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Alameda County
Environmental Health

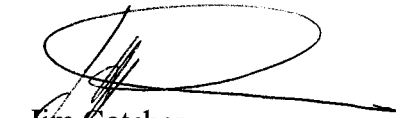
Date: 11-22-2011

Subject: 3200 Santa Rita Road, Pleasanton, California
Fuel Leak Case No. RO~~0003928~~ 0002938

PERJURY STATEMENT

“I declare that to the best of my knowledge at the present time, the information and/or recommendations contained in the attached report are true and correct.”

Submitted by Responsible Party:



Jim Gotcher
City of Pleasanton Public Works
P.O. Box 520
Pleasanton, CA 94566

WELL INSTALLATION
AND FIRST QUARTER 2011
GROUNDWATER MONITORING REPORT

FIRE STATION NO. 3, SANTA RITA ROAD
PLEASANTON, CALIFORNIA

The logo for ENGEO INCORPORATED is displayed in large, white, 3D-style block letters. The word "ENGEO" is on the top line, and "INCORPORATED" is on the bottom line. The letters are set against a background of a green, rolling hillside under a blue sky. The entire logo is overlaid on a dark blue horizontal band.

ENGEO
INCORPORATED

Submitted to:

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540

November 18, 2011
Project No. 6621.100.120

Project No.
6621.100.120

November 18, 2011

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540

Subject: Fire Station No. 3, Santa Rita Road
Pleasanton, California
ACEH Case No. RO0002938

**WELL INSTALLATION
AND FIRST QUARTER 2011 GROUNDWATER MONITORING REPORT**

Reference: ENGEO, Workplan for Installation of Groundwater Monitoring Wells, Fire Station No. 3, Santa Rita Road, Pleasanton, California, December 1, 2010.

Dear Mr. Wickham:

ENGEO prepared this report on behalf of the responsible party, City of Pleasanton Public Works. This report summarizes the groundwater monitoring well installation and First Quarter 2011 groundwater monitoring event completed at the Fire Station No. 3, Santa Rita Road (Site), located at 3200 Santa Rita Road, Pleasanton, California (Figure 1).

SITE HISTORY

Based on a review of publically available information, we understand that two underground storage tanks (USTs) were removed from the Site in September 2006. The USTs were both 500 gallons in volume; one tank was used for gasoline, and the other tank was used for diesel fuel. The tanks were reportedly free of holes or rust, but rust and visible leaks were observed on associated piping. Confirmation soil samples recovered at the time of tank removal exhibited detectable concentrations of petroleum hydrocarbons, with the maximum concentration of 2,800 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons as diesel (TPH-d) detected in an excavation sidewall sample.

Additional soil materials were excavated from the former tank locations in November 1996. A sample collected from a gravel soil layer, 2 feet below the ground surface (below the ground surface), exhibited a TPH-d concentration of 12,000 mg/kg. Following additional excavation, a sample collected from the same gravel layer exhibited a trace TPH-d concentration of 2 mg/kg.

In June 2007, Kleinfelder advanced a soil boring near the former UST location for the purpose of soil and groundwater characterization; however, the boring was terminated before groundwater was encountered. A soil sample collected from a depth of 12 feet below the ground surface exhibited a TPH-d concentration of 2.2 mg/kg. An additional boring was advanced at the Site in April 2008. A shallow groundwater sample and a soil sample collected from a depth of 15 feet below the ground surface exhibited TPH-gasoline (TPH-g) and TPH-motor oil (TPH-mo) concentrations in excess of respective Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board.

Kleinfelder performed an additional site investigation in March 2009. Five soil borings were advanced to a maximum depth of 60 feet below the ground surface. Both soil and groundwater samples were collected from the soil borings. Kleinfelder reported one soil sample collected from a depth of 12 feet exhibited TPH-d concentrations in excess of the respective ESL; however, a soil sample collected from a depth of 16 feet exhibited a TPH-d concentration below the respective ESL. Three grab groundwater samples (collected from the borings advanced to a maximum depth of 60 feet) exhibited TPH concentrations in excess of respective ESLs. Although Kleinfelder recommended no further action for the Site, they later concurred with the recommendation of ACEH for the installation of groundwater monitoring wells at the Site.

GROUNDWATER MONITORING WELL INSTALLATION

We provided oversight for the installation of three groundwater monitoring wells (MW-1 through MW-3) at the Site on January 26 and 27, 2011 (Figure 2). The monitoring well installations were completed in general accordance with the referenced work plan and California Code of Regulations, Title 23, Division 3, Chapter 16, Article 4, Section 2649. Prior to beginning the work, we obtained a well installation permit from Zone 7 Water Agency and completed a Site Hazard Form.

Prior to drilling, we marked the location of the three borings and contacted Underground Services Alert (USA). We also cleared the specific well locations using a private utility locator. Additionally, at the locations of MW-2 and MW-3, concrete coring equipment was used to remove hardscape cover prior to drilling.

Gregg Drilling of Martinez, California, a C-57 licensed drilling contractor, advanced three borings (approximately 8 inches in diameter) to depths ranging between 60 and 75 feet below ground surface (below the ground surface) using a hollow-stem auger. The well borings were logged by an ENGEO project manager under the supervision of a Professional Engineer. Soil cuttings from the three borings were logged continuously and screened with a photoionization detector for volatile organic vapors. Because drilling conditions and soil cuttings were not conclusive in indicating if an anticipated coarse-grained layer had been reached, Boring MW-2 was advanced to a depth of 75 feet below the ground surface. Upon extraction of the

drilling augers, it was apparent that the coarse-grained layer had been reached, although it graded with a substantial clay content.

The subsurface geology generally consisted of dark brown and dark gray silty clay from the surface to an approximate depth of 50 feet below the ground surface, where well-graded gravel and sand was encountered. Groundwater was first encountered at a depth of approximately 55 to 60 feet below the ground surface during drilling. No hydrocarbon odors or PID responses were observed within the soil cuttings.

Following the completion of each borehole, the wells were constructed using two-inch-diameter PVC well casing. A screened interval (0.020 slot size) was installed for the bottom 10 feet of each casing; details regarding well dimensions are presented in Table 1 below. A sand filter pack (#3 sand) was placed around the PVC casing approximately from 48 to 60 feet below the ground surface (MW-1); from 63 to 75 feet below the ground surface (MW-2); and from 48 to 60 feet below the ground surface (MW-3). A two-foot-thick bentonite seal was applied atop the sand filter pack. The remaining annular space was filled with neat cement grout seal to the ground surface. The wells were completed with traffic-rated flush-mount iron well boxes. Following installation of the wells, we retained a licensed surveyor to survey the top of casing for the three wells. Well construction diagrams and boring logs are attached in Appendix A. Figure 4 presents a typical well construction detail.

TABLE 1
Summary of Well Construction Data

Well	Depth of Well (ft. bgs)	Top of Casing (ft. msl)	Bottom of Casing (ft. bgs)	Screened Interval (ft. bgs)
MW-1	60	342.24	59.8	49.8 to 59.8
MW-2	75	342.37	74.8	64.8 to 74.8
MW-3	60	342.95	59.5	49.5 to 59.5

We returned to the Site approximately 72 hours after completing the well installation and developed the wells with a surge block and bailer system. Purge water and soil cuttings were contained in 55-gallon drums for subsequent offsite disposal.

GROUNDWATER MONITORING

Groundwater Elevations

ENGEO measured and recorded the depth to groundwater in monitoring Wells MW-1, MW-2, and MW-3 using a portable electronic water level indicator. The depths to groundwater ranged from 58.00 feet below the TOC in onsite Well MW-2 to 56.62 feet below the TOC in

Well MW-3. Based on the groundwater elevations, the groundwater flow direction is toward the north-northwest with a gradient of approximately 0.04 ft/ft (Figure 2). The groundwater elevation data is summarized in Table A.

GROUNDWATER SAMPLING

After recording groundwater depth measurements, we collected groundwater samples from onsite Wells MW-1, MW-2, and MW-3 on February 14, 2011. The groundwater sampling was conducted using the following methodology.

- Purging was accomplished using dedicated, disposable polyethylene bailers. After purging approximately three well casing volumes, groundwater samples were collected using new disposable bailers and transferred to laboratory-provided containers.
- A portable field meter was used to record turbidity, pH, temperature, and conductivity measurements during purging.
- Groundwater samples were labeled with an identification number and placed on ice with a chain-of-custody record during transportation to the analytical laboratory.
- The samples were submitted to TestAmerica Laboratories, Inc., in Pleasanton, California for the analysis of total petroleum hydrocarbons as gasoline (TPH-g) by EPA Test Method 8260B; total petroleum hydrocarbons as diesel (TPH-d) and motor oil (TPH-mo) by EPA Test Method 8015B with silica gel cleanup (EPA Method 3630); benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Test Method 8260B, and five fuel oxygenates, including MTBE, TBA, DIPE, TAME, and ETBE by EPA Test Method 8260B.
- Purge water was transferred to a 55-gallon drum for subsequent offsite disposal.

GROUNDWATER ANALYTICAL RESULTS

For the February 2011 sampling event, TPH-d and TPH-mo were detected in Wells MW-1 and MW-2. TPH-d concentrations were 72 and 170 micrograms per liter ($\mu\text{g/l}$) for Wells MW-1 and MW-2, respectively. TPH-mo concentrations were 210 and 520 micrograms per liter ($\mu\text{g/l}$) for Wells MW-1 and MW-2, respectively. The results are presented in Table B and Figure 3. No other detections above laboratory reporting limits were observed. The laboratory analysis reports are presented in their entirety in Appendix C.

FINDINGS

- During drilling of the monitoring well borings, first groundwater was encountered at a depth of approximately 50 to 60 feet below the ground surface. Following completion of the well installations and development, we noted the depth to groundwater in the monitoring wells ranged from 56.62 to 58.00 feet below top of casing. Groundwater elevations observed in the monitoring wells indicate an approximate gradient of 0.04 ft/ft directed toward the north-northwest.
- The concentrations of petroleum hydrocarbons were as follows: detected TPH-d concentrations were 72 and 170 µg/l for Wells MW-1 and MW-2, respectively, and detected TPH-mo concentrations were 210 and 520 µg/l for Wells MW-1 and MW-2, respectively. Some of these concentrations, while relatively low, do exceed the respective Environmental Screening Levels (ESLs) promulgated by the San Francisco bay Regional Water Quality Control Board (RWQCB) of 100 µg/l for both TPH-d and TPH-mo, respectively¹. No benzene, toluene, ethylbenzene, xylene(s) (BTEX) or fuel oxygenates were detected in groundwater.
- We recommend performing a minimum of three additional groundwater monitoring events to confirm the predominant groundwater flow direction and concentration trends. Upon completing four quarterly monitoring events, we can determine whether a no further action (NFA) determination should be requested from ACEH.

LIMITATIONS

We performed our professional services in accordance with generally accepted environmental engineering principles and practices currently employed in Northern California at the time we performed our services. No other warranty is expressed or implied. We limited our investigation to the authorized work scope, which included monitoring of specific groundwater monitoring wells. Our investigation is not intended to be comprehensive, to identify all potential concerns, or to guarantee that no additional environmental contamination beyond that described in this report exists at the site.

Findings in this report are valid as of the day of monitoring. However, changes in groundwater conditions can occur with the passage of time, whether due to natural processes or human activity on the site, or on surrounding properties. This report applies only for Site. We are not responsible for the interpretations of the data in this report made by others. This report does not represent a legal opinion.

¹ SFRWQCB ESLs, 2008: Table F-1a – Groundwater Screening Levels where Groundwater is a Potential Drinking Water Source.

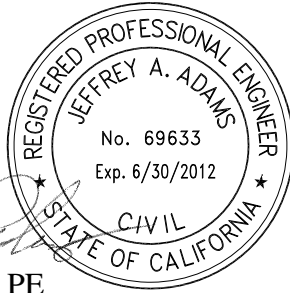
Alameda County Environmental Health
Fire Station No. 3, Santa Rita Road, ACEH Case No. RO0002938
WELL INSTALLATION
AND FIRST QUARTER 2011 GROUNDWATER MONITORING REPORT

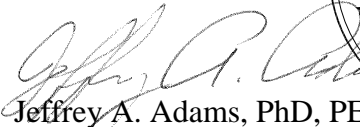
6621.100.120
November 18, 2011
Page 6


If you have any questions regarding this report, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated




Jeffrey A. Adams, PhD, PE
jaa/sm/jf:1stqtr


Shawn Munger, CHG, REAII

- Attachments: Figure 1: Vicinity Map
Figure 2: Groundwater Elevations – February 2011
Figure 3: Groundwater Analytical Results – February 2011
Figure 4: Typical Monitoring Well Construction
Table A: Groundwater Elevation Data
Table B: Groundwater Monitoring Well Analytical Data
Appendix A – Boring Logs/Well Construction Diagrams
Appendix B – Well Sampling Logs
Appendix C – Laboratory Analytical Reports and Chain-of-Custody Records

FIGURES

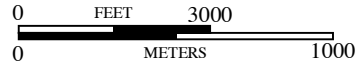
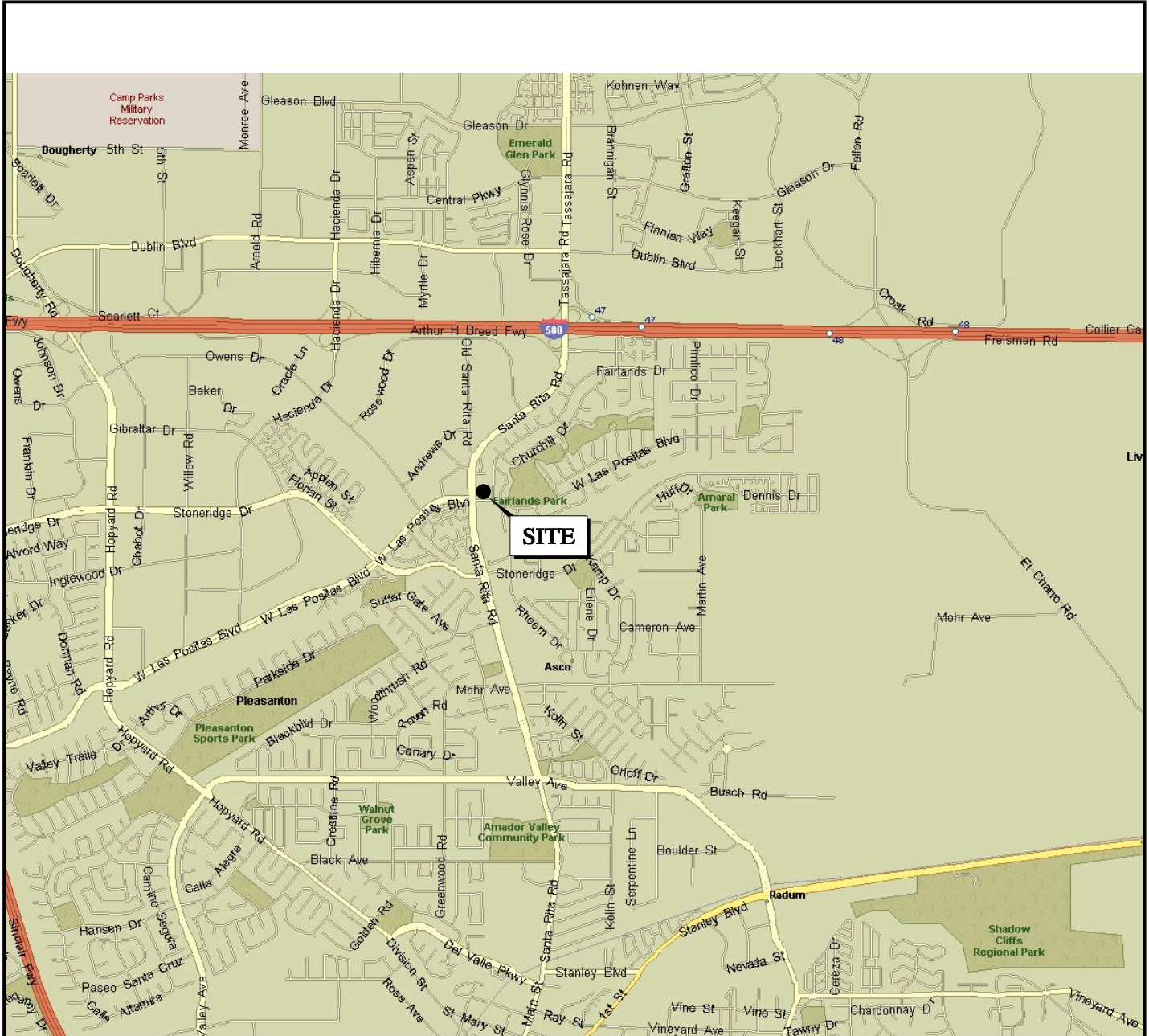
Figure 1 - Vicinity Map

Figure 2 - Groundwater Elevations – February 2011

Figure 3 – Groundwater Analytical Results – February 2011

Figure 4 – Typical Monitoring Well Construction

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BASE MAP SOURCE: MS STREETS AND TRIPS

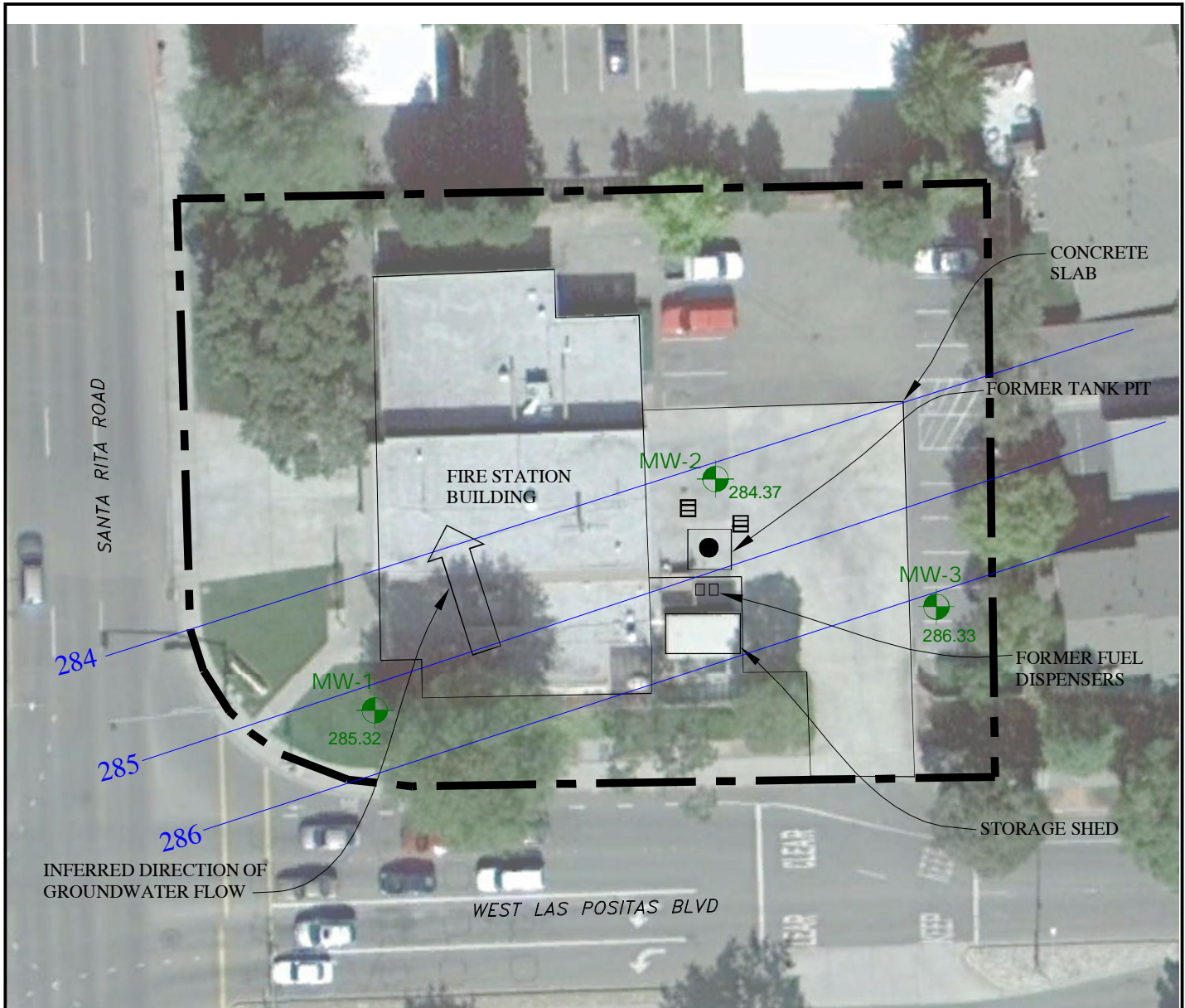


VICINITY MAP
 FIRE STATION #3, 3200 SANTA RITA ROAD
 PLEASANTON, CALIFORNIA

PROJECT NO.: 6621.100.120	
DATE: AS SHOWN	
DRAWN BY: SRP	CHECKED BY: SM

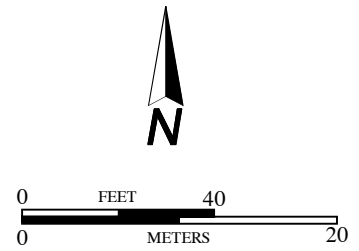
FIGURE NO.
1

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EXPLANATION

- PROPERTY LINE
- STORM DRAIN INLET
- APPROXIMATE LOCATION OF PROPOSED MONITORING WELL
- GROUNDWATER ELEVATION (FT-MSL)
- GROUNDWATER CONTOUR (FT-MSL)



BASE MAP SOURCE: KLEINFELDER, GOOGLE EARTH, 2011



GROUNDWATER ELEVATIONS -FEBRUARY 2011
 FIRE STATION #3, 3200 SANTA RITA ROAD
 PLEASANTON, CALIFORNIA




PROJECT NO.: 6621.100.120
DATE: AS SHOWN
DRAWN BY: SRP **CHECKED BY:** SM

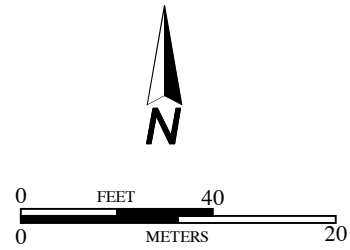
FIGURE NO.
2

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EXPLANATION

-  PROPERTY LINE
-  STORM DRAIN INLET
-  MW-3 LOCATION OF PROPOSED MONITORING WELL
- TPHg TOTAL HYDROCARBONS AS GASOLINE CONCENTRATIONS ($\mu\text{g/L}$)
- TPHd TOTAL HYDROCARBONS AS DIESEL CONCENTRATIONS ($\mu\text{g/L}$)
- TPHmo TOTAL HYDROCARBONS AS MOTOR OIL CONCENTRATIONS ($\mu\text{g/L}$)
- ND NON - DETECT CONCENTRATION



BASE MAP SOURCE: KLEINFELDER, GOOGLE EARTH, 2011

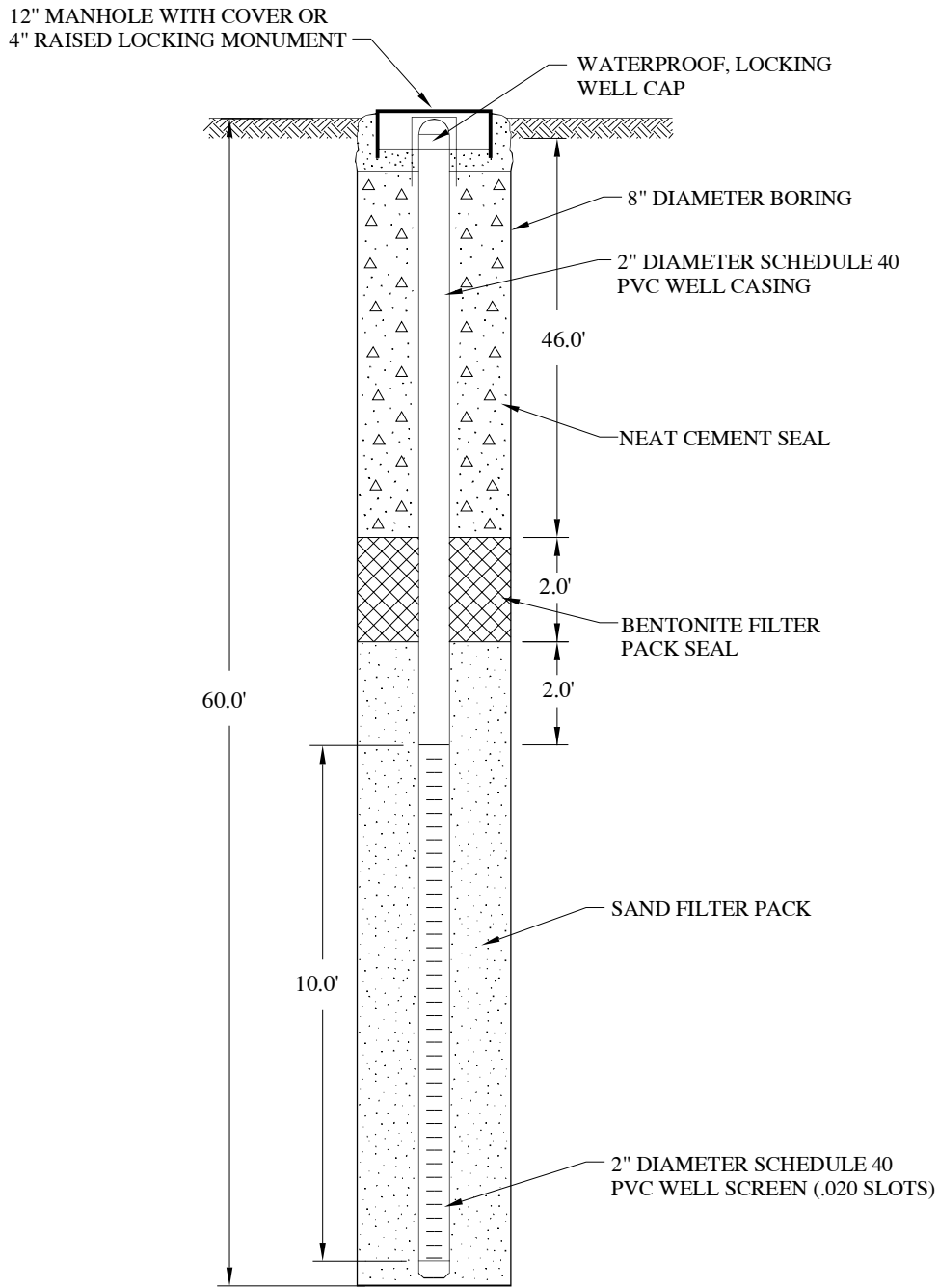


GROUNDWATER ANALYTICAL RESULTS - FEBRUARY 2011
 FIRE STATION #3, 3200 SANTA RITA ROAD
 PLEASANTON, CALIFORNIA

PROJECT NO.:	6621.100.120
DATE:	AS SHOWN
DRAWN BY:	SRP
CHECKED BY:	SM

FIGURE NO.
3

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TYPICAL MONITORING WELL CONSTRUCTION
 FIRE STATION #3, 3200 SANTA RITA ROAD
 PLEASANTON, CALIFORNIA

PROJECT NO.: 6621.100.120
 SCALE: NO SCALE
 DRAWN BY: SRP CHECKED BY: SM

FIGURE NO.
 4

TABLES

Table A - Groundwater Elevation Data

Table B - Groundwater Monitoring Well Analytical Data

TABLE A
Groundwater Elevations
Fire Station #3, 3200 Santa Rita Road
Pleasanton, California

Well Elevation (Ft msl)	MW-1		MW-2		MW-3	
Top of Casing Elevation ⁽²⁾ (feet)	342.2400		342.3700		342.9500	
Date	Depth to Groundwater ⁽¹⁾ (ft bgs)	Groundwater Elevation (ft msl)	Depth to Groundwater ⁽¹⁾ (ft bgs)	Groundwater Elevation (ft msl)	Depth to Groundwater ⁽¹⁾ (ft bgs)	Groundwater Elevation (ft msl)
2/14/2011	56.92	285.32	58.00	284.37	56.62	286.33

NOTES:

bgs = Below ground surface

msl = Mean sea level

(1) Depth to groundwater measured from top of well casing.

(2) Well casing elevations (NAV 88) surveyed Summer 2011

TABLE B
Groundwater Monitoring Well Analytical Data
Fire Station #3, 3200 Santa Rita Road
Pleasanton, California

Sample ID	Date	Depth to Water ft	Total Petroleum Hydrocarbons (µg/L)			Benzene µg/L	Toulene µg/L	Ethylbenzene µg/L	Xylene(s) µg/L	MTBE µg/L	TBA µg/L	ETBE µg/L	DIPE µg/L	TAME µg/L
			Gasoline	Diesel	Motor Oil									
MW-1	2/14/2011	56.92	ND<50	72	210	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<4	ND<0.5	ND<0.5	ND<0.5
MW-2	2/14/2011	58.00	ND<50	170	520	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<4	ND<0.5	ND<0.5	ND<0.5
MW-3	2/14/2011	56.62	ND<50	ND<61	ND<120	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<4	ND<0.5	ND<0.5	ND<0.5

NOTES:

Samples have undergone silica gel cleanup unless otherwise noted.
µg/L = micrograms per liter

APPENDIX A

Boring Logs / Well Construction Diagrams

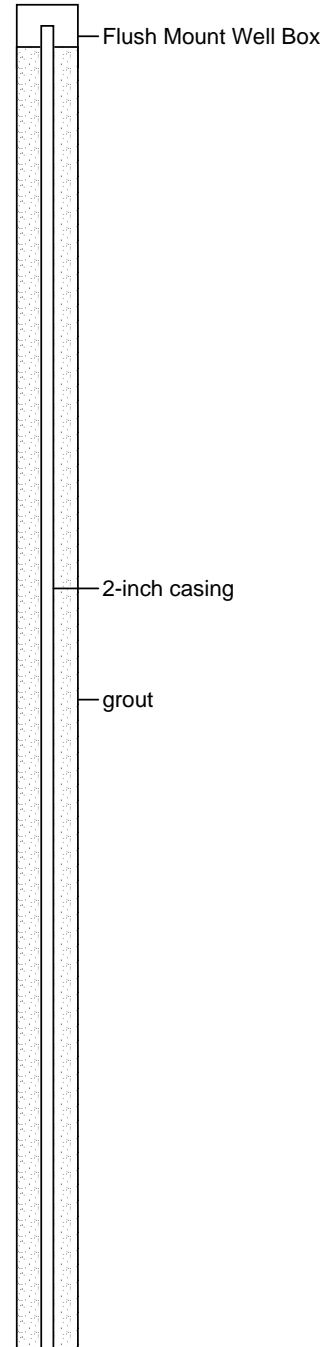
Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 27, 2011
 HOLE DEPTH (FT) : 60
 SUFR ELEV (MSL) : 342.6 Feet
 LATITUDE (NAD83) : 37.692197
 LONGITUDE (NAD83) : -121.878062

LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8

Depth in Feet	Depth in Meters	Sample Type	DESCRIPTION	Graphic	Water Level	PID (ppm)
0	0		Organics (grass), dark brown, moist, LEAN CLAY (CL), dark brown with light brown mottling, moist, <5% organics (roots), <5% fine-grained sand.			
1			no organics		0.0	
5			grades approximately 10-15% fine-grained sand			
10	3				0.0	
15	4		grades <5% fine- to medium-grained sand, dark gray with light gray mottling			
20	6				0.0	
25	7		grades dark gray		0.0	
30	9					

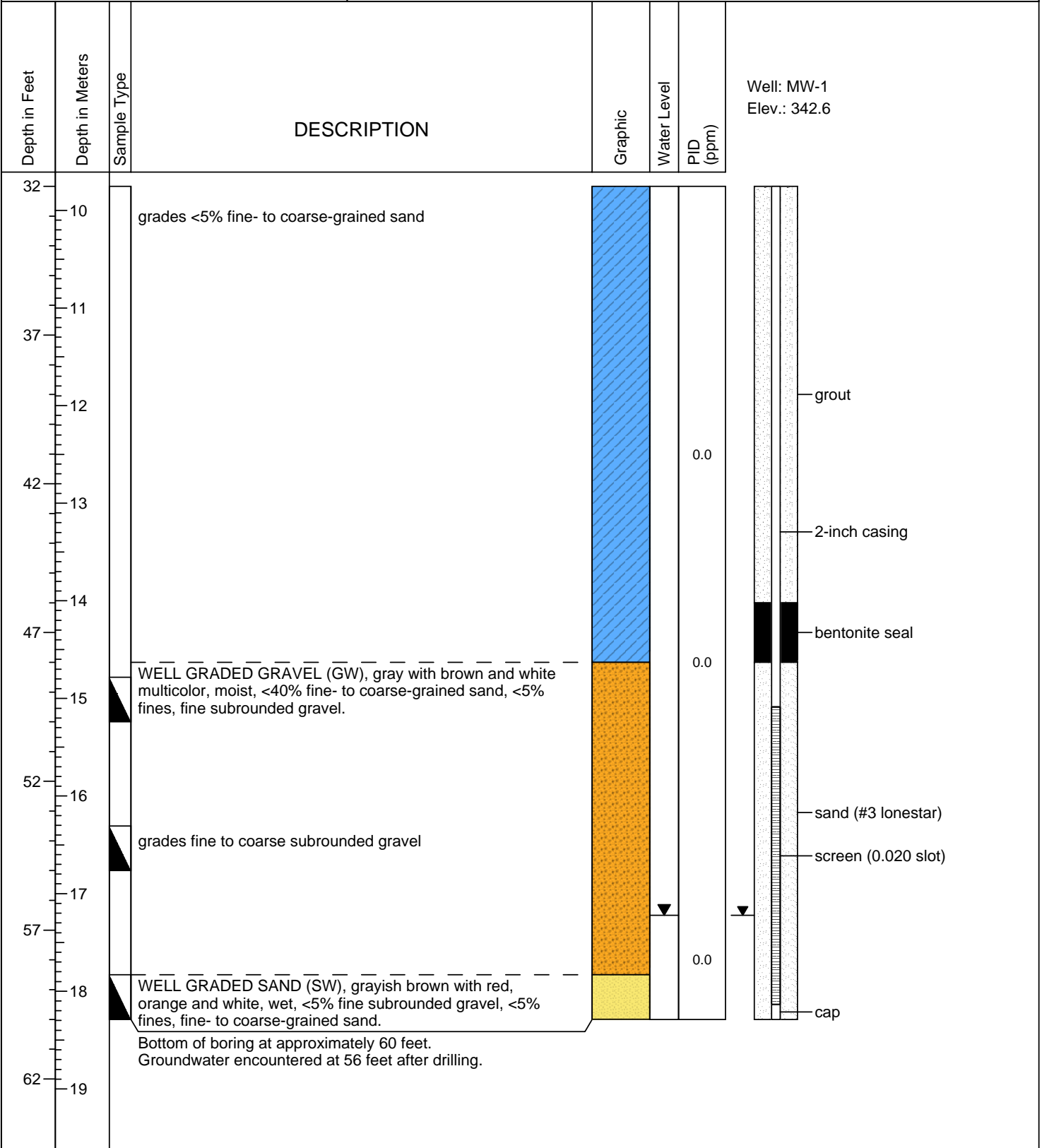
Well: MW-1
 Elev.: 342.6



Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 27, 2011
 HOLE DEPTH (FT) : 60
 SUFR ELEV (MSL) : 342.6 Feet
 LATITUDE (NAD83) : 37.692197
 LONGITUDE (NAD83) : -121.878062

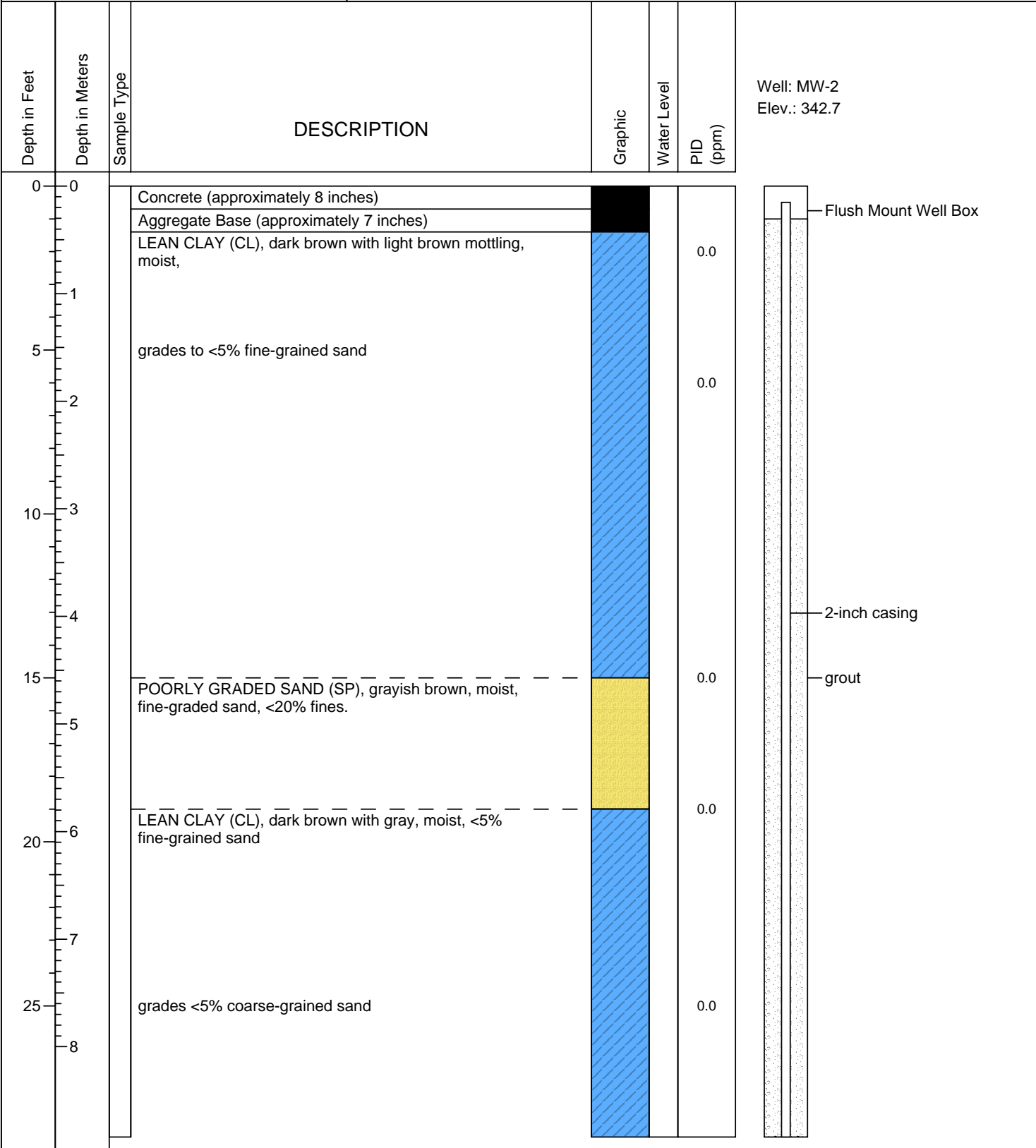
LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8



Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 26, 2011
 HOLE DEPTH (FT) : 75
 SUFR ELEV (MSL) : 342.7 Feet
 LATITUDE (NAD83) : 37.692355
 LONGITUDE (NAD83) : -121.877847

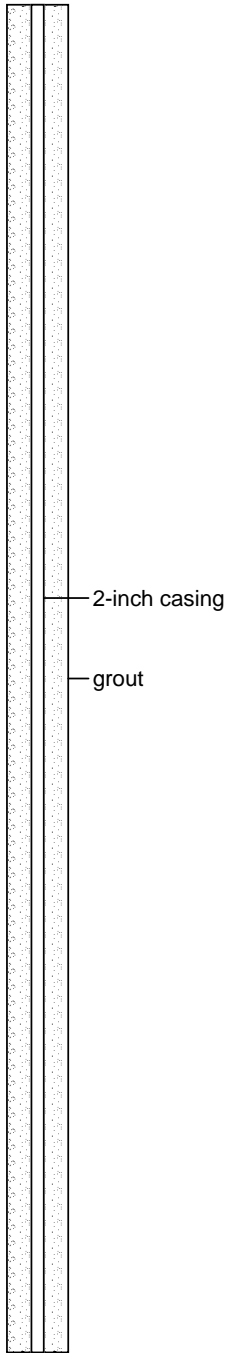
LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8



Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 26, 2011
 HOLE DEPTH (FT) : 75
 SUFR ELEV (MSL) : 342.7 Feet
 LATITUDE (NAD83) : 37.692355
 LONGITUDE (NAD83) : -121.877847

LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8

Depth in Feet	Depth in Meters	Sample Type	DESCRIPTION	Graphic	Water Level	PID (ppm)	
29	9		grades to no sand				Well: MW-2 Elev.: 342.7 
34	10				0.0		
39	11				0.0		
44	12		grades <10% fine- to coarse-grained sand		0.0		
49	13				0.0		
54	14				0.0		
54	15		grades approximately 25% fine to medium subangular gravel, fine- to medium-grained sand				
54	16				0.0		
54	17		POORLY GRADED GRAVEL (GP), gray and brown, moist to wet, fine- to medium-graded sand, < 5% fines, fine to medium subangular gravel			0.0	

Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 26, 2011
 HOLE DEPTH (FT) : 75
 SUFR ELEV (MSL) : 342.7 Feet
 LATITUDE (NAD83) : 37.692355
 LONGITUDE (NAD83) : -121.877847

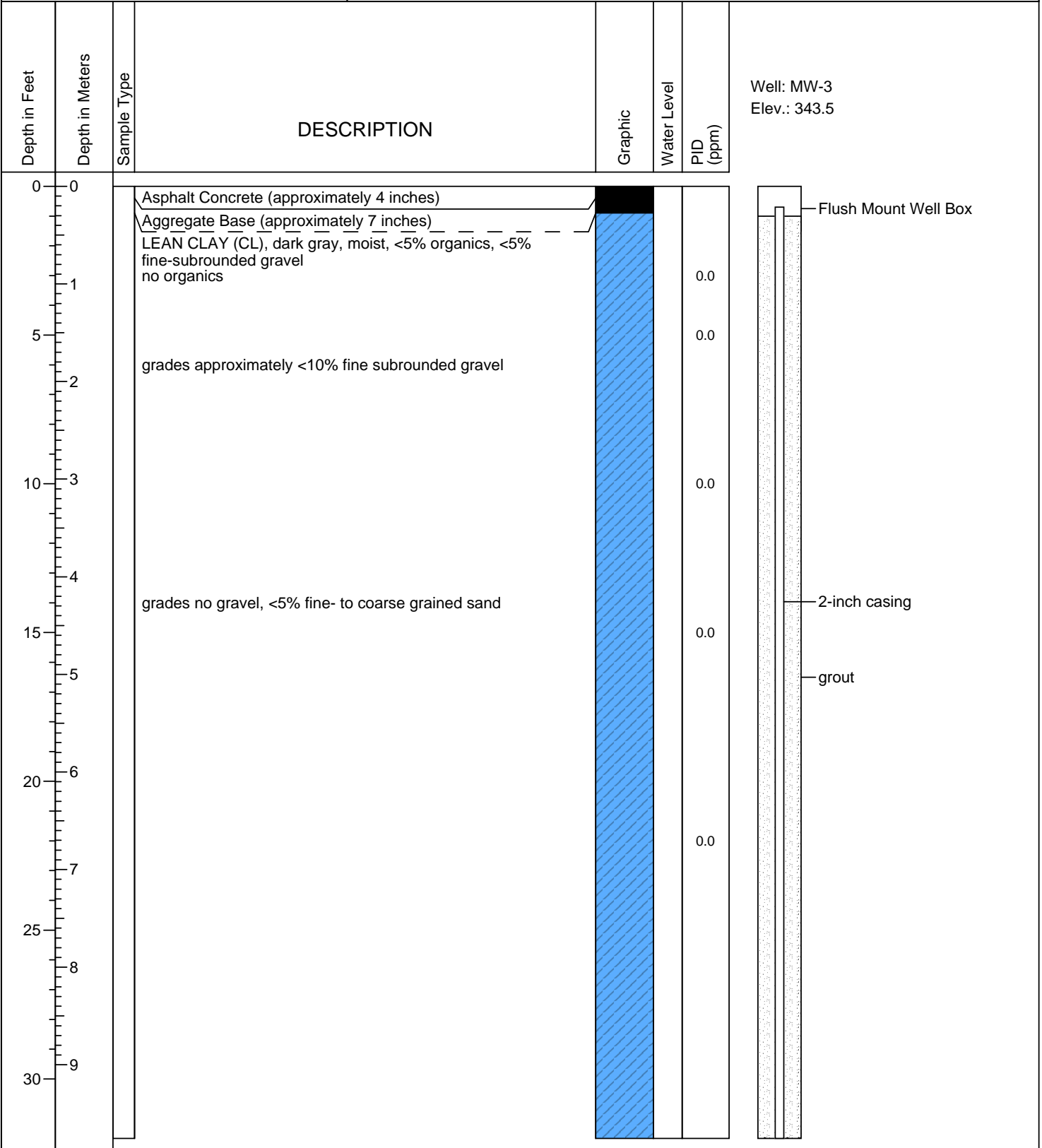
LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8

Depth in Feet	Depth in Meters	Sample Type	DESCRIPTION	Graphic	Water Level	PID (ppm)	Well: MW-2 Elev.: 342.7
58	18				0.0		
63	19				0.0		
68	20				0.0		
73	21				0.0		
78	22				0.0		
83	23				0.0		
	24						
	25						
	26						
			Bottom of boring at approximately 75 feet. Groundwater measured at 62 feet after drilling.				

Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 26-27, 2011
 HOLE DEPTH (FT) : 60
 SUFR ELEV (MSL) : 343.5 Feet
 LATITUDE (NAD83) : 37.692252
 LONGITUDE (NAD83) : -121.877629

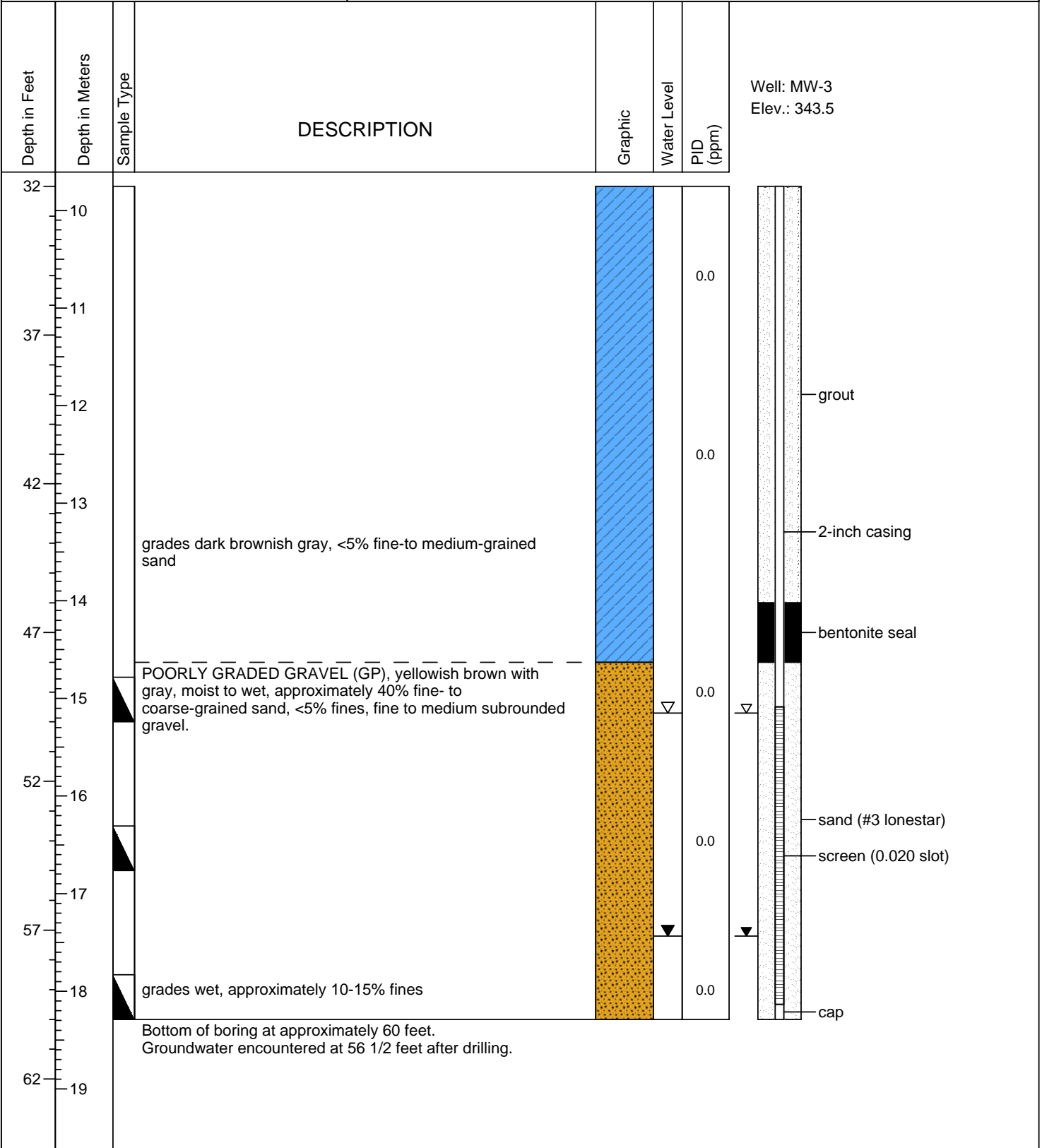
LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8



Monitor Well Installation
 Fire Station #3
 Pleasanton, California
 6621.100.120

DATE DRILLED : January 26-27, 2011
 HOLE DEPTH (FT) : 60
 SUFR ELEV (MSL) : 343.5 Feet
 LATITUDE (NAD83) : 37.692252
 LONGITUDE (NAD83) : -121.877629

LOGGED/REVIEWED BY : R. Gandolfo/JA
 DRILLING CONTRACTOR: Gregg Drilling
 DRILLING METHOD : Hollow Stem
 HAMMER TYPE : Automatic
 HOLE DIAMETER (IN) : 8



APPENDIX B
Well Sampling Logs

APPENDIX C

**Laboratory Analytical Reports and
Chain-Of-Custody Records**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica San Francisco
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-33358-1
Client Project/Site: Santa Rita FS#3

For:
Engeo, Inc.
2010 Crow Canyon Place
Suite 250
San Ramon, California 94583

Attn: Richard Gandolfo



Authorized for release by:
2/22/2011 2:53 PM

Afsaneh Salimpour
Project Manager I
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Qualifier Definition/Glossary

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

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Case Narrative

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Job ID: 720-33358-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative
720-33358-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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Detection Summary

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Client Sample ID: MW-1

Lab Sample ID: 720-33358-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	72		53		ug/L	1		8015B	Silica Gel Clear
Motor Oil Range Organics [C24-C36]	210		110		ug/L	1		8015B	Silica Gel Clear

Client Sample ID: MW-2

Lab Sample ID: 720-33358-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	170		55		ug/L	1		8015B	Silica Gel Clear
Motor Oil Range Organics [C24-C36]	520		110		ug/L	1		8015B	Silica Gel Clear

Client Sample ID: MW-3

Lab Sample ID: 720-33358-3

No Detections.

Analytical Data

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Client Sample ID: MW-1

Date Collected: 02/14/11 15:00

Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-1

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			02/16/11 05:26	1
Ethylbenzene	ND		0.50		ug/L			02/16/11 05:26	1
Toluene	ND		0.50		ug/L			02/16/11 05:26	1
Xylenes, Total	ND		1.0		ug/L			02/16/11 05:26	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			02/16/11 05:26	1
TBA	ND		4.0		ug/L			02/16/11 05:26	1
Methyl tert-butyl ether	ND		0.50		ug/L			02/16/11 05:26	1
Ethyl tert-butyl ether	ND		0.50		ug/L			02/16/11 05:26	1
DIPE	ND		0.50		ug/L			02/16/11 05:26	1
TAME	ND		0.50		ug/L			02/16/11 05:26	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		67 - 130		02/16/11 05:26	1
1,2-Dichloroethane-d4 (Surr)	128		67 - 130		02/16/11 05:26	1
Toluene-d8 (Surr)	99		70 - 130		02/16/11 05:26	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	72		53		ug/L		02/15/11 16:10	02/16/11 16:34	1
Motor Oil Range Organics [C24-C36]	210		110		ug/L		02/15/11 16:10	02/16/11 16:34	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.08		0 - 5	02/15/11 16:10	02/16/11 16:34	1
p-Terphenyl	89		31 - 150	02/15/11 16:10	02/16/11 16:34	1

Client Sample ID: MW-2

Date Collected: 02/14/11 13:50

Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-2

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			02/16/11 05:55	1
Ethylbenzene	ND		0.50		ug/L			02/16/11 05:55	1
Toluene	ND		0.50		ug/L			02/16/11 05:55	1
Xylenes, Total	ND		1.0		ug/L			02/16/11 05:55	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			02/16/11 05:55	1
TBA	ND		4.0		ug/L			02/16/11 05:55	1
Methyl tert-butyl ether	ND		0.50		ug/L			02/16/11 05:55	1
Ethyl tert-butyl ether	ND		0.50		ug/L			02/16/11 05:55	1
DIPE	ND		0.50		ug/L			02/16/11 05:55	1
TAME	ND		0.50		ug/L			02/16/11 05:55	1

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130		02/16/11 05:55	1
1,2-Dichloroethane-d4 (Surr)	125		67 - 130		02/16/11 05:55	1
Toluene-d8 (Surr)	99		70 - 130		02/16/11 05:55	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	170		55		ug/L		02/15/11 16:10	02/16/11 16:58	1

Analytical Data

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Client Sample ID: MW-2
Date Collected: 02/14/11 13:50
Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-2
Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	520		110		ug/L		02/15/11 16:10	02/16/11 16:58	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.2		0 - 5				02/15/11 16:10	02/16/11 16:58	1
p-Terphenyl	78		31 - 150				02/15/11 16:10	02/16/11 16:58	1

Client Sample ID: MW-3
Date Collected: 02/14/11 11:30
Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-3
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			02/16/11 06:24	1
Ethylbenzene	ND		0.50		ug/L			02/16/11 06:24	1
Toluene	ND		0.50		ug/L			02/16/11 06:24	1
Xylenes, Total	ND		1.0		ug/L			02/16/11 06:24	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			02/16/11 06:24	1
TBA	ND		4.0		ug/L			02/16/11 06:24	1
Methyl tert-butyl ether	ND		0.50		ug/L			02/16/11 06:24	1
Ethyl tert-butyl ether	ND		0.50		ug/L			02/16/11 06:24	1
DIPE	ND		0.50		ug/L			02/16/11 06:24	1
TAME	ND		0.50		ug/L			02/16/11 06:24	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130					02/16/11 06:24	1
1,2-Dichloroethane-d4 (Surr)	127		67 - 130					02/16/11 06:24	1
Toluene-d8 (Surr)	98		70 - 130					02/16/11 06:24	1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		61		ug/L		02/15/11 16:10	02/16/11 17:21	1
Motor Oil Range Organics [C24-C36]	ND		120		ug/L		02/15/11 16:10	02/16/11 17:21	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.2		0 - 5				02/15/11 16:10	02/16/11 17:21	1
p-Terphenyl	93		31 - 150				02/15/11 16:10	02/16/11 17:21	1

Quality Control Data

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-86297/5

Matrix: Water

Analysis Batch: 86297

Client Sample ID: MB 720-86297/5

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50		ug/L			02/15/11 21:13	1
Ethylbenzene	ND		0.50		ug/L			02/15/11 21:13	1
Toluene	ND		0.50		ug/L			02/15/11 21:13	1
m-Xylene & p-Xylene	ND		1.0		ug/L			02/15/11 21:13	1
o-Xylene	ND		0.50		ug/L			02/15/11 21:13	1
Xylenes, Total	ND		1.0		ug/L			02/15/11 21:13	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			02/15/11 21:13	1
TBA	ND		4.0		ug/L			02/15/11 21:13	1
Methyl tert-butyl ether	ND		0.50		ug/L			02/15/11 21:13	1
Ethyl tert-butyl ether	ND		0.50		ug/L			02/15/11 21:13	1
DIPE	ND		0.50		ug/L			02/15/11 21:13	1
TAME	ND		0.50		ug/L			02/15/11 21:13	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	% Recovery	Qualifier				
4-Bromofluorobenzene	98		67 - 130		02/15/11 21:13	1
1,2-Dichloroethane-d4 (Surr)	106		67 - 130		02/15/11 21:13	1
Toluene-d8 (Surr)	100		70 - 130		02/15/11 21:13	1

Lab Sample ID: LCS 720-86297/6

Matrix: Water

Analysis Batch: 86297

Client Sample ID: LCS 720-86297/6

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Ethylbenzene	25.0	26.8		ug/L		107	86 - 135
Toluene	25.0	24.6		ug/L		99	83 - 129
m-Xylene & p-Xylene	50.0	56.3		ug/L		113	70 - 142
o-Xylene	25.0	28.4		ug/L		114	89 - 136
TBA	500	497		ug/L		99	82 - 116
Methyl tert-butyl ether	25.0	26.9		ug/L		107	62 - 130
Ethyl tert-butyl ether	25.0	25.7		ug/L		103	70 - 130
DIPE	25.0	24.1		ug/L		96	74 - 155
TAME	25.0	27.9		ug/L		111	79 - 129

Surrogate	LCS LCS		Limits
	% Recovery	Qualifier	
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	108		67 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: LCS 720-86297/8

Matrix: Water

Analysis Batch: 86297

Client Sample ID: LCS 720-86297/8

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits

Quality Control Data

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-86297/8

Matrix: Water

Analysis Batch: 86297

Client Sample ID: LCS 720-86297/8

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	% Recovery	Qualifier	
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		67 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: LCSD 720-86297/7

Matrix: Water

Analysis Batch: 86297

Client Sample ID: LCSD 720-86297/7

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec.		RPD	Limit
							Limits	RPD		
Benzene	25.0	24.9		ug/L		100	82 - 127	0	20	
Ethylbenzene	25.0	26.3		ug/L		105	86 - 135	2	20	
Toluene	25.0	24.4		ug/L		97	83 - 129	1	20	
m-Xylene & p-Xylene	50.0	55.4		ug/L		111	70 - 142	2	20	
o-Xylene	25.0	27.7		ug/L		111	89 - 136	3	20	
TBA	500	507		ug/L		101	82 - 116	2	20	
Methyl tert-butyl ether	25.0	26.7		ug/L		107	62 - 130	1	20	
Ethyl tert-butyl ether	25.0	25.8		ug/L		103	70 - 130	0	20	
DIPE	25.0	24.2		ug/L		97	74 - 155	1	20	
TAME	25.0	27.8		ug/L		111	79 - 129	0	20	

Surrogate	LCSD LCSD		Limits
	% Recovery	Qualifier	
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	108		67 - 130
Toluene-d8 (Surr)	104		70 - 130

Lab Sample ID: LCSD 720-86297/9

Matrix: Water

Analysis Batch: 86297

Client Sample ID: LCSD 720-86297/9

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec.		RPD	Limit
							Limits	RPD		
Gasoline Range Organics (GRO) -C5-C12	500	389		ug/L		78	62 - 117	2	20	

Surrogate	LCSD LCSD		Limits
	% Recovery	Qualifier	
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	110		67 - 130
Toluene-d8 (Surr)	104		70 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-86278/1-A

Matrix: Water

Analysis Batch: 86306

Client Sample ID: MB 720-86278/1-A

Prep Type: Silica Gel Cleanup

Prep Batch: 86278

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		02/15/11 13:09	02/16/11 10:19	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		02/15/11 13:09	02/16/11 10:19	1

Quality Control Data

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 720-86278/1-A
Matrix: Water
Analysis Batch: 86306

Client Sample ID: MB 720-86278/1-A
Prep Type: Silica Gel Cleanup
Prep Batch: 86278

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	% Recovery	Qualifier				
Capric Acid (Surr)	0.2		0 - 5	02/15/11 13:09	02/16/11 10:19	1
p-Terphenyl	87		31 - 150	02/15/11 13:09	02/16/11 10:19	1

Lab Sample ID: LCS 720-86278/2-A
Matrix: Water
Analysis Batch: 86306

Client Sample ID: LCS 720-86278/2-A
Prep Type: Silica Gel Cleanup
Prep Batch: 86278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits

Surrogate	LCS LCS		Limits
	% Recovery	Qualifier	
p-Terphenyl	107		31 - 150

Lab Sample ID: LCSD 720-86278/3-A
Matrix: Water
Analysis Batch: 86306

Client Sample ID: LCSD 720-86278/3-A
Prep Type: Silica Gel Cleanup
Prep Batch: 86278

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	
								RPD	Limit
Diesel Range Organics [C10-C28]	2500	1430		ug/L		57	32 - 119	8	35

Surrogate	LCSD LCSD		Limits
	% Recovery	Qualifier	
p-Terphenyl	101		31 - 150

QC Association Summary

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

GC/MS VOA

Analysis Batch: 86297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-33358-1	MW-1	Total/NA	Water	8260B/CA_LUF TMS	
720-33358-2	MW-2	Total/NA	Water	8260B/CA_LUF TMS	
720-33358-3	MW-3	Total/NA	Water	8260B/CA_LUF TMS	
MB 720-86297/5	MB 720-86297/5	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-86297/6	LCS 720-86297/6	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-86297/7	LCSD 720-86297/7	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-86297/8	LCS 720-86297/8	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-86297/9	LCSD 720-86297/9	Total/NA	Water	8260B/CA_LUF TMS	

GC Semi VOA

Prep Batch: 86278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-86278/1-A	MB 720-86278/1-A	Silica Gel Cleanup	Water	3510C SGC	
720-33358-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
720-33358-2	MW-2	Silica Gel Cleanup	Water	3510C SGC	
720-33358-3	MW-3	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-86278/2-A	LCS 720-86278/2-A	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-86278/3-A	LCSD 720-86278/3-A	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 86306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-86278/2-A	LCS 720-86278/2-A	Silica Gel Cleanup	Water	8015B	86278
LCSD 720-86278/3-A	LCSD 720-86278/3-A	Silica Gel Cleanup	Water	8015B	86278
720-33358-1	MW-1	Silica Gel Cleanup	Water	8015B	86278
720-33358-2	MW-2	Silica Gel Cleanup	Water	8015B	86278
720-33358-3	MW-3	Silica Gel Cleanup	Water	8015B	86278
MB 720-86278/1-A	MB 720-86278/1-A	Silica Gel Cleanup	Water	8015B	86278

Lab Chronicle

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Client Sample ID: MW-1
Date Collected: 02/14/11 15:00
Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUF TMS		1	86297	02/16/11 05:26	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			86278	02/15/11 16:10	NP	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	86306	02/16/11 16:34	DH	TestAmerica San Francisco

Client Sample ID: MW-2
Date Collected: 02/14/11 13:50
Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUF TMS		1	86297	02/16/11 05:55	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			86278	02/15/11 16:10	NP	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	86306	02/16/11 16:58	DH	TestAmerica San Francisco

Client Sample ID: MW-3
Date Collected: 02/14/11 11:30
Date Received: 02/14/11 16:50

Lab Sample ID: 720-33358-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUF TMS		1	86297	02/16/11 06:24	AC	TestAmerica San Francisco
Silica Gel Cleanup	Prep	3510C SGC			86278	02/15/11 16:10	NP	TestAmerica San Francisco
Silica Gel Cleanup	Analysis	8015B		1	86306	02/16/11 17:21	DH	TestAmerica San Francisco



Certification Summary

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Laboratory	Authority	Program	EPA Region	Certification ID	* Expiration Date
TestAmerica San Francisco	California	State Program	9	2496	01/31/12

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

* Any expired certifications in this list are currently pending renewal and are considered valid.

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Method Summary

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFT MS	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Engeo, Inc.
Project/Site: Santa Rita FS#3

TestAmerica Job ID: 720-33358-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-33358-1	MW-1	Water	02/14/11 15:00	02/14/11 16:50
720-33358-2	MW-2	Water	02/14/11 13:50	02/14/11 16:50
720-33358-3	MW-3	Water	02/14/11 11:30	02/14/11 16:50

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody
 1220 Quarry Lane • Pleasanton CA 94566-4456
 Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 129645

Date 2/14/11 Page 1 of 1

02/22/2011

Report To **Analysis Request**

Attn: R. Grand
 Company: ENGEO
 Address:
 Phone: Email:
 Bill To: Sampled By: R. Grand
 Attn: Phone:

TPH EPA - 8260B Gas w/ BTEX MTBE
 TEPH EPA 8015M* Silica Gel Other
 Diesel Motor Oil
 EPA 8260B: Gas BTEX 5 Oxygenates DCA, EDB Ethanol
 (HVOCs) EPA 8021 by 8260B
 Volatile Organics GC/MS (VOCs)
 EPA 8260B 624
 Semivolatiles GC/MS
 EPA 8270 625
 Oil and Grease Petroleum (EPA 1664) Total
 Pesticides EPA 8081 608 608
 PCBs EPA 8082 608
 PNAs by 8270 8310
 CAM17 Metals (EPA 8010/7470/7471)
 Metals: Lead LUFT RCRA Other
 Low Level Metals by EPA 200.8/6020 (ICP-MS):
 W.E.T (STLC) TCLP
 Hexavalent Chromium pH (24hr hold time for H₂O)
 Spec. Cond. Alkalinity TDS
 TSS
 Anions: Cl SO₄ NO₃ F Br NO₂ PO₄

Sample ID	Date	Time	Mat. rix	Preserv	TPH EPA - 8260B	TEPH EPA 8015M*	EPA 8260B	(HVOCs)	Volatile Organics GC/MS (VOCs)	Semivolatiles GC/MS	Oil and Grease	Pesticides	PCBs	PNAs	CAM17 Metals	Metals	Low Level Metals	W.E.T (STLC)	TCLP	Hexavalent Chromium	pH	Spec. Cond.	Alkalinity	TDS	TSS	Anions	Number of Containers
7 MW-1	2/11/11	15:00	W	HCl	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
8 MW-1		15:00		HCl	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
9 MW-2		13:50		HCl	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
MW-2		13:50		HCl	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
MW-3		11:30		HCl	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3
MW-3		11:30		HCl	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2

UVA
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Project Info
 Project Name: Santa Rita FS #3
 Project#: 6621.100.120
 PO#: 3.42
 Credit Card#:

Sample Receipt
 # of Containers: 15
 Head Space:
 Temp: 3.42
 Conforms to record:
 Other:

Report: Routine Level 3 Level 4 EDD State Tank Fund EDF
 Special Instructions / Comments: Global ID

1) Relinquished by:
 Signature: [Signature] Time: 16:50
 Printed Name: Richard Grand Date: 2/14/11
 Company: ENGEO

1) Received by:
 Signature: [Signature] Time: 16:50
 Printed Name: Mulvey Date: 2-14-11
 Company: [Signature]

2) Relinquished by:
 Signature: _____ Time: _____
 Printed Name: _____ Date: _____
 Company: _____

2) Received by:
 Signature: _____ Time: _____
 Printed Name: _____ Date: _____
 Company: _____

3) Relinquished by:
 Signature: _____ Time: _____
 Printed Name: _____ Date: _____
 Company: _____

3) Received by:
 Signature: _____ Time: _____
 Printed Name: _____ Date: _____
 Company: _____

See Terms and Conditions on reverse
 *TestAmerica SF reports 8015M from C₉-C₂₄ (Industry norm). Default for 8015B is C₁₀-C₂₈

Login Sample Receipt Check List

Client: Engeo, Inc.

Job Number: 720-33358-1

Login Number: 33358

Creator: Mullen, Joan

List Number: 1

List Source: TestAmerica San Francisco

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

