

Nowell, Keith, Env. Health

From: Kate Lamb <klamb@eticeng.com>
Sent: Monday, March 26, 2018 9:24 AM
To: Nowell, Keith, Env. Health
Cc: Ryan Haughey; Sedlachek, Jennifer C; Gretchen Tagavilla
Subject: ETIC - Former Station 70234, Oakland Case # RO2515
Attachments: 70234_Boring Logs.pdf; 70234_Site Map.pdf; 70234_Well Construction Table.pdf

Keith,

Per the Alameda County letter dated 13 March 2018, ETIC is notifying you of the upcoming well destruction schedule for Former Station 70234, located at 3450 35th Avenue in Oakland, CA. All work will be completed pending completion of the public notice period.

- On 29 March 2018, ETIC will oversee a geophysical survey to identify any subsurface utilities adjacent to each of the well locations.
- On 13 through 15 April 2018, ETIC will oversee the well abandonments. ETIC will pressure grout the seven monitoring wells (MW4 through MW9 and RW1). The top 5 feet of casing will be removed at each of the monitoring wells, the well box will be removed, and the surface will be completed to match the surrounding surface. ETIC will remove the entire vapor probe casing for V1 through V6, the well boxes will be removed, and the surface completed to match the surrounding surface.

A well construction table, boring logs, and site map are attached for your reference.

Please let me know if you have any questions or need additional information.

Thank you,

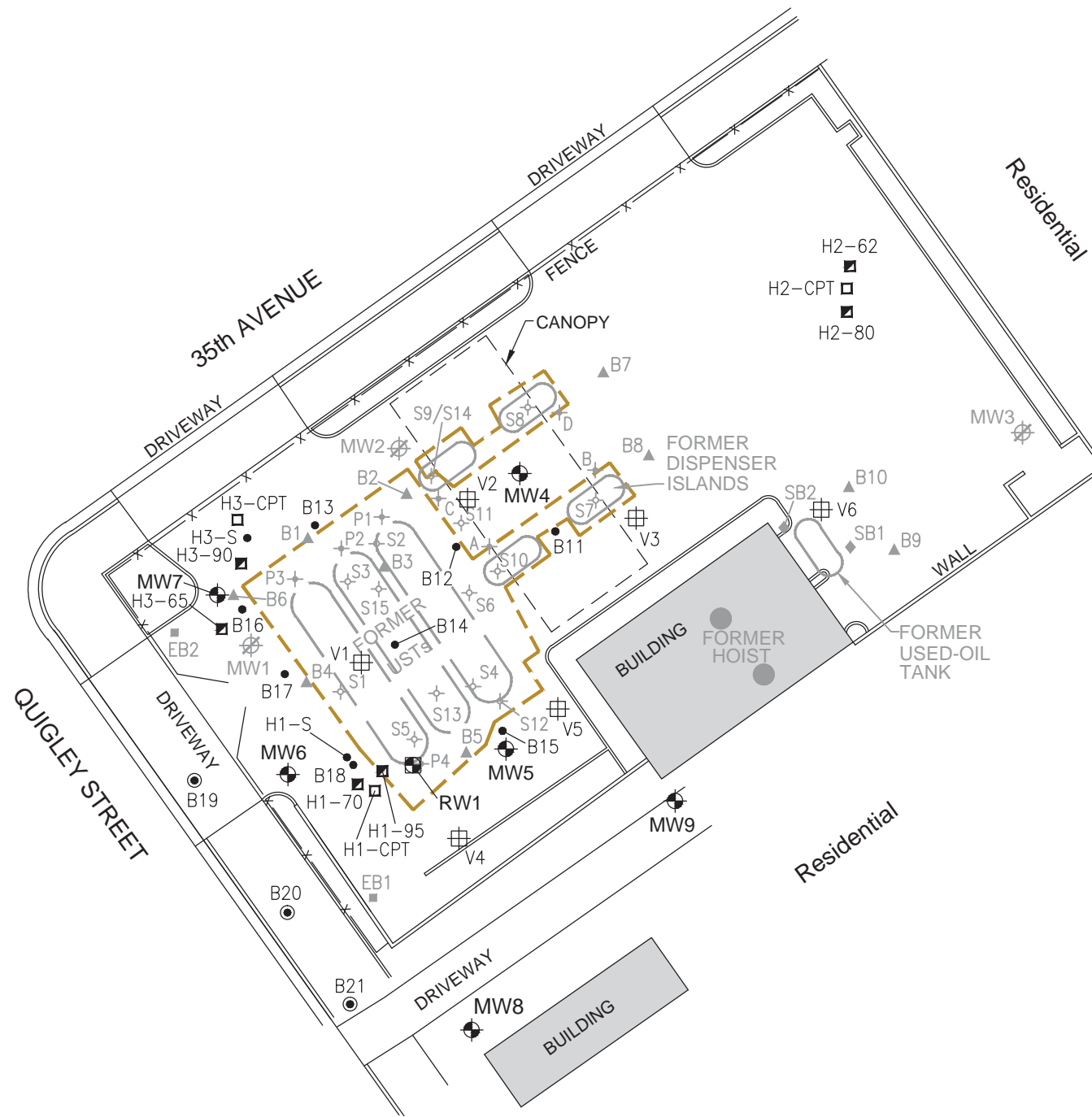
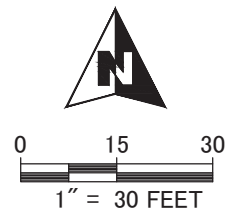
Kate Lamb, QSP, QISP
Senior Project Manager



ETIC | 250 W Colorado Blvd
Suite 110 | Arcadia, CA 91007
Phone 626.432.5999, 2506 | Mobile 626.319.0393
Fax 626.432.5998 | www.eticeng.com

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- LEGEND:**
- EXCAVATED AREA
 - GROUNDWATER MONITORING WELL
 - GROUNDWATER MONITORING WELL (by others)
 - DESTROYED GROUNDWATER MONITORING WELL
 - GROUNDWATER RECOVERY WELL
 - V1 SOIL VAPOR MONITORING WELL
 - H3-CPT CONE PENETROMETER TESTING BORING
 - H3-65 HYDROPUNCH GROUNDWATER SAMPLING LOCATION (WITH DEPTH BELOW GROUND SURFACE NOTED)
 - H3-S SOIL BORING
 - SOIL BORING (GTI, 1986)
 - SOIL BORING (HLA, 1988)
 - SOIL BORING (Alton, 1991)
 - SOIL SAMPLE (Alton, 1991)
 - SOIL SAMPLE (TRC, 2002)
 - SOIL BORING (ERI, 2007)
 - SOIL BORING (ERI, 2009)

16-070234-UP	EXXONMOBIL OIL CORPORATION	FIGURE: 2
OR: AF	SITE MAP	
DR: AJW	FORMER EXXON SERVICE STATION 70234 3450 35th AVENUE	
CK:	OAKLAND, CALIFORNIA	
FR:		

2285 MORELLO AVENUE
PLEASANT HILL, CA 94523
(925) 602-4710
eticeng.com

TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON SERVICE STATION 70234, 3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date Installed	Date Destroyed	Elevation TOC (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	Jun-00	192.00	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	Jun-00	194.85	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	Jun-00	196.90	11	45	45	4	Schedule 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW4	03/02/09	---	197.62	8	45	45	2	Schedule 40 PVC	35-45	0.020	33-45	#3 Sand
MW5	03/06/09	---	196.35	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW6	03/09/09	---	192.41	8	40	39	2	Schedule 40 PVC	29-39	0.020	27-39	#3 Sand
MW7	03/09/09	---	194.34	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW8	03/04/09	---	192.96	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
MW9	03/05/09	---	195.16	8	40	40	2	Schedule 40 PVC	30-40	0.020	28-40	#3 Sand
RW1	12/22/11	---	195.15	10	40	40	4	Stainless Steel	25-39.5	0.020	23-40	#2/12 Sand
V1	04/14/14	---	---	5	7	6.75	0.25	Stainless Steel	6.25-6.75	0.0057	6-7	#3 Sand
V2	04/15/14	---	---	5	7	6.75	0.25	Stainless Steel	6.25-6.75	0.0057	6-7	#3 Sand
V3	04/15/14	---	---	5	7	6.75	0.25	Stainless Steel	6.25-6.75	0.0057	6-7	#3 Sand
V4	04/15/14	---	---	5	7.25	6.75	0.25	Stainless Steel	6.25-6.75	0.0057	6-7.25	#3 Sand
V5	04/15/14	---	---	5	7	6.75	0.25	Stainless Steel	6.25-6.75	0.0057	6-7	#3 Sand
V6	11/07/14	---	---	3	6.7	6.4	0.25	Stainless Steel	5.9-6.4	0.0057	5.7-6.7	#3 Sand

Notes: Data prior to 2013 provided by Cardno ERI.

TOC Top of well casing elevation; datum is mean sea level.

PVC Polyvinyl chloride.

feet bgs Feet below ground surface.

--- Not applicable.



BORING LOG MW4

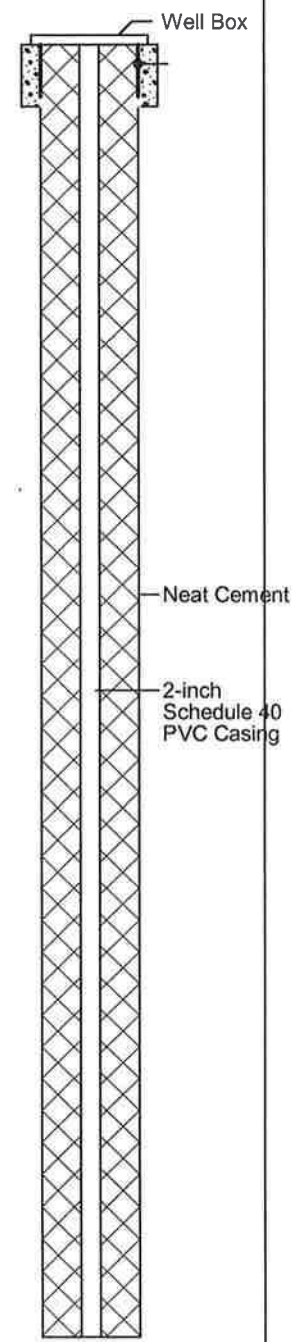
(Page 1 of 2)

Date Drilled: : 03/02/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115577.4
 Location E-W : 6069903.2
 Total Depth: : 45 fbg
 First GW Depth: : 37 fbg

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						No Recovery Sampled Interval Described Sample Preserved Sample	First Encountered Water: 37' Second Encountered Water: NA	
0								Concrete: 6 inches in thickness.
					SW			SAND: Fill
					FILL			Gravelly SAND with Silt (Fill) fine- to coarse-grained, chunks of asphalt, consolidated, rootlets
5		0.0			SM			Silty SAND with Clay: fine- to medium-grained, yellowish brown (10YR 5/8), dry, black iron oxide nodules, trace coarse-grained sand (15% Clay, 30% Silt, 55% Sand, 0% Gravel)
10		0.0			CL			Sandy CLAY: yellowish brown (10YR 5/4), damp; fine- to coarse-grained sand, trace gravel, black, white, green, red colored sand grains (40,20,38,2)
15		0.0			CL			
20		0.7			CL			
25					SC			Clayey SAND with Gravel: fine- to coarse-grained, dark yellowish brown (10YR 4/6) damp, fine, angular to subangular gravel, various sand grain colors - black, white, green red (30,15,40,15)

Well: MW4



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BORING LOG MW4

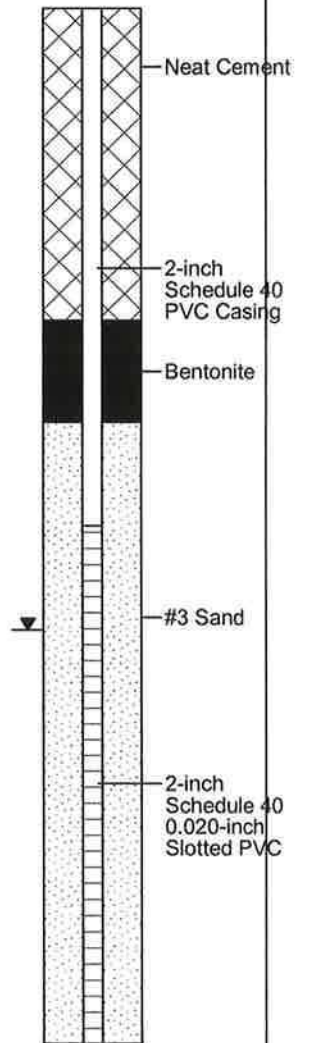
(Page 2 of 2)

Date Drilled: : 03/02/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115577.4
 Location E-W : 6069903.2
 Total Depth: : 45 fbs
 First GW Depth: : 37 fbs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi L. Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	▼ First Encountered Water: 37' ▽ Second Encountered Water: NA	
25		0.0			SC			Clayey SAND with Gravel (continued): fine- to coarse-grained, dark yellowish brown (10YR 4/6) damp, fine, angular to subangular gravel, various sand grain colors - black, white, green red (30,15,40,15)
30		0.0			GC			Clayey GRAVEL with Sand: fine- to coarse-grained, yellowish brown (10YR 4/4), damp, subangular to angular, coarse-grained sand (30,15,25,30)
35		0.0			SW			Gravelly SAND: medium- to coarse-grained, dark yellowish brown (10YR 4/4), moist, subangular, gravel angular to subangular (20,15,40,25) Wet from 37 feet bgs.
40		0.0			CL			Sandy CLAY: dark yellowish brown (10YR 4/6), damp, low plasticity, fine- to medium-grained sand, trace coarse-grained sand
45		0.0						Cleared with a hand auger, air knife, water-knife and vacuum to 6.3 feet bgs on 02/25/2009. Total Depth = 45 feet bgs, 13:00, 03/02/2009.

Well: MW4



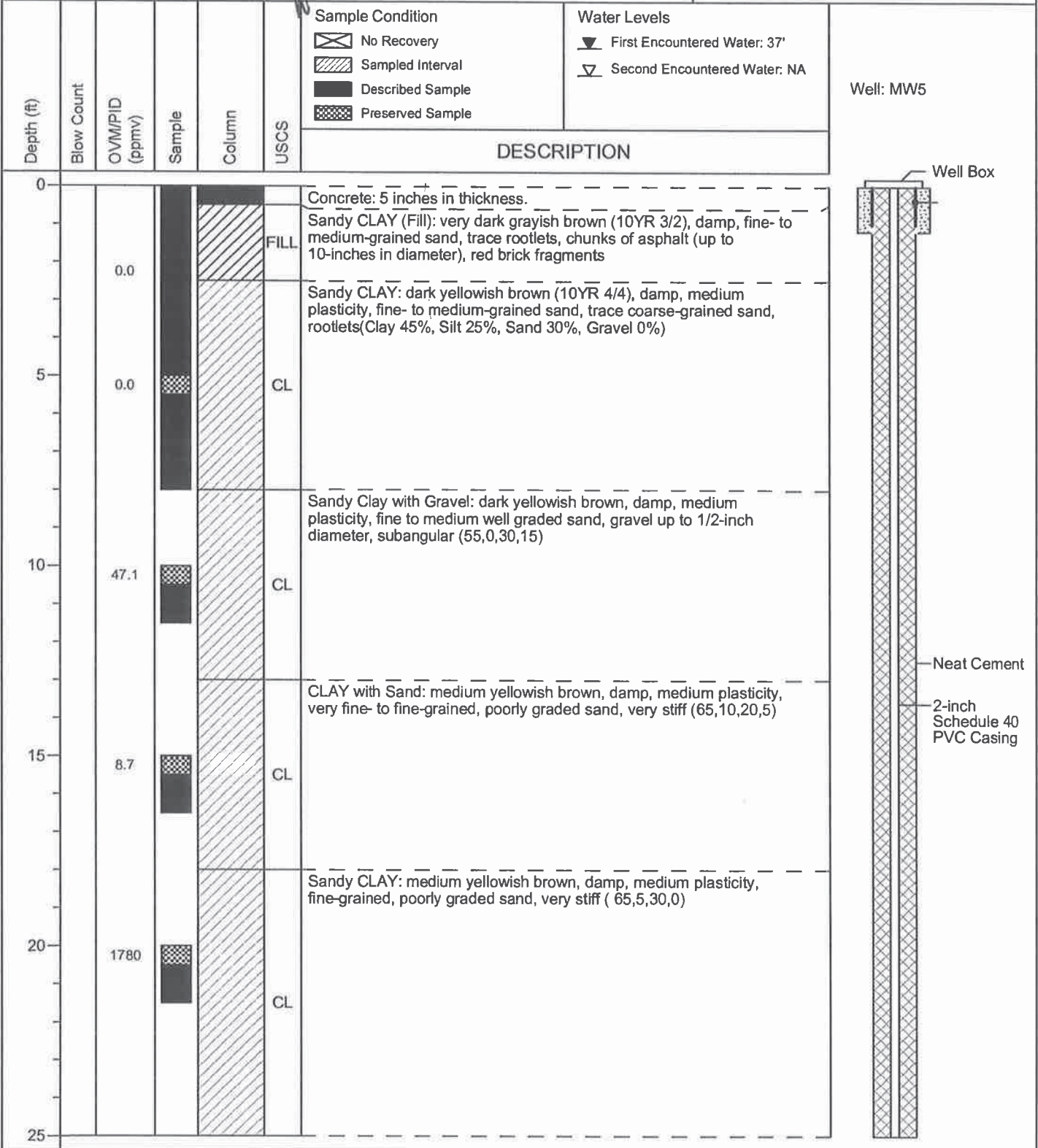


BORING LOG MW5

(Page 1 of 2)

Date Drilled: : 03/05/09, 03/06/09
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115524.5
 Location E-W : 6069900.5
 Total Depth: : 42 fbs
 First GW Depth: : 37 fbs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793 / Paula Sime
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*





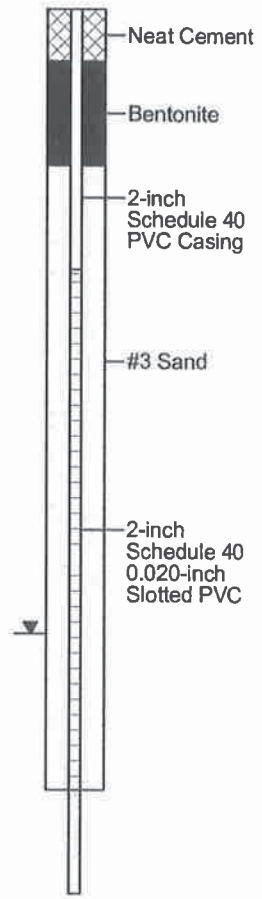
BORING LOG MW5

(Page 2 of 2)

Date Drilled: : 03/05/09, 03/06/09
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115524.5
 Location E-W : 6069900.5
 Total Depth: : 42 fbsg
 First GW Depth: : 37 fbsg

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793 / Paula Sime
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						No Recovery Sampled Interval Described Sample Preserved Sample	First Encountered Water: 37' Second Encountered Water: NA	
25		2000			SW			Gravelly SAND: fine-to coarse-grained, medium yellowish brown, dry to damp, subangular, well graded, trace dense clay (5,0,65,30)
					CL			Sandy CLAY: yellowish brown, damp, low plasticity, very fine-grained, poorly graded sand, trace coarse-grained sand, very stiff (65,0,35,0)
30		336						@30 feet bgs: heavily mottled with light bluish green, moist
					SW			Gravelly SAND: fine-to coarse-grained, medium yellowish brown, dry to damp, angular to subangular, well graded, trace dense clay
35		286			CL			CLAY with Sand: yellowish brown with greenish gray mottling, moist, medium plasticity, very fine-grained, very poorly graded sand, trace coarse-grained sand, soft (85,0,15,0)
					SW			SAND: fine- to coarse-grained, dark yellowish brown, damp, well graded, subangular gravel, trace clay (5,0,80,15) @37 feet bgs: wet
40		3			CL			Sandy CLAY with Gravel: yellowish brown, moist (wet along clast boundaries), low plasticity, fine- to coarse-grained, well graded sand, subangular gravel (55,0,30,15)
								Cleared to 5 feet bgs with hand auger for collection of soil sample. Boring widened to 10-inches using airknife and vacuum truck on 2/27/2009.
45								Total Depth = 42 feet bgs, 11:50 03/06/2009.
50								



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BORING LOG MW6

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Date Drilled: : 03/09/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115519.6
 Location E-W : 6069858.6
 Total Depth: : 40 fbs
 First GW Depth: : 33 fbs

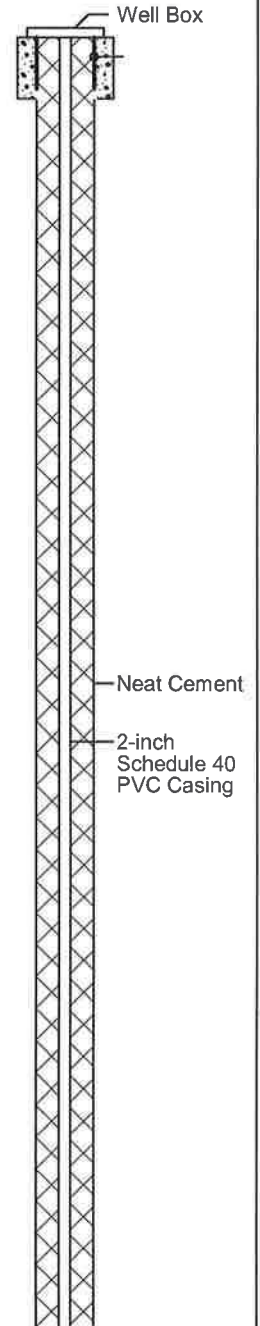
Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> First Encountered Water: 33' <input type="checkbox"/> Second Encountered Water: NA

Well: MW6

DESCRIPTION

0						Concrete: 6 inches in thickness.
0.0					CL	Sandy CLAY: light olive brown (2.5Y 5/4) with pervasive yellowish brown staining, damp, medium plasticity, fine- to medium-grained sand, tree rootlets (45% Clay, 25% Silt, 30% Sand, 0% Gravel) @4 feet bgs: becoming dark yellowish brown (10YR 4/6), increase in medium-grained sand
5					CL	Sandy CLAY: dark yellowish brown (10YR 4/6), damp, medium- to coarse-grained sand, trace gravel (40,25,30,5)
10					CL	CLAY with Sand: dark yellowish brown (10YR 4/4), damp, fine-grained sand (60,25,15,0)
15					CL	CLAY with Sand: light olive brown (2.5Y 5/3), mottled dark yellowish brown, damp, fine- to medium-grained sand
20					CL	Sandy CLAY: dark yellowish brown (10YR 4/4), damp, medium- to coarse-grained, well graded and angular sand with multi-colored grains, trace gravel (45,22,30,3)
25					CL	Sandy CLAY: dark yellowish brown (10YR 3/6), damp, fine- to coarse-grained, well graded and subrounded to angular sand, trace gravel, black iron oxides (45,15,35,5)





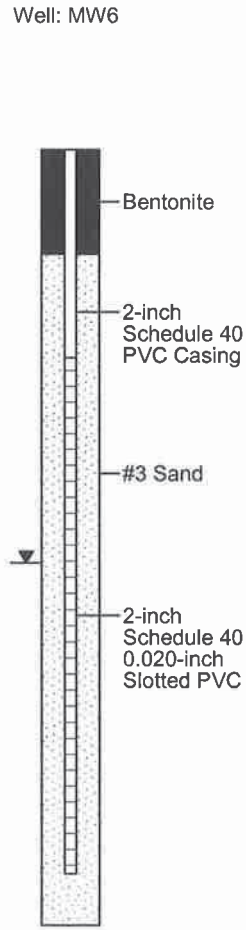
BORING LOG MW6

(Page 2 of 2)

Date Drilled: : 03/09/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115519.6
 Location E-W : 6069858.6
 Total Depth: : 40 fbs
 First GW Depth: : 33 fbs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	▼ First Encountered Water: 33' ▽ Second Encountered Water: NA	
25					CL			Sandy CLAY (continued): dark yellowish brown (10YR 3/6), damp, fine- to coarse-grained, well graded and subrounded to angular sand, trace gravel, black iron oxides (45,15,35,5)
					GC			Clayey GRAVEL: fine-grained gravel, yellowish brown (10YR 5/4), damp, subangular to angular, trace medium- to coarse-grained sand (30,15,20,35)
					CL			CLAY with Sand: dark yellowish brown (10YR 4/6) with dark gray stringers, high plasticity, fine- to medium-grained sand (60,20,20,0)
30					CL			Sandy CLAY: dark yellowish brown (10YR 4/6), low plasticity, fine- to medium-grained sand with multi-colored grains, trace fine-grained gravel (40,20,30,10)
					SC			Clayey SAND with Gravel: medium- to coarse-grained, dark yellowish brown (10YR 3/6), moist to wet, subangular to angular, fine-grained gravel (30,10,60,10)
35					CL			Sandy CLAY: dark yellowish brown (10YR 3/6), damp, medium- to coarse-grained, well graded and subangular sand, trace gravel
40								Cleared to 5 feet bgs by 10-inches on 2/27/2009 Cleared to 4 feet bgs with hand auger, airknife and vacuum. Cleared to 5 feet bgs with hand auger for collection of soil sample. Widened to 10-inches using airknife and vacuum. Total Depth = 40 feet bgs, 10:15, 03/09/2009.
45								
50								



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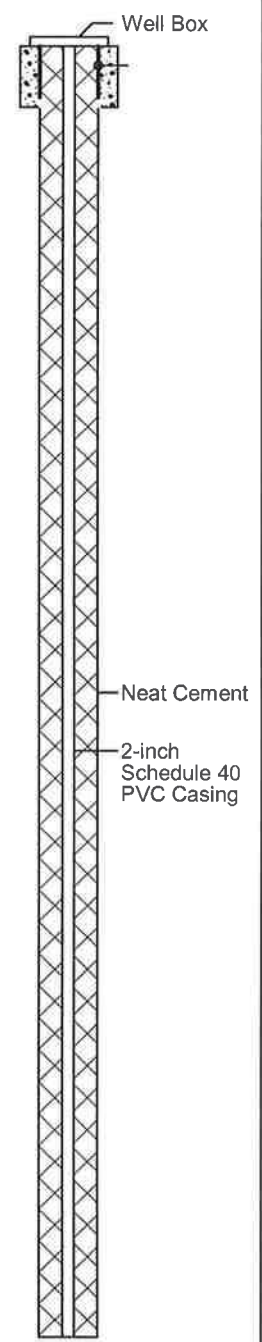
BORING LOG MW7

(Page 1 of 2)

Date Drilled: : 03/09/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115554.1
 Location E-W : 6069845.1
 Total Depth: : 40 fbs
 First GW Depth: : 35 fbs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	▼ First Encountered Water: 35' ▽ Second Encountered Water: NA	
0								Concrete: 6 inches in thickness.
					CL			Sandy CLAY: very dark grayish brown (10YR 3/2), damp, fine-grained sand, rootlets, trace gravel (45% Clay, 25% Silt, 30% Sand, 2% Gravel)
					CL			Sandy CLAY: dark yellowish brown (10YR 4/4), damp, fine- to medium-grained sand
5					CL			Silty CLAY with Sand: yellowish brown (10YR 5/6), damp, high plasticity, fine- to coarse-grained sand, trace gravel with rootlets, bark and woody material (65,18,15,2)
					CL			Sandy CLAY: dark yellowish brown (10YR 4/4), damp, fine- to coarse-grained sand with multi-colored grains (40,30,30,0)
10					CL			
					CL			CLAY with Sand: light olive brown with dark yellowish brown mottling, damp, low plasticity, fine- to medium-grained sand, trace coarse-grained sand (45,30,15,0)
15					CL			
					CL			Sandy CLAY: yellowish brown (10YR 5/6), damp, fine- to coarse-grained, subangular to angular sand with multi-colored grains, trace gravel (45,15,35,5)
20					CL			
					SW			Gravelly SAND with Clay and Silt: medium- to coarse-grained, dark yellowish brown (10YR 4/4), damp, fine-grained gravel (10,20,50,10)
25								



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BORING LOG MW7

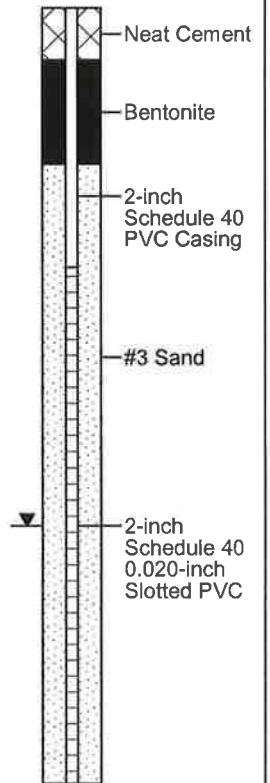
(Page 2 of 2)

Date Drilled: : 03/09/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115554.1
 Location E-W : 6069845.1
 Total Depth: : 40 fbg
 First GW Depth: : 35 fbg

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
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 Signature: : *Heidi L. Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						No Recovery Sampled Interval Described Sample Preserved Sample	First Encountered Water: 35' Second Encountered Water: NA	
25					SW			Gravelly SAND with Clay and Silt (continued): medium- to coarse-grained, dark yellowish brown (10YR 4/4), damp, fine-grained gravel (10,20,50,10)
					CL			Sandy CLAY: dark yellowish brown (10YR 4/4), low plasticity, fine- to medium-grained sand, trace fine-grained, subangular to angular gravel (40,20,30,10)
30								
					SC			Clayey SAND with Gravel: medium- to coarse-grained, dark yellowish brown (10YR 4/4), moist, well graded, multi-colored grains, fine-grained, subangular to angular gravel (30,10,55,15) @35 feet bgs: becoming wet
35								
					CL			Sandy CLAY: dark yellowish brown (10YR 4/4), moist, fine- to medium-grained sand (45,25,30,0) Cleared to 5 feet bgs by 10-inches on 2/27/2009 Cleared to 5 feet bgs with hand auger for collection of soil sample. Boring widened to 10-inches using airknife and vacuum truck. Total Depth = 40 feet bgs, 13:35, 03/09/2009.
40								
45								
50								

Well: MW7





BORING LOG MW8

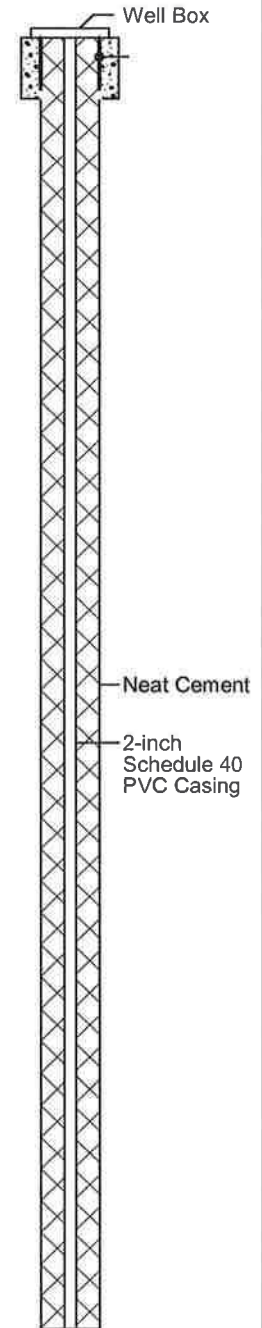
(Page 1 of 2)

Date Drilled: : 03/04/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115470.5
 Location E-W : 6069894.0
 Total Depth: : 40 fbs
 First GW Depth: : 35 fbs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels	DESCRIPTION
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	▼ First Encountered Water: 35' ▽ Second Encountered Water: NA	
0								Ground cover - Lawn
0 - 4					CL			Sandy CLAY: dark brown (10YR 3/3), moist, high plasticity, fine- to medium-grained sand, trace coarse-grained sand, rootlets (50% Clay, 20% Silt, 30% Sand, 0% Gravel)
4 - 5					CL			Sandy CLAY: yellowish brown (10YR 5/6) with faint orange mottling, damp, medium plasticity, fine- to coarse-grained and subangular to angular sand, black iron oxide nodules, trace rootlets (50,25,25,0)
5 - 8					CL			Silty CLAY: dark yellowish brown (10YR 4/6), damp, trace sand, trace rootlets (80,15,3,0)
8 - 11					CH			Sandy CLAY: dark yellowish brown (10YR 4/6), damp, high plasticity, fine- to coarse-grained and well graded sand, trace gravel, black iron oxide clasts (60% Fines, 35% Sand, 5% Gravel)
11 - 14	0.0				CL			Sandy CLAY: yellowish brown (10YR 5/6), damp, low plasticity, fine- to medium-grained sand, trace coarse-grained sand
14 - 20	0.0				CL			Sandy CLAY: yellowish brown (10YR 5/6), damp, fine- to coarse-grained, subangular sand with multi-colored grains, trace gravel (60,30,10)
20 - 25	0.8				CL			@ 25 feet bgs: decreasing gravel and increasing medium- to coarse-grained sand (60,35,5)

Well: MW8





BORING LOG MW8

(Page 2 of 2)

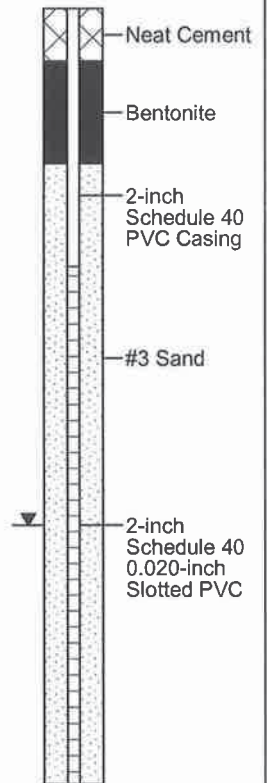
Date Drilled: : 03/04/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115470.5
 Location E-W : 6069894.0
 Total Depth: : 40 fbs
 First GW Depth: : 35 fbs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input type="checkbox"/> Described Sample <input type="checkbox"/> Preserved Sample	<input type="checkbox"/> First Encountered Water: 35' <input type="checkbox"/> Second Encountered Water: NA
DESCRIPTION							

Well: MW8

25		1.4			CL	Sandy CLAY: yellowish brown (10YR 5/6), damp, fine- to coarse-grained, subangular sand with multi-colored grains, trace gravel (60,35,5)
30		1.3			CH	CLAY with Sand: dark yellowish brown (10YR 4/4) damp, high plasticity, fine-grained sand, trace medium- to coarse-grained sand (75,25,0)
35		1.4			SC	SAND with Clay: medium- to coarse-grained sand, dark yellowish brown (10 YR 4/4), moist, poorly graded (30,60,10)
					CL	CLAY with Sand: dark yellowish brown (10 YR 4/6), moist, medium plasticity, fine-grained sand, trace medium- to coarse-grained sand (80,20,0)
					SC	Clayey SAND: medium to coarse-grained, dark yellowish brown (10YR 4/4), wet, trace angular gravel (40,55,5)
40		2.1			CL	Sandy CLAY: dark yellowish brown (10YR 4/4), damp, fine- to coarse-grained sand with multi-colored grains, trace subangular to angular gravel (60,35,5)



Cleared to 5 feet bgs by 10-inches on 2/25/2009.

Cleared to 5 feet bgs with hand auger for collection of soil sample. Boring widened to 10-inches and deepened to 8 fbs using airknife and vacuum truck

Total Depth = 40 feet bgs, 14:50, 03/04/2009.



BORING LOG MW9

(Page 1 of 2)

Date Drilled: : 03/05/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115514.5
 Location E-W : 6069933.1
 Total Depth: : 40 fbg
 First GW Depth: : 35 fbg

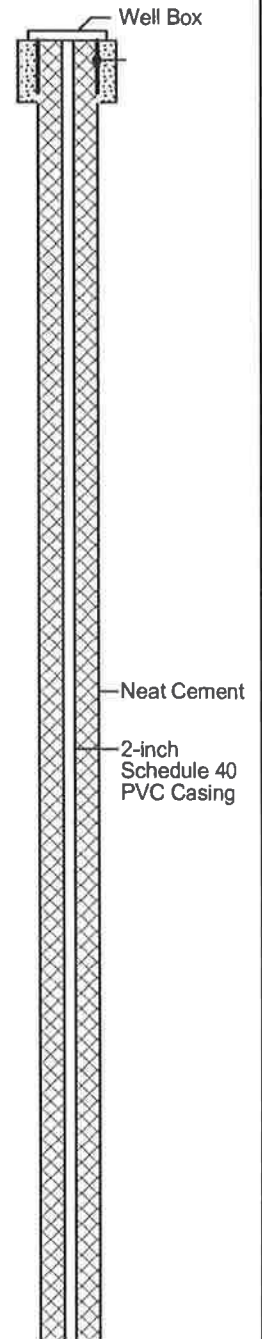
Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793 / Paula Sime
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input type="checkbox"/> No Recovery <input checked="" type="checkbox"/> Sampled Interval <input checked="" type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input checked="" type="checkbox"/> First Encountered Water: 35' <input type="checkbox"/> Second Encountered Water: NA

Well: MW9

DESCRIPTION

0						Concrete: 4.3 inches in thickness.
					CH	Silty CLAY: dark brown (7.5YR 3/2), moist, high plasticity, trace sand, trace rootlets (Clay 80%, Silt 15%, Sand 5%, Gravel 0%)
					CL	Sandy CLAY: dark yellowish brown (10YR 4/6), moist, medium plasticity, fine- to coarse-grained, angular to subangular sand, trace angular to subangular gravel, trace rootlets (70,12,15,3)
5					CH	Silty CLAY: dark yellowish brown (10 YR 4/6), damp, high plasticity, trace sand, trace rootlets (82,15,3,0)
					CL	Sandy CLAY: dark yellowish brown, damp, high plasticity, fine- to coarse-grained, subangular, well graded sand (60, 0, 35, 5)
10					CL	Sandy CLAY: dark yellowish brown, damp, low plasticity, fine- to medium, poorly graded sand, trace coarse-grained sand, very stiff, trace silt (60,5,35,0)
15					CL	Sandy CLAY: dark yellowish brown, damp, low plasticity, fine- to coarse-grained, subangular, well graded sand, trace gravel and silt, very stiff (55,5,35,5)
20					CL	
25						





BORING LOG MW9

(Page 2 of 2)

Date Drilled: : 03/05/2009
 Drilling Co.: : Gregg Drilling Company
 Drilling Method: : Hollow-Stem Auger
 Sampling Method: : Direct Push
 Borehole Diameter: : 8"
 Casing Diameter: : 2"
 Location N-S : 2115514.5
 Location E-W : 6069933.1
 Total Depth: : 40 fbg
 First GW Depth: : 35 fbg

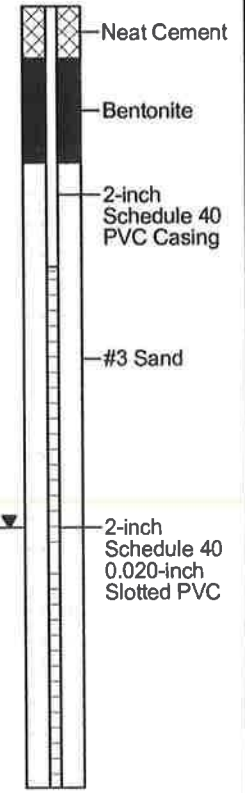
Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, California
 Logged By: : Heidi L. Dieffenbach-Carle, P.G. #6793 / Paula Sime
 Reviewed By: : Heidi L. Dieffenbach-Carle, P.G. #6793
 Signature: : *Heidi Dieffenbach-Carle*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						No Recovery Sampled Interval Described Sample Preserved Sample	First Encountered Water: 35' Second Encountered Water: NA
DESCRIPTION							

Well: MW9

25					SC	Clayey SAND: fine- to medium-grained, dark yellowish brown, damp, well graded, trace gravel and silt, very dense (25,5,65,5)
					CL	Sandy CLAY: dark yellowish brown, damp to moist, medium plasticity, fine- to medium-grained, well graded sand (75,0,25,0)
30						
					SW	SAND with Clay: fine- to coarse-grained, dark yellowish brown, very moist to wet (along clasts boundaries), well graded, subangular, trace gravel, medium loose (10,0,85,5)
35						@35 feet bgs: wet
					CL	Sandy CLAY: dark yellowish brown, moist, low plasticity, fine- to coarse-grained, poorly graded sand, trace gravel (70,0,27,3)
40						

Cleared to 5 feet bgs with hand auger for collection of soil sample. Boring widened to 10-inches and deepened to 8 fbg using air/water knife and vacuum truck on 2/25/2009.
 Total Depth = 40 fbg, 10:45 03/05/2009.

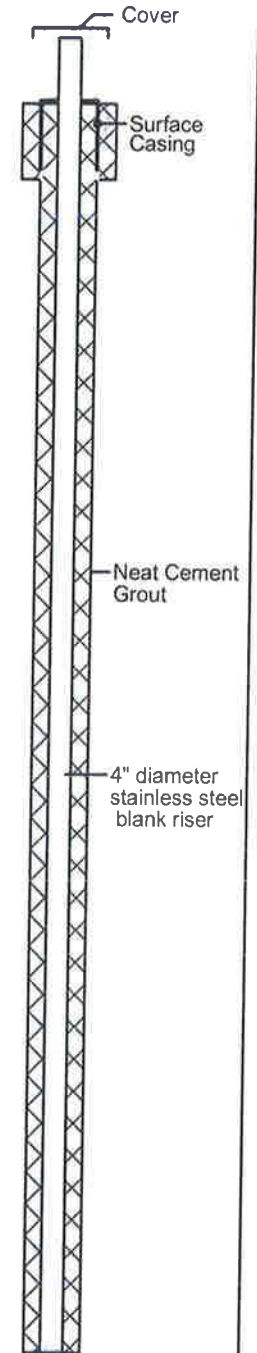
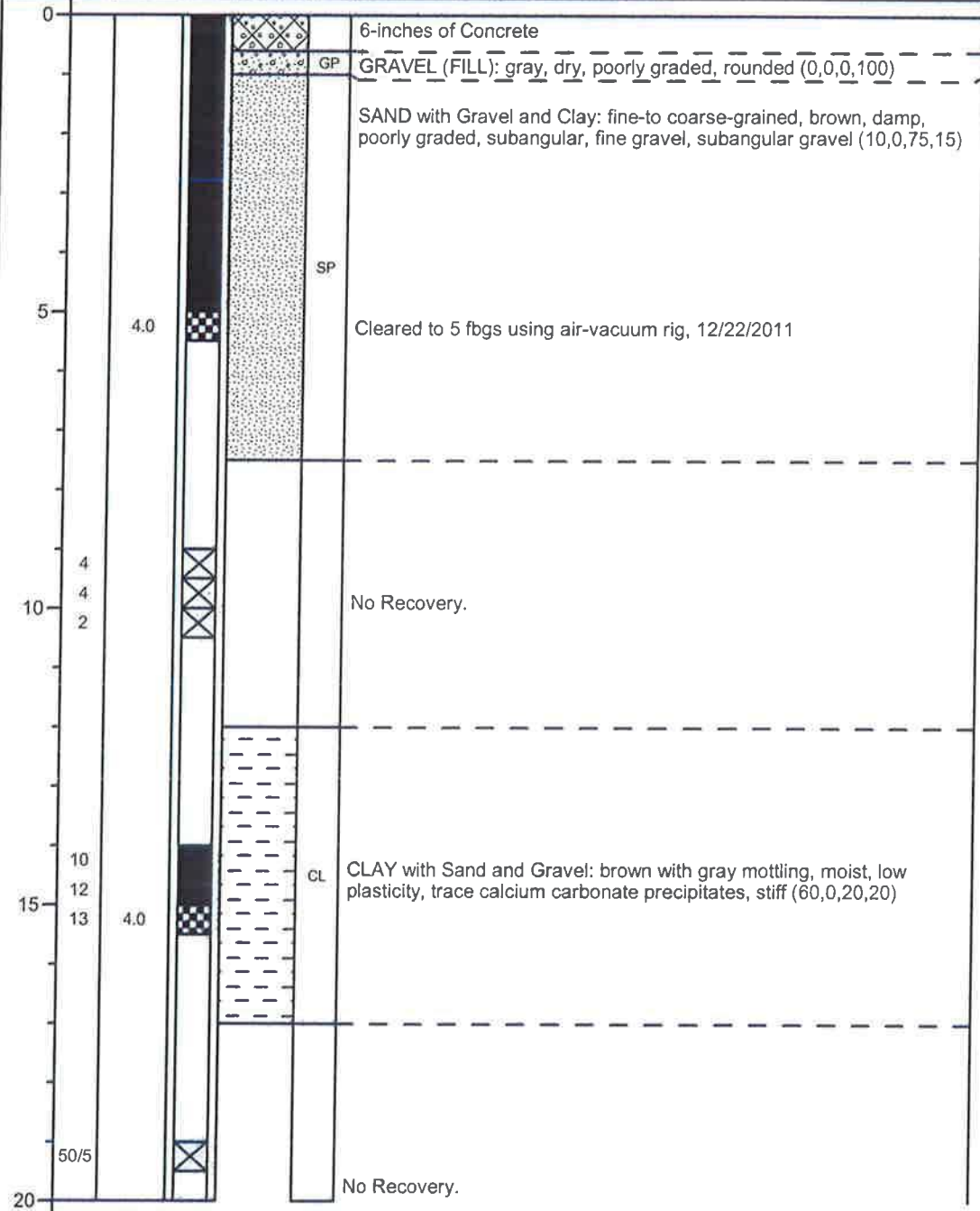


Date Drilled: : 12/22/2011
 Drilling Co.: : Cascade Drilling
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : Split Spoon
 Borehole Diameter: : 10"
 Casing Diameter: : 4"
 Location N-S : 2115521.4
 Location E-W : 6069882.6
 Total Depth: : 40 fbgs
 First GW Depth: : 29 fbgs

Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, CA
 Logged By: : Vincent T. Battaglia
 Reviewed By: : David R. Daniels, P.G. 8737
 Signature: : *[Signature]*

Depth (ft)	Blow Count	OVM/PIID (ppmv)	Sample	Column	USCS	Sample Condition <input checked="" type="checkbox"/> No Recovery <input type="checkbox"/> Interval Not Sampled <input type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	Water Levels <input checked="" type="checkbox"/> After Completion: 32.08 fbgs <input checked="" type="checkbox"/> During drilling: 29 fbgs
						DESCRIPTION	

Well: RW1
 TOC Elev.: 195.15





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Shaping the Future

BORING LOG RW1

(Page 2 of 2)

Date Drilled: : 12/22/2011
 Drilling Co.: : Cascade Drilling
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : Split Spoon
 Borehole Diameter: : 10"
 Casing Diameter: : 4"
 Location N-S : 2115521.4
 Location E-W : 6069882.6
 Total Depth: : 40 fbgs
 First GW Depth: : 29 fbgs

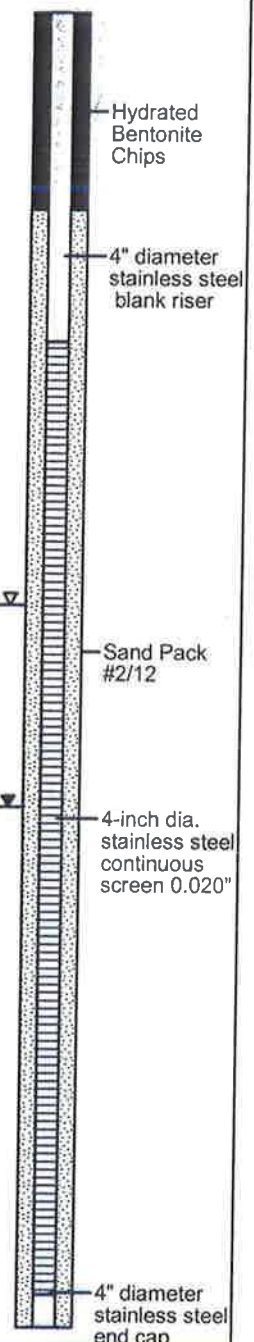
Project No.: : Former Exxon Service Station 70234
 Site: : 3450 35th Avenue, Oakland, CA
 Logged By: : Vincent T. Battaglia
 Reviewed By: : David R. Daniels, P.G. 8737
 Signature:

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	Water Levels
						<input checked="" type="checkbox"/> No Recovery <input type="checkbox"/> Interval Not Sampled <input checked="" type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample	<input type="checkbox"/> After Completion: 32.08 fbgs <input checked="" type="checkbox"/> During drilling: 29 fbgs

Well: RW1
 TOC Elev.: 195.15

DESCRIPTION						
20						
11					CL	CLAY with Sand: brown with gray mottling, moist, low plasticity, stiff, subangular sand (80,0,20,0)
12						
25		48				
13					CL	CLAY with Sand and Gravel: brown with greenish gray mottling, moist, low plasticity, stiff, trace calcium carbonate precipitates, subangular sand, subangular gravel (65,0,25,10)
13						
15		187				
4						
4						
30					CL	CLAY with Sand and Gravel: brown with gray mottling, damp to moist, low plasticity, fine-to coarse-grained sand, subangular sand, calcium carbonate precipitates, fine-grained gravel, subangular gravel (65,0,25,10)
13						
14		>999				
10					CL	CLAY with Sand: reddish brown, moist, low to medium plasticity, fine-to coarse-grained sand, subangular sand (80,0,20,0)
12		231				
13						
9						CLAY with Sand: reddish brown, moist, medium plasticity, fine-grained sand, subangular sand (90,0,10,0)
9						
11		160			CL	
35						
9						CLAY with Sand and Gravel: reddish brown, saturated, low plasticity, firm, fine-to coarse-grained sand, subangular sand, fine-grained gravel (65,0,25,10)
9						
7						
9		343				
9					CL	
10		806				
11						
9						
11		102				

Total Depth of Boring at 40 fbgs, 12/22/11. 1410.
 Free Groundwater Encountered at 29 fbgs.





PROJECT NAME: FORMER EXXON SERVICE STATION 70234
 PROJECT NO: 14-070234-UP
 LOCATION: 3450 35TH AVE, OAKLAND, CA

DRILLING COMPANY: Gregg Drilling		LICENSE No.: C57-485165		ELEVATION AND DATUM (FT.): -					
DRILLING METHOD 1: Hand Auger		DRILLER: German Garcia		DATE STARTED: 4/14/14		DATE FINISHED: 4/14/14			
DRILLING METHOD 2: -		DRILL BIT: -		BORING DEPTH (FT.) 7		WELL DEPTH (FT.) 6.75			
DRILLING EQUIPMENT: 5" Hand Auger		SAMPLER: 4-inch Ø Shelby Tube Slide Hammer		NO. OF SAMPLES: 2		SOIL: 2	GW: 0	OTHER: 0	
SIZE AND TYPE OF CASING: 1/4" Ø Stainless steel				DEPTH TO WATER (FT.):		▽ FIRST:	▼ COMPLETION:	OTHER:	
TYPE OF PERFORATION: Stainless steel 0.0057" mesh		FROM 6.25 TO 6.75 FT.		DEPTH TO WATER (FT.):		-	-	-	
SIZE AND TYPE OF FILTER PACK: #3 Monterey sand		FROM 6 TO 7 FT.		TIME:		-	-	-	
TYPE OF SEAL: Dry bentonite		FROM 5 TO 6 FT.		LOGGED BY: Karina Gillette				CHECKED BY: -	
TYPE OF SEAL: Bentonite Slurry		FROM 0.5 TO 5 FT.							

DEPTH (FT.)	DESCRIPTION	GRAPHIC LOG				SAMPLES					REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)	
		LITHOLOGY	USCS	WELL CONSTRUCTION DIAGRAM	WATER LEVEL	DRIVEN (in.)	RECOVERY (in.)	SAMPLING INTERVAL	BLOW COUNTS (per 6-in.)	OMV (ppmv)		
0-0.5	Concrete + traffic box											
1	Concrete											
2												
3	SILTY SAND with gravel: Dark brown (10YR 3/3), fine to medium grained, loose, slightly moist, some fine subangular gravel up to 1/2 inch diameter.		SM									
4												
5												
6						18	18			0	Soil samples V1-6.5 @ 1315	
7	END OF BORING AT 7 FEET.					6	6			0	V1-7 @ 1330	
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Swagelok valve on top of stainless steel tubing



PROJECT NAME: FORMER EXXON SERVICE STATION 70234
 PROJECT NO: 14-070234-UP
 LOCATION: 3450 35TH AVE, OAKLAND, CA

DRILLING COMPANY: Gregg Drilling	LICENSE No.: C57-485165	ELEVATION AND DATUM (FT.): -			
DRILLING METHOD 1: Hand Auger	DRILLER: German Garcia	DATE STARTED: 4/15/14	DATE FINISHED: 4/15/14		
DRILLING METHOD 2: -	DRILL BIT: -	BORING DEPTH (FT.) 7	WELL DEPTH (FT.) 6.75		
DRILLING EQUIPMENT: 5" Hand Auger	SAMPLER: 4-inch Ø Shelby Tube Slide Hammer	NO. OF SAMPLES:	SOIL: 2	GW: 0	OTHER: 0
SIZE AND TYPE OF CASING: 1/4" Ø Stainless steel		DEPTH TO WATER (FT.):	▽ FIRST:	▼ COMPLETION:	OTHER:
TYPE OF PERFORATION: Stainless steel 0.0057" mesh	FROM 6.25 TO 6.75 FT.	TIME:	-	-	-
SIZE AND TYPE OF FILTER PACK: #3 Monterey sand	FROM 6 TO 7 FT.	LOGGED BY: Karina Gillette			
TYPE OF SEAL: Dry bentonite	FROM 5 TO 6 FT.	CHECKED BY: -			
TYPE OF SEAL: Bentonite Slurry	FROM 0.5 TO 5 FT.				

DEPTH (FT.)	DESCRIPTION	GRAPHIC LOG				SAMPLES					REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)	
		LITHOLOGY	USCS	WELL CONSTRUCTION DIAGRAM	WATER LEVEL	DRIVEN (in.)	RECOVERY (in.)	SAMPLING INTERVAL	BLOW COUNTS (per 6-in.)	OMV (ppmv)		
0-0.5	Concrete + traffic box											
1	Concrete											
1	SILTY SAND with some gravel: Very dark grayish brown (10YR 3/2), fine to medium grained, loose, slightly moist, rounded gravel up to 3/8 inch diameter.		SM									0
2	SAND: Brown (10YR 5/3), fine grained, loose, dry, trace rounded gravel up to 1/4 inch diameter.		SP			6	6	6				0
3	SILT with some sand: Dark yellowish brown (10YR 4/4), hard, dry, very fine grained sand.		ML									0
5			ML			12	11.5					0
6	SILTY CLAY: Yellowish brown (10YR 4/4), stiff, moist, trace fine gravel.		CL			6	6	6				0
7	END OF BORING AT 7 feet.											0
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
												Swagelok valve on top of stainless steel tubing



PROJECT NAME: FORMER EXXON SERVICE STATION 70234
 PROJECT NO: 14-070234-UP
 LOCATION: 3450 35TH AVE, OAKLAND, CA

DRILLING COMPANY: Gregg Drilling	LICENSE No.: C57-485165	ELEVATION AND DATUM (FT.): -			
DRILLING METHOD 1: Hand Auger	DRILLER: German Garcia	DATE STARTED: 4/15/14	DATE FINISHED: 4/15/14		
DRILLING METHOD 2: -	DRILL BIT: -	BORING DEPTH (FT.) 7	WELL DEPTH (FT.) 6.75		
DRILLING EQUIPMENT: 5" Hand Auger	SAMPLER: 4-inch Ø Shelby Tube Slide Hammer	NO. OF SAMPLES:	SOIL: 3	GW: 0	OTHER: 0
SIZE AND TYPE OF CASING: 1/4" Ø Stainless steel		DEPTH TO WATER (FT.):	▽ FIRST:	▼ COMPLETION:	OTHER:
TYPE OF PERFORATION: Stainless steel 0.0057" mesh	FROM 6.25 TO 6.75 FT.	TIME:	-	-	-
SIZE AND TYPE OF FILTER PACK: #3 Monterey sand	FROM 6 TO 7 FT.	LOGGED BY: Victor Ocegquera			
TYPE OF SEAL: Dry bentonite	FROM 5 TO 6 FT.	CHECKED BY:			
TYPE OF SEAL: Bentonite Slurry	FROM 0.5 TO 5 FT.				

DEPTH (FT.)	DESCRIPTION	GRAPHIC LOG				SAMPLES					REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		LITHOLOGY	USCS	WELL CONSTRUCTION DIAGRAM	WATER LEVEL	DRIVEN (in.)	RECOVERY (in.)	SAMPLING INTERVAL	BLOW COUNTS (per 6-in.)	OMV (ppmv)	
0-0.5	Concrete + traffic box										
1	Concrete										
1	SILTY SAND: Dark brown (10YR 3/3), fine to coarse grained, loose, trace rounded fine gravel up to 1/4" diameter, moist.		SM								0
2	Grain size change to fine to medium sand.										0
3	SILT: Yellowish brown (10YR 5/6), trace fine grained sand, stiff, moist.		ML			6	4	X			0
4											0
5											0
6						12	10	X			0
6						6	6	X			0
7	END OF BORING AT 7 feet.										0
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

V3

BORING NO.: _____

Swagelok valve on top of stainless steel tubing



PROJECT NAME: FORMER EXXON SERVICE STATION 70234
 PROJECT NO: 14-070234-UP
 LOCATION: 3450 35TH AVE, OAKLAND, CA

DRILLING COMPANY: Gregg Drilling	LICENSE No.: C57-485165	ELEVATION AND DATUM (FT.): -			
DRILLING METHOD 1: Hand Auger	DRILLER: German Garcia	DATE STARTED: 4/14/14	DATE FINISHED: 4/15/14		
DRILLING METHOD 2: -	DRILL BIT: -	BORING DEPTH (FT.) 7.25	WELL DEPTH (FT.) 6.75		
DRILLING EQUIPMENT: 5" Hand Auger	SAMPLER: 4-inch Ø Shelby Tube Slide Hammer	NO. OF SAMPLES:	SOIL: 2	GW: 0	OTHER: 0
SIZE AND TYPE OF CASING: 1/4" Ø Stainless steel		DEPTH TO WATER (FT.):	▽ FIRST:	▼ COMPLETION:	OTHER:
TYPE OF PERFORATION: Stainless steel 0.0057" mesh	FROM 6.25 TO 6.75 FT.	TIME:	-	-	-
SIZE AND TYPE OF FILTER PACK: #3 Monterey sand	FROM 6 TO 7.25 FT.	LOGGED BY: Victor Ocegquera		CHECKED BY:	
TYPE OF SEAL: Dry bentonite	FROM 5 TO 6 FT.				
TYPE OF SEAL: Bentonite Slurry	FROM 0.5 TO 5 FT.				

DEPTH (FT.)	DESCRIPTION	GRAPHIC LOG				SAMPLES					REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		LITHOLOGY	USCS	WELL CONSTRUCTION DIAGRAM	WATER LEVEL	DRIVEN (in.)	RECOVERY (in.)	SAMPLING INTERVAL	BLOW COUNTS (per 6-in.)	OMV (ppmv)	
0-0.5 Ft.	Concrete + traffic box										
1	Concrete										
1	SILTY SAND with gravel: Dark brown (10YR 3/3), fine to medium grained, loose, some angular gravel up to 1/2 inch diameter, moist.		SM								0
2											0
3	SANDY SILT: Dark brown (10YR 3/3), fine grained sand, soft, some angular gravel up to 1/2 inch diameter, moist.										0
4	Color change: Dark yellowish brown (10YR 4/6) becoming medium stiff.										0
5			ML								0
6						12	12				0
6						6	6				0
7	END OF BORING AT 7.25 feet.										
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											



PROJECT NAME: FORMER EXXON SERVICE STATION 70234
 PROJECT NO: 14-070234-UP
 LOCATION: 3450 35TH AVE, OAKLAND, CA

DRILLING COMPANY: Gregg Drilling	LICENSE No.: C57-485165	ELEVATION AND DATUM (FT.): -			
DRILLING METHOD 1: Hand Auger	DRILLER: German Garcia	DATE STARTED: 4/14/14	DATE FINISHED: 4/15/14		
DRILLING METHOD 2: -	DRILL BIT: -	BORING DEPTH (FT.) 7	WELL DEPTH (FT.) 6.75		
DRILLING EQUIPMENT: 5" Hand Auger	SAMPLER: 4-inch Ø Shelby Tube Slide Hammer	NO. OF SAMPLES:	SOIL: 2	GW: 0	OTHER: 0
SIZE AND TYPE OF CASING: 1/4" Ø stainless steel		DEPTH TO WATER (FT.):	▽ FIRST:	▼ COMPLETION:	OTHER:
TYPE OF PERFORATION: Stainless steel 0.0057" mesh	FROM 6.25 TO 6.75 FT.	TIME:	-	-	-
SIZE AND TYPE OF FILTER PACK: #3 Monterey sand	FROM 6 TO 7 FT.	LOGGED BY: Victor Ocegquera			
TYPE OF SEAL: Dry bentonite	FROM 5 TO 6 FT.	CHECKED BY:			
TYPE OF SEAL: Bentonite Slurry	FROM 0.5 TO 5 FT.				

DEPTH (FT.)	DESCRIPTION	GRAPHIC LOG				SAMPLES					REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		LITHOLOGY	USCS	WELL CONSTRUCTION DIAGRAM	WATER LEVEL	DRIVEN (in.)	RECOVERY (in.)	SAMPLING INTERVAL	BLOW COUNTS (per 6-in.)	OMV (ppmv)	
0-0.5	Concrete + traffic box										
1	Concrete										
1-5	SILTY CLAY: Dark brown (10YR 3/6), medium stiff, secondary color dark yellowish brown (10YR 5/6), moist.		CL								
4	SILT WITH CLAY: Dark brown (10YR 3/4), moist, trace angular gravel up to 1 inch diameter.										
5	Color change: Dark yellowish brown (10YR 5/6)		ML								
6						12	9			0	V5-6 @ 0830
6.5						6	6			0	V5-6.5 @ 0845
7	END OF BORING AT 7 feet.										
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											



PROJECT NAME: FORMER EXXON SERVICE STATION 70234
 PROJECT NO: 14-070234-UP
 LOCATION: 3450 35TH AVE, OAKLAND, CA

DRILLING COMPANY: Gregg Drilling	LICENSE No.: C57-485165	ELEVATION AND DATUM (FT.): -			
DRILLING METHOD 1: Hand Auger	DRILLER: Armando Torres	DATE STARTED: 11/7/14	DATE FINISHED: 11/7/14		
DRILLING METHOD 2: -	DRILL BIT: -	BORING DEPTH (FT.) 6.7	WELL DEPTH (FT.) 6.4		
DRILLING EQUIPMENT: 3" Hand Auger	SAMPLER: Slide Hammer/ 3"Ø Shelby Tube	NO. OF SAMPLES:	SOIL: 3	GW: 0	OTHER: -
SIZE AND TYPE OF CASING: 1/4" Ø stainless steel		DEPTH TO WATER (FT.):	▽ FIRST: -	▼ COMPLETION: -	OTHER: -
TYPE OF PERFORATION: Stainless steel 0.0057" mesh	FROM 5.9 TO 6.4 FT.	TIME: -	-	-	-
SIZE AND TYPE OF FILTER PACK: #3 sand	FROM 5.7 TO 6.7 FT.	LOGGED BY: Karina Gillette			
TYPE OF SEAL: Dry Granular Bentonite	FROM 4.7 TO 5.7 FT.	CHECKED BY:			
TYPE OF SEAL: Bentonite Slurry	FROM 0.5 TO 4.7 FT.				

DEPTH (FT.)	DESCRIPTION	GRAPHIC LOG				SAMPLES					REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)	
		LITHOLOGY	USCS	WELL CONSTRUCTION DIAGRAM	WATER LEVEL	DRIVEN (in.)	RECOVERY (in.)	SAMPLING INTERVAL	BLOW COUNTS (per 6-in.)	OMV (ppmv)		
0-0.5	Concrete + traffic box											
1	Concrete											Swagelok valve on top of stainless steel tubing.
1-2	SANDY SILT: Dark yellowish brown (10YR 4/4), stiff, moist.		ML									
2-3	CLAY: Yellowish brown (10YR 5/6), medium plasticity, very stiff, moist.		CL									0 V6, 3 collected @ 1050 on 11/7/14.
3-5												
5-6						12	12					V6, 6 collected @ 1120 on 11/7/14.
6-7	SANDY SILT: Dark yellowish brown (10YR 4/6), firm, moist, fine to medium sand, trace angular gravel up to 2"Ø.		ML			6	6					0 V6, 6.5 collected at 1145 on 11/7/14.
7-8	END OF BORING AT 6.7 feet.											
8-9												
9-10												
10-11												
11-12												
12-13												
13-14												
14-15												
15-16												
16-17												
17-18												
18-19												
19-20												