEL (FT BELOW TOC) NM
GROUND WATER ELEVATION (FT MSL)

REMARKS The lithology at OW-08 (10' north), was used from 0-71'. The geophysical log and cuttings were used from 71' to the total depth of 143'.

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	DEPTH (ft. bgs)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
						CONCRETE is 7 inches thick.	0.6
						ROADBASE	1.0
					CL	SILTY CLAY: brown (7.5YR4/3); 70% clay with minor rock fragments to 3-inch diameter (probable fill), very slightly plastic, firm, hard to dig, moist; 30% silt; moist, no odor.	2.0
						SILT: light brown (7.5YR6/4); nonplastic, soft, moist to damp, no odor.	
	5,6, 7	18		5			
	3,4, 5	18			ML		
0	9,10, 11,12	23					
	8,10, 12	18		10			
	7,9, 11	17					
0	50,50	17					14.0
					CL	CLAY: brown (7.5YR4/2); very slightly plastic, hard, firm, no staining or odor.	15.0
	21,40, 50	17		15		SILTY CLAY: brown (7.5YR4/2); very slightly plastic, firm, moist; 30% silt; gravel/clay lens - trace gravel to 20 mm through out	
	17,21, 25	18			CL		
0	16,22, 25,30	23					
	12,17, 21	18		20			21.0
	13,18, 24	17				CLAY: brown (7.5YR4/2); very slightly plastic, hard, moist; less than 10% silt.	
2/0	22,29, 50,	18			CL		
	15,16, 20	17		25			26.0
					SW	SAND: brown (7.5YR4/3); fine to coarse, well graded, subangular to subrounded, moist; grading to very fine to fine, poorly graded, subrounded at 27 feet, no odor.	27.0
	15,22, 29	18			ML	SILT: brown (7.5YR4/3); nonplastic, soft, no staining or odor.	28.0
4/0	18,20, 25,30	23			CL	CLAY: brown (7.5YR4/3); very slightly plastic, hard; trace coarse sand to 5 mm; trace light brown clay in voids and cracks, no staining or odor.	
	41,50	14		30			30.5
	25,26, 31	18				SILTY CLAY: brown (7.5RY4/3); very slightly plastic, firm/hard, moist; 30% silt; trace coarse sand; no staining or odor.	
4/0	18,23, 26,30	18			CL		
				35			

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WELL DIAGRAM
- Concrete (0-2 ft bgs)
- 12" x 3/8" mild steel conductor casing (0-91.4 ft bgs)
- 4" sch 40 pvc, blank casing (0-116 ft bgs)
- Portland cement w/ 5% bentonite gel grout (2 - 110 ft bgs)

NEWGINT OMEGA.GPJ NEWGINT.GDT 12/15/04

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW.Phase1a **BORING/WELL NUMBER** OW-8B REV

PROJECT NAME Omega Chemical **DATE DRILLED** 8/16/04

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PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
	14,17, 22	18								
	16,19, 26	17							37.0	
	20,24, 29,40	20				ML		SILT: brown (7.5YR4/3); nonplastic to very slightly plastic, soft to medium; interbedded with 3-inch thick clay stringers.		
					40				40.0	
18/0	23,27, 41	18						SILTY CLAY: brown (7.5YR4/3); very slightly plastic, firm to hard, moist; trace gravel to 5 mm; no staining or odor.		
	20,25, 32	14				CL				
	22,25, 27,27	22							44.5	
10/0	8,12, 15	17			45	ML		SILT: brown (7.5YR4/3); nonplastic, medium soft, moist; trace clay; no staining or odor.		12" x 3/8" mild steel conductor casing (0-91.4 ft bgs)
	12,15, 21	16							47.0	
	19,23, 26,28	20						SANDY SILT: light brown (7.5YR6/4); soft, moist; 35% very fine sand, poorly graded, subrounded; no staining or odor.		
18/2	17,21, 27	17			50	ML				4" sch 40 pvc, blank casing (0-116 ft bgs)
	15,20, 24	17								
4/2	29,50, 50,	18							54.0	
	19,24, 28	16			55			SAND: light brown (7.5YR6/4); clean sand, very fine to fine, poorly graded, subrounded, moist, no staining or odor.		Portland cement w/ 5% bentonite gel grout (2 - 110 ft bgs)
	17,20, 25	14								
4/2	50,50	12				SP				
	37,50	12			60					
	42,50	14								
									63.0	
2/0	50,50	12				SP		SAND: light brown (7.5YR6/4); clean sand, very fine to medium, poorly graded, subrounded, moist, no staining or odor.		
									65.0	
	29,50	15			65			SAND: light brown (7.5YR6/4); clean sand, very fine to medium, poorly graded, subrounded, saturated, no staining or odor. Groundwater encountered at 65 ft bgs.		
	28,50	14				SP				
28/0	18,21, 25,30	22						The lithology above 71 feet is from soil boring OW-8 from split spoon sampling. The lithology below 71 feet is from OW-8B, a mud rotary hole.		
	20,23, 28	16			70				71.0	
				G		CL		CLAY AND SILT: yellowish brown; 70% clay; 30% silt; high plasticity, high density, moist, no odor.		
					75				75.0	

Continued Next Page

NEWGINT OMEGA.GPJ NEWGINT.GDT 12/15/04

CDM
18581 Teller Avenue, Suite 200
Irvine, CA 92612
(949) 752-5452
(949) 752-1307 (FAX)

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW.Phase1a **BORING/WELL NUMBER** OW-8B REV

PROJECT NAME Omega Chemical **DATE DRILLED** 8/16/04

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						CL		CLAY AND SILT: yellowish brown; 70% clay; 30% silt; high plasticity, high density, moist, no odor.		
									78.0	
						ML		SANDY SILT: yellowish brown; 50% silt; 30% sand, fine grained, subround to round; 10% gravel, fine to coarse grained, subround to round; 10% clay; medium density, moist, no odor.	79.0	
						SM			80.0	Portland cement w/ 5% bentonite gel grout (2 - 110 ft bgs)
					80			SILTY SAND WITH GRAVEL: yellowish brown; 50% sand, fine to coarse grained, subround to round, well graded; 20% silt; 20% gravel, fine to coarse grained, subround to round, well graded; 10% clay; moist to wet, no odor.		
						GM		SILTY GRAVEL WITH SAND: brown; 40% gravel, fine to coarse grained, subround to round, well graded; 30% sand, fine to coarse grained, round to subround, well graded; 30% silt; trace of cobbles, maximum diameter of 6 inches; high density, moist, no odor.		4" sch 40 pvc, blank casing (0-116 ft bgs)
					85				87.0	
						CL		CLAY WITH SAND: brown; 85% clay, medium plasticity; 15% sand, poorly graded, fine to medium, mostly fine, subangular to subrounded.		
					90					
									92.0	12" x 3/8" mild steel conductor casing (0-91.4 ft bgs)
								CLAY: brown; 95% clay, medium to high plasticity; 5% sand, poorly graded, medium, subangular to subrounded; trace silt.		
				G	95					
						CH				
					100					
									102.0	
								CLAY: brown; 80% clay, 10% silt, medium plasticity; 10% sand, poorly graded, fine to medium, subangular to subrounded.		
					105	CL				
									108.0	
						CH		CLAY: brown; 95% clay, high plasticity; 5% sand, poorly graded, fine to medium, subangular to subrounded.	110.0	
					110					
						CL		CLAY WITH SAND: brown; 85% clay, medium plasticity; 15% sand, poorly graded, fine to medium, subangular to subrounded; trace silt.		Plaster sand (110-111.3 ft bgs)
									113.0	
						ML		SANDY SILT: brown; 55% silt, 10% clay, low plasticity; 35% sand, fine to medium, subangular to subrounded.		
					115				115.0	

Continued Next Page

NEWGINT OMEGA.GPJ NEWGINT.GDT 12/15/04

CDM
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Irvine, CA 92612
(949) 752-5452
(949) 752-1307 (FAX)

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 10500-37240-T1.GW.Phase1a **BORING/WELL NUMBER** OW-8B REV

PROJECT NAME Omega Chemical **DATE DRILLED** 8/16/04

Continued from Previous Page

PID (ppm)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
						ML		SANDY SILT: brown; 55% silt, 10% clay, low plasticity; 35% sand, fine to medium, subangular to subrounded.		No. 2/12 Monterey sand (111.3 - 128 feet bgs)
									119.0	
					120	SM		SILTY SAND: light brown and brown; 80% sand, poorly graded, fine to medium, subangular to rounded; 20% silt, nonplastic.		4" stainless steel, 0.010" wire wrap screen (116 - 126 ft bgs)
									122.0	
								SAND WITH SILT: light brown; 95% sand, poorly graded, fine to medium, mostly fine, subangular to rounded; 5% silt, nonplastic.		
					125	SP SM				
									129.0	
					130	CL		CLAY: light brown; 90% clay, medium plasticity; 10% sand.		
									131.0	
						SP SM		SAND WITH SILT: light brown; 95% sand, poorly graded, fine to medium, mostly fine, subangular to subrounded; 5% silt, nonplastic.	132.0	
						CL		CLAY: light brown; 90% clay, medium plasticity; 10% sand, poorly graded, fine to medium, mostly fine, subangular to subrounded.		
									135.0	Hydrated bentonite chips (128 - 143 ft bgs)
					135			SAND: light brown; 100% sand, poorly graded, fine to medium, mostly fine, subangular to subrounded.		
						SP				
									140.0	
					140	CL		CLAY: light brown; 90% clay, medium plasticity; 10% sand, poorly graded, fine to medium, mostly fine, subangular to subrounded.	141.0	
						SP		SAND: light brown; 100% sand, poorly graded, fine to medium, mostly fine, subangular to subrounded.	143.0	
								Total depth is 143 feet bgs.		

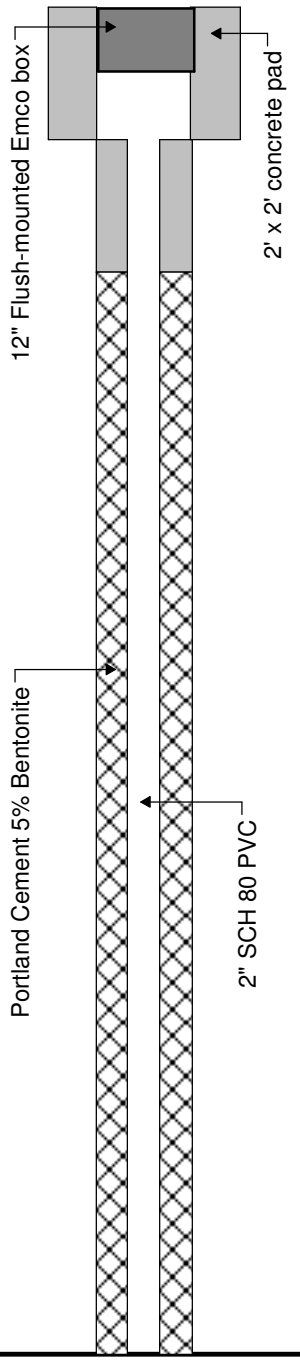
NEWGINT OMEGA.GPJ NEWGINT.GDT 12/15/04

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
0					Ground Surface			Hand auger to 5' bgs
					Concrete	0		
					SANDY SILT (ML) dark yellowish brown (10 YR 4/4), moist, 60% fines, 40% fine sand	0		
		0.1						
5	1140	0.3						
			2.2/5					
10		1.6				10		



reference template: Ch2m_GWWell_OmegaPIDRec

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					as above, trace subangular gravel as quartz and granodiorite, 0.2 to 2 inches			
			3.5/5					
		0.3						
		0.1			**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), 40% fine sand, 30% medium sand, 20% fines, 10% coarse sand, angular to subrounded, quartz grains, trace gravel as granodiorite	13		
					LEAN CLAY (CL) dark brown (10YR 3/3), moist, 85% fines, 15% fine sand, soft, low plasticity			
15	1203	0.0						1210:stop drilling
	1255							1255: resume drilling
			4/5					
					SANDY LEAN CLAY (CL) dark yellowish brown (10YR 3/4), dry, 70% fines, 30% fine sand, firm, low plasticity, trace gravel as quartz, granodiorite, some gravel polished and rounded, some gravel angular to subangular, gravel 0.8 to 1.5 inches	18		
20	1300	0.1				20		

reference template: Ch2m_GWWell_OmegaPIDRec

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					as above, except gravel is ~2 inches			short sample run from 20'-23.5' bgs due to gravel at 23.5'
			3/3.5					
		0.1			**POORLY GRADED GRAVEL (GP)** light gray (5 Y 7/2), dry, 100% cobbles, 3 inches diameter, subrounded to subangular, Fe-oxide staining on fractures	23		
		0.3			**WELL GRADED GRAVEL WITH SAND (SW)** dark yellowish brown (10YR 4/6), dry, 70% gravel, subrounded to rounded, diorite and quartz, 0.2 to 2 inches, 20% coarse sand, 10% medium sand, loose	24		
			1.5/1.5					
		0.7			**SANDY SILT (ML)** dark yellowish brown (10YR 3/6), 70% fines, 30% fine sand, hard	25		
25								
		0.7			**WELL GRADED SAND WITH GRAVEL (SW)** dark yellowish brown (10YR 4/4), dry, 40% fine gravel, subangular to subrounded, some polished, granodiorite, 0.1 to 0.4 inches, 30% coarse sand, 20% medium sand, 10% fine sand	26		
		0.1						
		0.6	4.4/5		**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), dry, 70% fines, 30% fine sand, soft	28		
		2.3			as above, very dark brown (7.5YR 3/3), trace highly weathered granodiorite gravel, 0.2 inches			
		0.7			**WELL GRADED SAND (SW)** pale brown (10YR 6/3), dry, 50% coarse sand, 30% medium sand, 20% fine sand, angular to subrounded	29		
30	1400	0.3				30		

reference template: Ch2m_GWWell_OmegaPIDRec

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					SILTY SAND (SM) dark yellowish brown (10YR 4/4), dry, 60% fine sand, 40% fines, loose			
		0.2			**WELL GRADED SAND WITH GRAVEL (SW)** dry, 40% coarse sand, 25% fine to coarse gravel, subangular to subrounded, 0.1 to 2 inches, granodiorite, 20% medium sand, 15% fine sand, loose	31		
		0.1			**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), dry, 60% fine sand, 40% fines, loose	32		
			4.1/5					
		0.7			as above, hard trace gravel, rounded sandstone and subangular granodiorite	33		
35		0.2			as above, dark yellowish brown (10YR 3/4), dry, 80% fine sand, 20% fines, trace fine gravel, granitic, up to 0.2 inches	35		
		0.4			**WELL GRADED GRAVEL WITH SAND (GW)** 60% fine to coarse gravel, angular to subrounded, 0.1 to 3 inches, granite to granodiorite, 30% coarse sand, 5% medium sand, 5% fine sand, loose	37		
			4/5					
		0.5			**SILTY SAND (SM)** brown (10YR 4/3), dry, 65% fine sand, 35% fines, hard	39		
40		0.1				40		

reference template: Ch2m_GWWell_OmegaPIDRec

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					as above, dark yellowish brown (10YR 4/4), dry, 75% fine sand, 25% fines, micaceous, loose			
		0.2	4/5		as above, trace gravel, subrounded, 0.1 to 0.2 inches, quartz, granodiorite	42		
45	1505	0.2	2.2/5		as above, dark yellowish brown (10YR 4/4), dry, 80% fine sand, 20% fines, trace gravel, subrounded, 0.1 to 2 inches	45		
50	1530	0.5				50		

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
			3.8/5		as above, hard			1530, stop drilling 1600, resume drilling
		0.2			as above, dark yellowish brown (10YR 4/4), dry, 60% fine sand, 20% fines, 10% fine gravel, subrounded, quartz, 10% coarse sand	54		
55	1610	2.6						
		1.5			as above, yellowish brown (10YR 5/4), dry, 60% fine sand, 40% fines	57		
			2.5/5		**SILTY SAND WITH GRAVEL (SM)** dark yellowish brown (10YR 3/6), dry, 60% fine sand, 25% fines, 15% fine gravel, subangular to subrounded, 0.1 to 0.2 inches			
60	1635	0.1				60		

CH2MHILL

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					SILTY SAND (SM) dark yellowish brown (10YR 4/4), moist, 60% fine sand, 40% fines			9/1/09, 1635, stop drilling at 60' bgs for the day
		0.1			**SILTY SAND WITH GRAVEL (SM)** dark yellowish brown (10YR 4/4), moist, 50% fine sand, 35% fines, 15% gravel, angular, 0.1 to 1.5 inches, possible calcium carbonate stringer	62		9/2/09, 0714, begin drilling for the day
			4.1/5					
		0.1			**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), moist, 60% fine sand, 40% fines, trace gravel, angular, 0.1" in diameter, possible calcium carbonate stringer	64		
65	0723	0.2			as above, 60% fine sand, 40% fines, soft	65		
			2/5					
70	0745	0.2				70		

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
			4.3/5		**SANDY SILT (ML)** brown (10YR 4/3), moist, 60% fines, 40% fine sand, soft, nonplastic, calcium carbonate stringers, abundant stringers at 70.5'-71', 71.6'-72.4', 73.3'-73.8', trace gravel, subrounded, granodiorite, 1 inch			
75	0807	0.2				75		
			3.6/5		**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), moist, 70% fine sand, 30% fines, trace gravel, subrounded, 0.1 inches, quartz and granodiorite, soft, stringer of calcium carbonate 77.4'-77.6'			
80	0832	0.2				80		

CH2MHILL

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					as above, no gravel, calcium carbonate stringers, abundant calcium carbonate stringers from 82.2'-82.7'			
			3.3/5					
85	0855	0.6			as above, dry, 75% fine sand, 25% fines, stringers of calcium carbonate	85		
					as above, yellowish brown (10YR 5/4), abundant calcium carbonate stringers	87		
			3.8/5		as above, few calcium carbonate stringers	87		
90	0930	0.3				90		

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
			5/5		**SILTY SAND (SM)** as above, yellowish brown (10YR 5/4), moist, 80% fine sand, 20% fines, stringers of calcium carbonate			0935, stop drilling 0952, resume drilling
					as above, dark brownish yellow (10YR 4/4), moist, 70% fine sand, 20% fines, 10% gravel, subangular to subrounded, 0.1 to 0.2 inches, granodiorite, stringers of calcium carbonate	94		
95	1009	0.3			as above, dark yellowish brown (10YR 4/4), 70% fine sand, 15% fines, 10% coarse sand, quartz, 5% gravel, subrounded, 0.2 inches, quartz, few calcium carbonate stringers	95		
					SILTY GRAVEL WITH SAND (GM) dark yellowish brown (10YR 4/4), moist, 70% gravel, subrounded, 0.2 to 1 inch, quartz and granite	97		
		1.3	3/5		**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), moist, 85% fine sand, 15% fines, stringers of calcium carbonate	98		
					as above, mottled dark yellowish brown (10YR 4/4) and very dark grayish brown (10YR 3/2), no stringers			
					as above, dark yellowish brown (10YR 3/4), moist, 85% fine sand, 15% fines, trace gravel, subrounded, 0.1 inches, quartz			
100	1028	0.8				100		

reference template: Ch2m_GWWell_OmegaPIDRec

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					as above, dark yellowish brown (10YR 3/6), wet, 75% fine sand, 15% fines, 10% gravel, subrounded, 0.1 inches, quartz		Medium bentonite chips	
		0.5	3.9/5		**WELL GRADED GRAVEL WITH SAND (SW)** dark yellowish brown (10YR 3/6), wet, 70% gravel, subrounded, 0.1 to 1 inches, granite and granodiorite, 20% coarse sand, 10% medium sand, trace fine sand	102		
					SILTY SAND (SM) dark yellowish brown (10YR 4/6), wet, 70% medium sand, micaceous, quartz, 15% fines, 10% fine sand, 5% coarse sand		No. 2/16 sand No. 60 sand	
105	1045	0.5			as above, dark yellowish brown (10YR 3/4), wet, 85% fine sand, 15% fines, trace gravel, subrounded, 1 inch, granodiorite	105		
		0.8	2.7/5		**SILTY GRAVEL WITH SAND (GM)** dark yellowish brown (10YR 3/6), wet, 60% gravel, subrounded, 0.2 to 2 inches, granodiorite, 25% fine sand, 15% fines	107	15' - 0.01" slot	
					SILTY SAND (SM) dark yellowish brown (10YR 3/4), wet, 85% fine sand, 15% fines, trace gravel, subrounded, 1 inch, granodiorite	108		
					WELL GRADED GRAVEL WITH SAND (GW) dark yellowish brown (10YR 4/6), wet, 70% gravel, subangular to subrounded, 0.1 to 2 inches, granodiorite, 15% coarse sand, 10% medium sand, 5% fines			
110		1.9				110		

reference template: Ch2m_GWWell_OmegaPIDRec

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
					POORLY GRADED SAND (SP) dark yellowish brown (10YR 4/6), wet, 60% coarse sand, angular to subrounded, mainly quartz and feldspars, few diorite, 15% gravel, 0.1 to 4 inches, 10% medium sand, 10% fines, 5% fine sand			
		0.9			**SILTY SAND WITH GRAVEL (SM)** dark yellowish brown (10YR 4/6), wet, 45% medium sand, 20% gravel, 0.1 to 4 inches, quartz and granodiorite, 20% coarse sand, 15% fines	111		
			2.2/5		**WELL GRADED SAND WITH GRAVEL (SW)** dark yellowish brown (10YR 4/6), wet, 65% coarse sand, angular to subrounded, quartz, feldspars, granodiorite, 20% gravel, subrounded, 0.1 to 1.5 inches, granodiorite, 10% medium sand, 5% fines	112		
115	1115	2.1			**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)** dark yellowish brown (10YR 4/6), wet, 60% gravel, angular to subrounded, granodiorite and diorite, 0.1 to 1 inch, 30% coarse sand, 10% fines	115		1115, stop drilling 1210, resume drilling
		1.5			**POORLY GRADED SAND WITH GRAVEL (SP)** dark yellowish brown (10YR 4/6), wet, 70% coarse sand, 15% gravel, subangular to subrounded, diorite, granodiorite, quartz, 15% medium sand	117		
		0.4	4.4/5		**SILTY SAND WITH GRAVEL (SM)** dark yellowish brown (10YR 4/6), wet, 40% fine sand, 20% gravel, angular, highly weathered diorite, 15% coarse sand, 15% fines, 10% medium sand	118		
		0.6			**BOULDER** boulder, granodiorite to diorite	119		
120	1230	0.4				120		

CH2MHILL

Well Number: MW-31

Client: U.S. EPA
Project: Omega Chemical OU2
Location: Whittier Frontage Road
Project Number: 335392.FI.01

Driller: Tricounty Drilling
Drilling Method: HSA CME-75 with 8" augers
Sampling Method: Core
Logged by: E. Bryant
Start/Finish Date: 9/1/09 to 9/2/09

Depth (ft)	Sample Info: Time	Sample Info: PID (ppm)	Sample Info: Recovery (ft)	Graphic Log	Soil Description	Depth (ft)	Well Drawing	Drilling Comments
		0.5			**POORLY GRADED SAND WITH GRAVEL (SP)** dark yellowish brown (10YR 4/6), wet, 50% coarse sand, 20% gravel, subrounded, 0.1 to 1.5 inches, quartz, granodiorite, 5% medium sand, 5% fines			
					SILTY SAND (SM) dark yellowish brown (10YR 4/6), wet, 30% medium sand, 30% fine sand, 25% coarse sand, 15% fines	122		
		0.1	4.4/5		**POORLY GRADED SAND WITH GRAVEL (SP)** dark yellowish brown (10YR 4/6), wet, 50% coarse sand, 20% gravel, subrounded, 1 to 2 inches, quartz, granodiorite, 5% medium sand, 5% fines	122		
					POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) dark yellowish brown (10YR 4/6), wet, 40% coarse sand, 25% gravel, subrounded to subangular, diorite, 15% medium sand, 10% fine sand, 10% fines			
125	1248				**POORLY GRADED SAND WITH GRAVEL (SP)** dark yellowish brown (10YR 4/6), 50% coarse sand, 25% medium sand, 20% gravel, angular to subrounded, quartz, granodiorite, feldspars, 5% fines			1310, stop drilling
					SILTY SAND WITH GRAVEL (SM) dark yellowish brown (10YR 4/6), wet, 70% fine sand, 15% gravel, subangular, 0.1 to 0.2 inches, diorite, 15% fines	126	5' Sump 8" borehole	TD: 126' bgs
					End of Log			
130								