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June 19, 2007

**MONITORING WELL  
INSTALLATION REPORT**

6310 Houston Place  
Dublin, California

AEI Project No. 261639  
ACHCSA Fuel Leak No. RO0002862

Prepared For

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## 1.0 INTRODUCTION

This *Monitoring Well Installation Report* has been prepared on behalf of G&G International Holding (G&G) for the facility located at 6310 Houston Place in the City of Dublin, Alameda County, California (Figure 1). AEI Consultants (AEI) has been retained by G&G to provide environmental engineering and consulting services associated with a release of petroleum hydrocarbons from the former diesel underground storage tank (UST) system at the site.

This report documents the installation and initial monitoring of seven (7) groundwater monitoring wells at the site. These activities were requested by the Alameda County Health Care Services Agency (ACHCSA) to further evaluate impacted groundwater at the site in a letter dated July 31, 2006. The purpose of the monitoring wells is to investigate contaminant plume characteristics and evaluate treatment options in preparation for remediation.

## 2.0 SITE DESCRIPTION AND HISTORY

The subject property is located in a commercial and light industrial area of Dublin, on the south side of Houston Place, just east of Dougherty Road. Please refer to Figures 1 and 2 for the site location map and site plan details. According to records on file with the Dublin Building Department (DBD), three USTs (one 12,000-gallon diesel USTs, one 7,500-gallon gasoline UST, and one 2,000-gallon gasoline UST) were installed on the subject property in 1968.

### Previous Releases

According to a case closure summary report prepared by Alameda County Health Care Services Agency (ACHCSA), a piping leak and a localized surface spill of used motor oil were discovered at the site prior to 1984. Following the release, 156 cubic yards of contaminated soil was removed from the site to the satisfaction of San Francisco Bay Regional Water Quality Control Board (SFRWQCB). On March 31, 1989, four USTs (one 500-gallon waste oil, two 12,000-gallon and one 8,000-gallon diesel tanks) were excavated, three of which were removed. One 12,000-gallon diesel UST was refinished internally with "Glass Armor" coating and was reinstalled for continued use. Soil samples collected from the sidewalls of the excavation during tank removal activities had concentrations of Total Petroleum Hydrocarbons as diesel (TPH-d) to 190 milligrams per kilogram (mg/kg) and Total Oil and Grease (TOG) up to 240 mg/kg. No concentrations of TPH as gasoline; Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX); or chlorinated hydrocarbons were detected in these samples. One grab groundwater sample was collected from the diesel UST excavation, which had concentrations of TPH-d and TOG up to 380,000 micrograms per liter ( $\mu\text{g/L}$ ) and 50,000  $\mu\text{g/l}$ , respectively.

Following removal of the three USTs, three groundwater monitoring wells (MW-1 through MW-3) were installed on August 9, 1989, and quarterly groundwater monitoring and sampling commenced. To further define the extent of the groundwater contamination plume, three additional wells (MW-4 through MW-6) were installed between May 1990 and March 1991. TPH-d and TOG were detected up to 22,000  $\mu\text{g/L}$  and 8,600  $\mu\text{g/L}$ , respectively, during initial

sampling of these wells. Intermittent monitoring and sampling of the wells continued between August 1989 and October 1994. During the last sampling episode conducted in October 1994 concentrations of TPH-d and TOG were detected up to 850 µg/L and 600 µg/L, respectively. Based on a recent site inspection, the former onsite monitoring wells had been decommissioned. Approximate former well locations are shown on Figure 2.

Based on the gradual decline of TPH-d and TOG in the groundwater, and the remaining low concentrations of these contaminants in groundwater and soil, the ACHCSA granted case closure in a letter dated February 28, 1995.

At the request of a prospective purchaser of the property, AEI collected samples from on-site monitoring wells MW-1, MW-2, and MW-5 on January 23, 2001. TPH-d was detected up to 5,200 µg/L in the samples. No concentrations of TOG were detected in these samples. Monitoring wells MW-1 through MW-6 have been decommissioned, although no information was available to AEI as to the date and methods of decommissioning.

### **12,000-gallon diesel UST Removal**

On October 27, 2004, the remaining 12,000-gallon diesel UST, fuel dispensers, and product piping were removed from the subject property by Golden Gate Tank Removal, Inc. (GGTR). Following excavation, GGTR collected a total of seven soil and two groundwater samples from the UST excavation bottom and sidewall, overburden stockpile, and areas in the vicinity of the fuel dispensers and product piping. These samples were analyzed for TPH-d, MTBE, and BTEX. TPH-d was detected at concentrations of 6 mg/kg and 197 mg/kg in stockpile soil samples and at a concentration of 1 mg/kg in a soil sample obtained from the UST excavation sidewall. TPH-d was detected in the water sample collected from the UST pit at 0.3 mg/L and at 23.8 mg/L in water that was present in the shallow excavation beneath the dispenser. Locations of the samples collected by GGTR are shown on Figure 2 and a summary of sample analytical data from the tank removal is presented in Tables 3 and 4. The excavation was backfilled with the stockpiled soil and imported fill.

Upon reviewing the GGTR Tank Closure Report, the ACHCSA issued a letter dated April 12, 2005 requesting additional investigation regarding the release of petroleum hydrocarbons from the 12,000-gallon UST. On March 14, 2006, AEI performed a Soil and Groundwater Investigation consisting of the collection and analysis of soil and groundwater samples at the site. Five soil borings were advanced in the areas of the former 12,000-gallon diesel UST, the former dispenser island and products lines, and down-gradient from the former diesel UST. TPH-d was detected in the soil up to a concentration of 53 mg/kg. TPH-d and MTBE were detected in the groundwater samples up to concentrations of 580,000 µg/L and 2.6 µg/L, respectively. The findings of this investigation concluded that the release of TPH-d originated from the 12,000-gallon diesel UST, as the diesel release post-dates the previous releases at the property.

Upon reviewing the *Soil and Groundwater Investigation Report*, the ACHCSA issued a letter, dated July 31, 2006, requesting the installation of monitoring wells. A *Monitoring Well Installation Workplan* for five (5) wells, dated September 19, 2006, was approved by the

ACHCSA in a letter dated October 3, 2006. A request for two (2) additional off-site wells was subsequently approved by the ACHCSA in November 2006. Due to site construction work in Fall of 2006 to Winter 2007, the work was scheduled to occur following the asphalt paving of the parking lot. The following report describes monitoring well installation activities and the subsequent sampling of the seven wells performed by AEI.

### **3.0 GEOLOGY AND HYDROLOGY**

Based on a review of the United States Geological Survey (USGS) Dublin, California Quadrangle topographic map, the site is situated in the southeast end of the San Ramon Valley, and is located approximately ¾-mile south/southeast of the Dougherty Hills, which are foothills of Mount Diablo. The site is situated east of Dougherty Creek, which is located approximately ½-mile from the site. The site is relatively flat and at an elevation of approximately 335 feet above mean sea level (amsl). Any apparent slope throughout the surface of the site was likely produced to manage surface water drainage.

Based on the USGS Quaternary Geology of Alameda County, and Parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin Counties, California: A Digital Database, surface deposits in the vicinity of the site consist of Holocene Age Basin Deposits. These are identified as by very fine silty clay to clay deposits occupying flat-floored basins at the distal edge of alluvial fans.

During previous investigations, groundwater has been encountered at depth of approximately 12 feet below ground surface (bgs). Recent groundwater monitoring data for the newly installed seven wells show water levels stabilizing at approximately 7 to 8 feet bgs and migrating towards the south-southeast with a hydraulic gradient of 0.005 ft/ft. Previous monitoring identified a southeasterly groundwater flow direction with a hydraulic gradient of 0.001 ft/ft.

### **4.0 MONITORING WELL INSTALLATION**

Prior to initiating drilling activities, a well construction permit (permit number 27047) was obtained from Mr. Wyman Hong of the Alameda County Zone 7 Water Agency (Zone 7). Following permit approval, drilling activities were scheduled and Underground Utility Services (USA North) was notified to locate possible underground utilities in the area.

On March 14 and 15, 2007, AEI advanced seven (7) monitoring wells (DW-1 through DW-7) at the property. Locations of the newly installed wells are presented in Figure 2. The monitoring wells were initially drilled as boreholes with a standard rotary drilling rig, running 8¼-inch diameter hollow stem augers. The boreholes were advanced to a total depth of approximately 17 feet bgs. Soil samples were collected at approximately 5' intervals, during drilling with a California modified split spoon sampler advanced ahead of the auger bit. The soil samples were collected for laboratory analysis and to verify that soil lithology was consistent with former borings at the property.

Sampling equipment, including sampling barrels, augers, and other equipment used to sample, were decontaminated between samples using a triple rinse system containing Alconox™ or similar detergent. Rinse water was contained in sealed, labeled DOT approved 55-gallon drums in a secure location on-site pending proper disposal.

A six inch brass liner from each sample was sealed with Teflon tape and plastic caps, labeled with a unique identifier, placed in a cooler filled with water ice, and transported under appropriate chain-of-custody documentation for analysis to McCampell Analytical Inc., (DOHS Certification Number 1644) of Pacheco, California. Select soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) multi-range (as gas/diesel/motor oil) by EPA Method 8015C.

Following sampling activities, each borehole was converted into a monitoring well. The monitoring wells were constructed by placing a 2" diameter schedule 40 PVC casing with 10' of factory slotted 0.010-inch well screen through the augers to a total depth of 17 feet bgs each (screened 7 feet bgs to 17 feet bgs). An annular sand pack (consisting of clean #2/12 Sand) was installed through the augers to approximately 1 foot above the screened interval. A 1 foot bentonite seal was placed above the sand and the remainder of each boring was sealed with cement grout. A flush mounted traffic rated well box was installed over the casing, and an expanding, locking inner cap was placed on the casing top. DWR well registration forms (DWR Form 188) have been completed for each of the wells and have been forwarded to the DWR and Zone 7.

Cuttings generated during the drilling and well installation activities were stored on-site in a single sealed, labeled 55-gallon drum pending disposal. The 55-gallon drums were removed in mid-April 2007.

## **5.0 WELL DEVELOPMENT AND SAMPLING**

The newly installed monitoring well network was developed by surging, bailing, and purging the wells to remove accumulated fines from the casing and stabilize the sand pack on April 4, 2007. The wells were developed by using a surge block to clear the sand pack and screen of any fines, and then an attempt was made to purge approximately 10 well volumes.

On April 10, 2007, groundwater samples were collected from wells DW-1 through DW-7 for the first quarterly groundwater monitoring event. Prior to purging, the well caps were removed to allow the wells to equilibrate with the atmosphere. The depth to water in each well was measured to the nearest 0.01-foot and three well volumes of groundwater were purged from each well. During purging the following water quality parameters were measured: temperature, pH, specific conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP) along with a visual estimate of turbidity. These field parameters were recorded on Groundwater Well Sampling Field Forms (Appendix C), which include details on the sampling of each well.

Following recovery of water levels in the well to within 90% of the initial depth, samples were collected with a clean, disposable bailer.

The groundwater samples were collected from each well using clean disposable plastic bailers. Water was collected into laboratory supplied 40 ml VOA vials and 1-liter amber bottles. The VOAs were capped so that no headspace or air bubbles were visible within the sample containers. The samples were labeled, entered on a chain-of-custody form and placed in a cooler on ice pending same day transportation under appropriate chain-of-custody-protocol for analysis to McCampell Analytical Inc. (DOHS Certification Number 1644) of Pacheco, California. Groundwater samples were analyzed for TPH multi-range and BTEX by EPA Method 8021B/8015C, two samples (DW-2 and DW-3) were analyzed for Semi-volatile organic compounds (SVOCs) by EPA Method 8270, Inorganic nitrate and nitrite anions by EPA Method E300.1, Chemical Oxygen Demand (COD) by EPA Method SM5220D, and MTBE, ETBE, DIPE, TAME, TBA, EDB, 1,2-DCA, ethanol, and methanol by EPA Method 8260B.

## **6.0 SAMPLE ANALYTICAL RESULTS**

### **6.1 Soil Analytical Results**

During well installation activities conducted on March 14 and 15, 2007, soil samples were collected at select intervals. TPH-g was not detected in any of the soil samples analyzed. TPH-d was detected in soil samples DW-1-7', DW-2-10', and DW-3-11' at concentrations of 2.0 mg/kg, 9.2 mg/kg, and 12 mg/kg, respectively. TPH-mo was only detected in one sample, DW-3-11' at 6.2 mg/kg. No other target analytes exceeded laboratory detection limits in the soil samples analyzed. Soil analytical results are summarized in Table 2.

### **6.2 Groundwater Analytical Results**

The following contaminants were detected during the first groundwater monitoring episode for the seven monitoring wells conducted on April 10, 2007. Light Non-Aqueous Phase Liquid (LNAPL) was reported by the laboratory in samples DW-1 through DW-3. TPH-g was detected in three wells, DW-1 through DW-3 at concentrations ranging from 100 µg/L to 220 µg/L. TPH-d was detected in wells DW-1 through DW-5 at concentrations ranging from 65 µg/L to 27,000 µg/L. TPH-mo was detected in wells DW-1 through DW-3 and DW-5 at concentrations ranging from 320 µg/L to 9,200 µg/L. Benzene, ethylbenzene, and xylenes were not detected in any of the wells. MTBE was detected in DW-4 at a concentration of 0.67 µg/L. DIPE was detected in DW-6 at a concentration of 0.81 µg/L. The remaining target fuel additive compounds were not detected at or above the laboratory detection limit. Groundwater elevation and analytical results are displayed on Tables 4 and 5, as well as on Figures 3 and 4. A copy of the laboratory analytical report is included in Appendix D.

## 7.0 SITE SURVEY

On May 1, 2007, the well box and well casing elevations were surveyed by Morrow Surveying, West Sacramento, California; a California Registered Land Surveyor (LS No. LS 4650). Data from the survey was uploaded to the state Geotracker database. A copy of the well survey is included in Appendix E.

## 8.0 WELL SURVEY

Well records for all wells within a ½-mile radius of the site were collected from State of California Department of Water Resources. A well survey from the Alameda County Zone 7 Water Agency is currently underway and will be presented in forthcoming reports. A map with the locations of the wells identified in the survey relative to the site is presented in Figure 1. The identified nearby wells are also presented in the table below.

*Exhibit 1: Nearby Wells*

Owner	Map ID #	Distance (ft)	Direction	Depth (ft)	Screen Interval (ft)	Use
Dolan Rental Company (4 wells)	1	~1,200	South	20	5 – 20	Monitoring
Busick Air (9 wells?)	2	~ 1,500	Southeast	15	5 - 15	Monitoring
Scotsman Corp (5 wells?)	3	~2,500	Southeast	15	9 - 14	Monitoring
Charles LeMoine (1 well)	4	~1,800	Southeast	20	6.5 – 19.5	Monitoring
Tosco (8 wells)	5	~1,000	Southeast	20	5 - 20	Monitoring
BP Oil (4 wells)	6	~1,000	South	20	14 - 19	Monitoring
US Army (10 wells)	7	~2,000	East	15	10 - 15	Monitoring
Bedford Properties (3 wells)	8	~1,300	Northwest	22	7 – 22	Monitoring
CCB Bancorp (1 well)	9	~1,700	Southeast	18	8 - 18	Test Well

*NA – Information not available      Distances and direction from the site are approximate*

Most of the wells found during the DWR survey are monitoring and located at least ~1,000 feet away from the site. One test well owned by CCB Bancorp was found ~1,700 feet from the site. Based on the distance from the site in relation to these wells, that all identified wells are shallow, and the lack of petroleum hydrocarbons detected in down-gradient, off-site wells DW-6 and DW-7 during the initial monitoring event; the identified wells (Map ID #s 1 through 9) are not expected to be impacted by this release and would not likely act as a vertical conduit for shallow impacted groundwater at the site.

In summary, based on the well survey and the magnitude of the site hydrocarbon release, none of the identified wells appear to risk acting as preferential vertical conduits for migration of site contaminants nor does there appear to be active use of groundwater in the area that would be threatened by this release. Results of the Zone 7 well survey will be incorporated with DWR in the forthcoming groundwater monitoring report, scheduled for July 2007. In addition, no production wells were identified within the radius.



## 9.0 SUMMARY AND CONCLUSIONS

On March 14 and 15, 2007, seven (7) soil borings were installed at the site. Each boring was subsequently converted into a 2-inch diameter groundwater monitoring well. The monitoring wells (DW-1 through DW-7) were developed, surveyed by a licensed land surveyor, and sampled for their first groundwater monitoring episode.

Based on data obtained from the first groundwater monitoring event (4/10/07), the groundwater flow direction was determined to be towards the south-southwest with a hydraulic gradient of approximately 0.005 ft/ft (Figure 3). This groundwater flow direction is roughly consistent with contaminant distributions noted during the March 14, 2006 investigation and previous data from the former on-site monitoring wells.

TPH-d concentrations detected in wells near the source area were significantly less than diesel concentrations detected in groundwater samples during the 2006 investigation. The low concentrations of TPH-g and TPH-mo detected in two of the wells are likely the result of overlap with EPA Method 8015. BTEX was not detected in any of the wells. MTBE and DIPE were detected slightly above reporting limits in samples DW-4 and DW-6, respectively.

Analytical results confirm that the dissolved phase plume is limited to diesel range hydrocarbons. Although measurable free product was not encountered, dissolved diesel concentrations suggest LNAPL may be present. No significant soil source was identified, based on soil analytical data. This is consistent with a release from a tank partially submerged beneath the water table. Nitrate depletion with high chemical oxygen demand in plume and the negative O.R.P. values could indicate biodegradation has occurred but may be limited within the source area.

In accordance with ACHCSA regulations, quarterly groundwater monitoring is scheduled to occur in July 2007. During this next event, AEI proposes to analyze all samples for TPH-diesel by EPA Method 8015 and BTEX plus fuel additives by EPA Method 8260. If the 8260 results are consistent with this 1<sup>st</sup> groundwater monitoring event, AEI recommends dropping 8260 from future monitoring events.

Based on the high concentration of TPH-diesel, it is expected that remediation will be required to achieve case closure. If the results of the 2<sup>nd</sup> groundwater monitoring episode are consistent with the 1<sup>st</sup> monitoring episode, a feasibility study will be prepared with recommendations for a remediation approach. Given the limited extent of impact, AEI will likely propose in-situ chemical oxidation or in-situ enhanced bioremediation to reduce the impact.

## 10.0 REFERENCES

ACHCSA, Letter, April 12, 2005

ACHCSA, Letter, January 20, 2006

ACHCSA, Letter, March 10, 2006

ACHCSA, Letter, July 31, 2006

ACHCSA, Letter, October 3, 2006

ACHCSA, Letter, November 14, 2006

AEI, *Work Plan – Soil and Groundwater Investigation*, 6310 Houston Place, Dublin, California, dated July 11, 2005.

AEI, *Soil and Groundwater Investigation Report*, 6310 Houston Place, Dublin, California, dated June 28, 2006.

AEI, *Monitoring Well Installation Workplan and Addendum*, 6310 Houston Place, Dublin, California, dated September 19, 2007 and November 2, 2007, respectively.

Golden Gate Tank Removal, *Tank Closure Report*, 6310 Houston Place, Dublin, California, dated December 2, 2004.

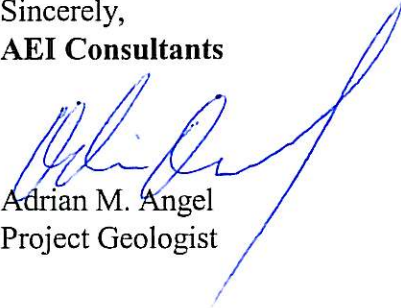
USGS, *Quaternary Geology Of Contra Costa County, And Surrounding Parts Of Alameda, Marin, Sonoma, Solano, Sacramento, And San Joaquin Counties, California*, 1997, Prepared by E. J Helley, et al.

## 11.0 REPORT LIMITATIONS AND SIGNATURES

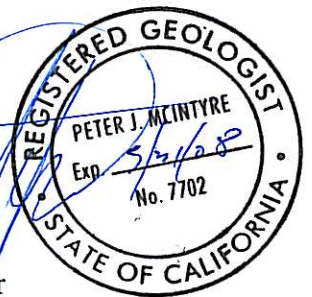
This report presents a summary of work completed by AEI, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

These services were performed in accordance with generally accepted practices in the environmental engineering and construction field that existed at the time and location of the work. AEI requests comment and concurrence with this plan. If you have any questions regarding this report, we can be reached at (925) 283-6000.

Sincerely,  
**AEI Consultants**

  
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Senior Project Manager



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# FIGURES



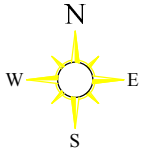


Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)

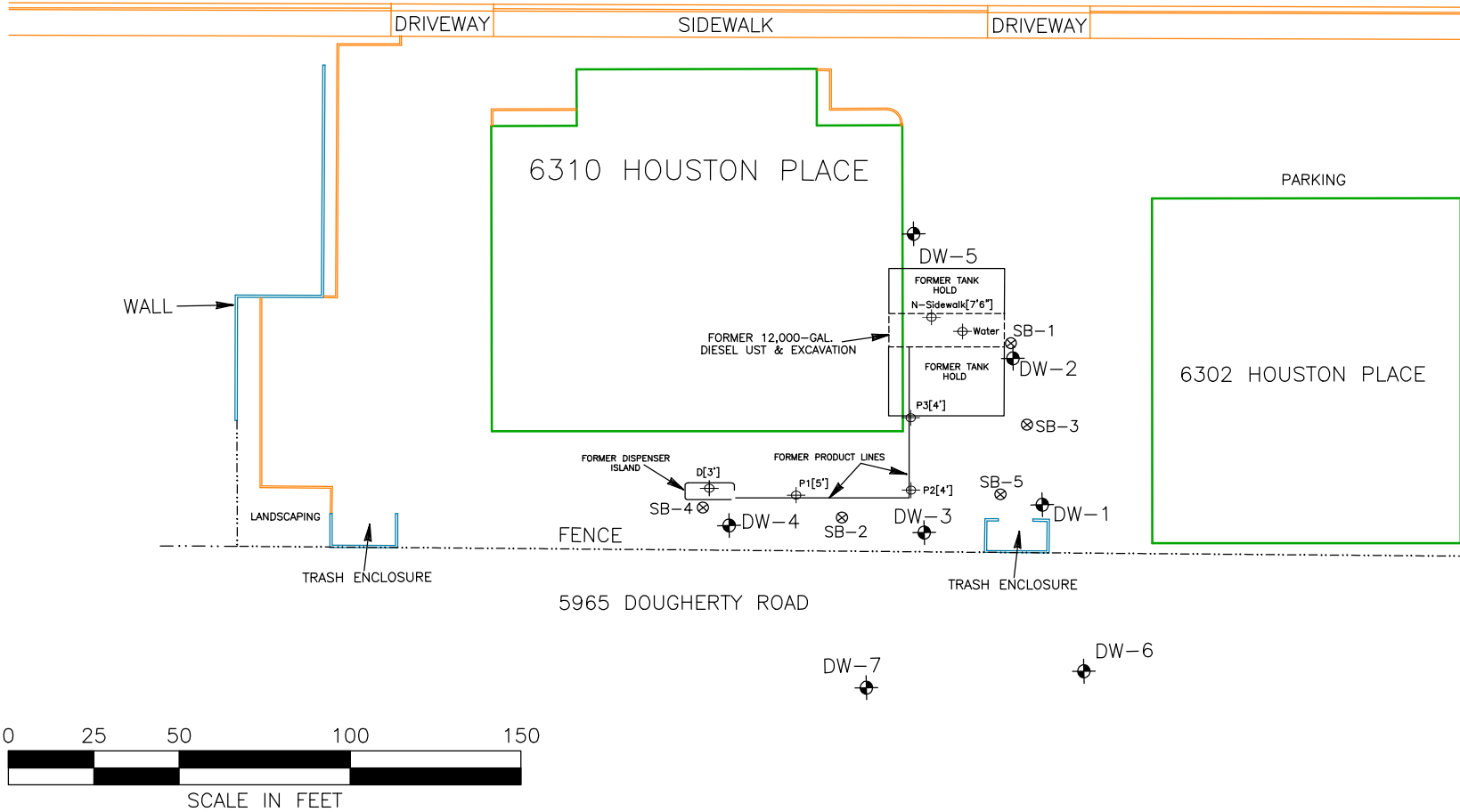
# - Well Locations

USGS DUBLIN, CALIFORNIA  
 QUADRANGLE TOPOGRAPHIC MAP  
 Created 1979, Revised 1980

<b>AEI CONSULTANTS</b> 2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597	
<b>SITE LOCATION MAP</b>	
6310 HOUSTON PLACE DUBLIN, CA 94568	<b>FIGURE 1</b> PROJECT No. 261639



# HOUSTON PLACE



## LEGEND

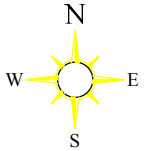
- ⊕ GROUNDWATER MONITORING WELL
- ⊗ BORING LOCATION (3/14/06)
- ⊕ TANK REMOVAL SAMPLE LOCATION
- EXCAVATION BOUNDARY (12,000-GAL. DIESEL UST)

**AEI CONSULTANTS**  
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

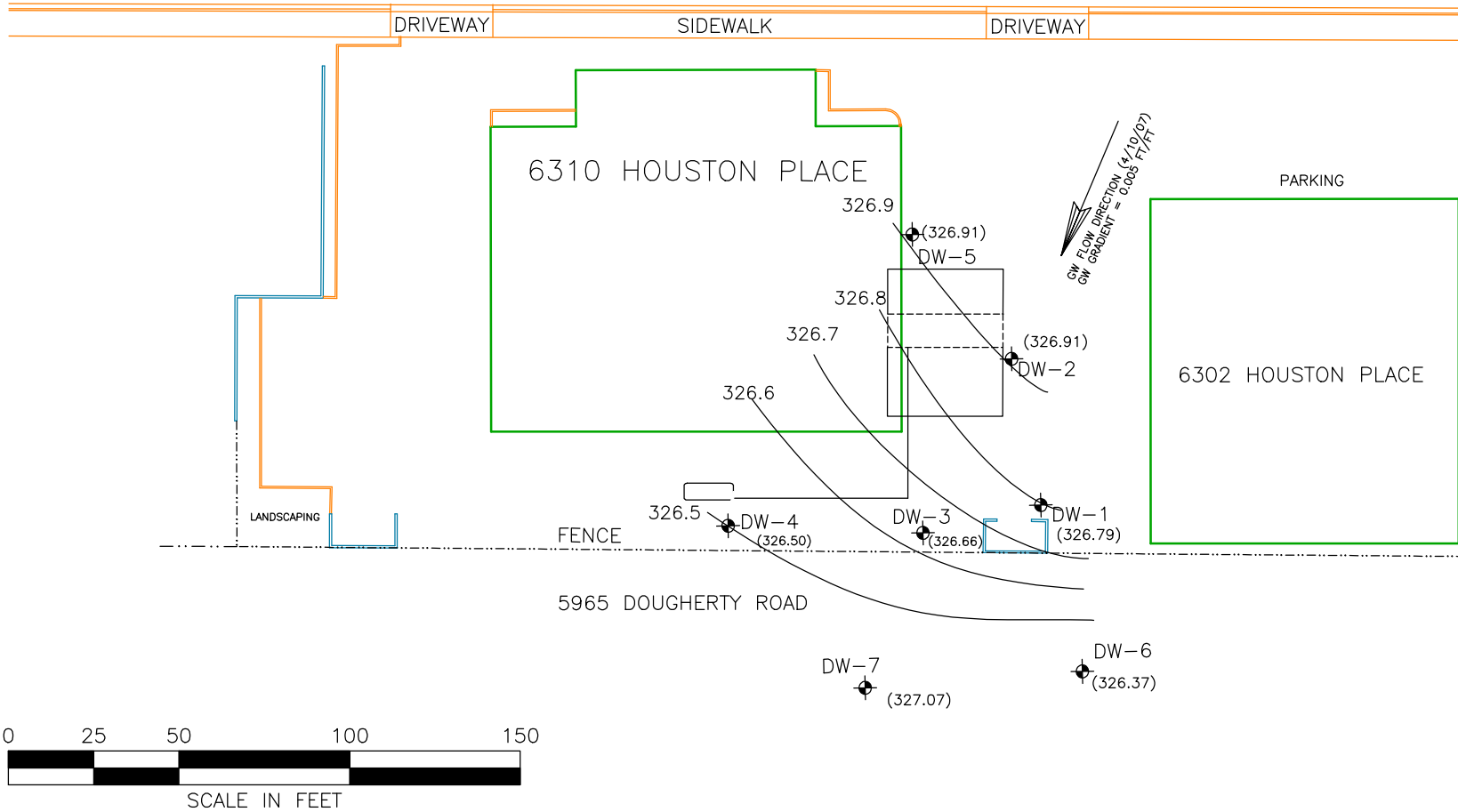
## SITE PLAN

6310 HOUSTON PLACE  
DUBLIN, CALIFORNIA

**FIGURE 2**  
PROJECT NO. 261639



# HOUSTON PLACE



## LEGEND

◆ GROUNDWATER MONITORING WELL

\*EVENT PERFORMED 4/10/07  
MW-7 NOT USED IN CALCULATION

(326.37) = GROUNDWATER ELEVATION  
ABOVE MEAN SEA LEVEL

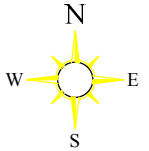
CONTOUR INTERVAL = 0.1 FT.

**AEI CONSULTANTS**  
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

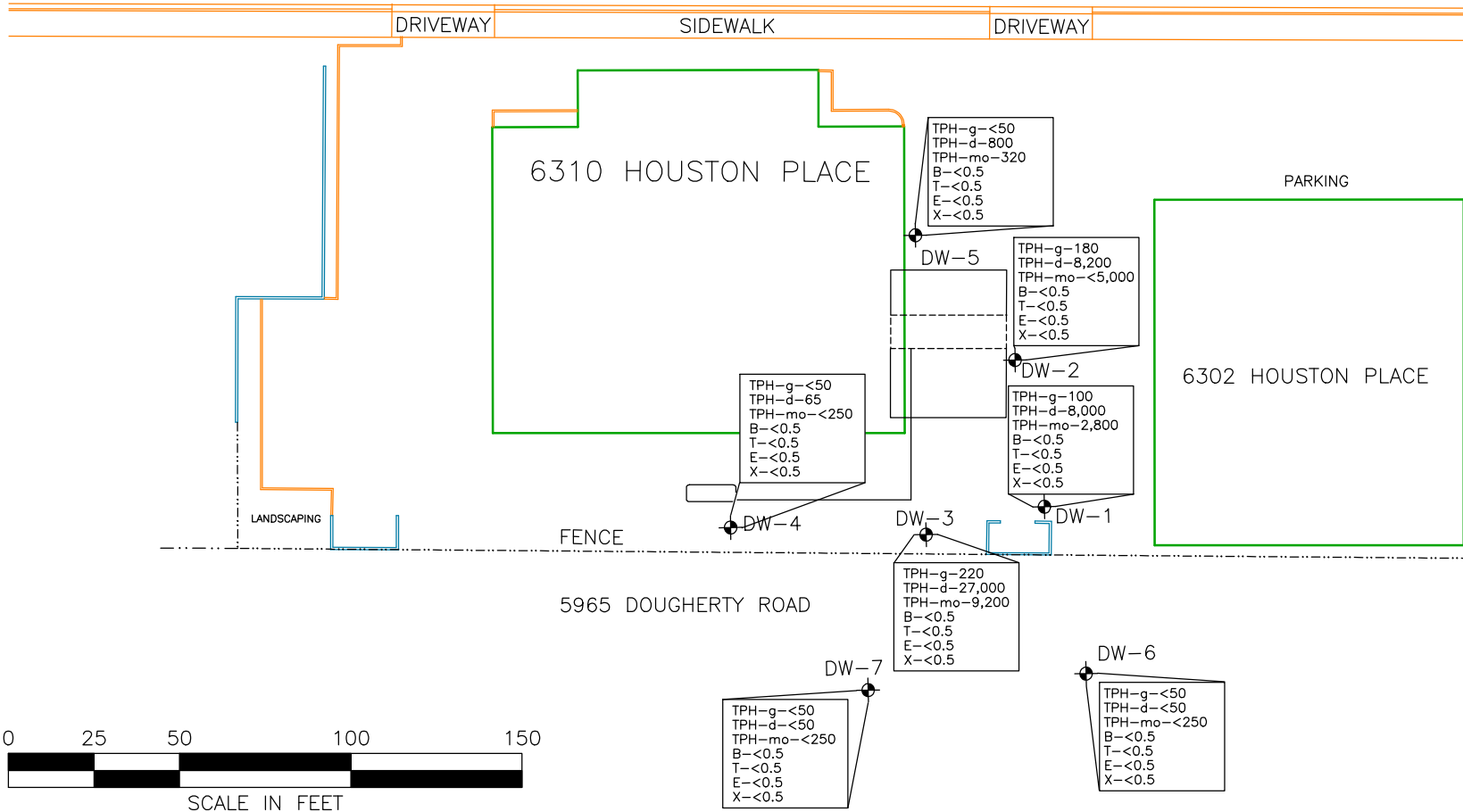
**GROUNDWATER ELEVATION**  
**(4/10/07)**

6310 HOUSTON PLACE  
DUBLIN, CALIFORNIA

**FIGURE 3**  
PROJECT NO. 261639



# HOUSTON PLACE



## LEGEND

⊕ GROUNDWATER MONITORING WELL

\*EVENT PERFORMED 4/10/07

TPH-G-TOTAL PETROLEUM HYDROCARBONS AS GAS  
 TPH-D-TOTAL PETROLEUM HYDROCARBONS AS DIESEL  
 TPH-MO-TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL  
 B-BENZENE, T-TOLUENE, E-ETHYLBENZENE, X-XYLENES  
 \*\*SAMPLE CONCENTRATIONS IN MICROGRAMS PER LITER (uG/L)

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

**GROUNDWATER ANALYTICAL DATA**  
 (4/10/07)

6310 HOUSTON PLACE  
 DUBLIN, CALIFORNIA

**FIGURE 4**  
 PROJECT NO. 261639



# TABLES



**Table 1, 6310 Houston Place, Dublin CA  
Monitoring Well Construction Details**

Well ID	Date Drilled	Top of Casing Elevation (ft amsl)	Well Box Rim Elevation (ft amsl)	Well Depth (ft)	Slotted Casing (ft)	Slot Size (in)	Blank Casing (ft)	Sand Interval (ft)	Sand Size	Bentonite Interval (ft)	Grout Interval (ft)
DW-1	03/14/07	334.23	334.44	17.00	7-17	0.010	0.2-5	4-17	# 2/12	3-4	0.75-2
DW-2	03/14/07	334.00	334.48	17.00	7-17	0.010	0.5-5	4-17	# 2/12	3-4	0.75-2
DW-3	03/14/07	334.56	334.99	17.00	7-17	0.010	0.4-5	4-17	# 2/12	3-4	0.75-2
DW-4	03/14/07	334.49	334.95	17.00	7-17	0.010	0.5-5	4-17	# 2/12	3-4	0.75-2
DW-5	03/15/07	333.91	334.5	17.00	7-17	0.010	0.6-5	4-17	# 2/12	3-4	0.75-2
DW-6	03/15/07	334.99	335.44	17.00	7-17	0.010	0.5-5	4-17	# 2/12	3-4	0.75-2
DW-7	03/15/07	335.18	335.62	17.00	7-17	0.010	0.4-5	4-17	# 2/12	3-4	0.75-2

Notes:  
ft amsl = feet above mean sea level

**Table 2, 6310 Houston Place, Dublin CA  
Soil Sample Analytical Data**

Sample ID	Sample Date	Sample Location	TPH-g	TPH-d	TPH-mo	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				<i>EPA Method 8015M</i>				<i>EPA Methods 5030 / 8020F</i>			<i>EPA Method 8260B</i>
8559-SP1	10/27/2004	Stockpile	-	6	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
8559-SP2	10/27/2004	Stockpile	-	<1	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
8559-SP3	10/27/2004	Stockpile	-	197	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
8559-P1[5']	10/27/2004	Product Piping	-	<1	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
8559-P2[4']	10/27/2004	Product Piping	-	<1	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
8559-P3[4']	10/27/2004	Product Piping	-	<1	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
8559-N-Sidewall[7'6"]	10/27/2004	UST Excavation	-	1	-	<0.005	<0.005	<0.005	<0.005	<0.01	-
SB-1-8'	3/14/2006	Adjacent to Tank	-	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	<0.005
SB-2-8'	3/14/2006	Product Piping	-	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	<0.005
SB-3-8'	3/14/2006	Downgradient	-	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	<0.005
SB-4-8'	3/14/2006	Dispenser	-	53	-	-	<0.005	<0.005	<0.005	<0.005	<0.005
SB-5-8'	3/14/2006	Downgradient	-	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	<0.005
DW-1-7'	3/14-15/2007	Upgradient	<1.0	2.0	<5.0	-	-	-	-	-	-
DW-2-10'	3/14-15/2007	Source Zone	<1.0	9.2	<5.0	-	-	-	-	-	-
DW-3-11'	3/14-15/2007	Downgradient	<1.0	12	6.2	-	-	-	-	-	-
DW-4-12'	3/14-15/2007	Crossgradient	<1.0	<1.0	<5.0	-	-	-	-	-	-
DW-5-7'	3/14-15/2007	Crossgradient	<1.0	<1.0	<5.0	-	-	-	-	-	-
DW-6-9'	3/14-15/2007	Downgradient	<1.0	<1.0	<5.0	-	-	-	-	-	-
DW-7-11'	3/14-15/2007	Downgradient	<1.0	<1.0	<5.0	-	-	-	-	-	-
Composite Sample #1	3/14-15/2007	Inv.-Derived Waste	<1.0	<1.0	<5.0	-	-	-	-	-	-
Composite Sample #2	3/14-15/2007	Inv.-Derived Waste	<1.0	<1.0	<5.0	-	-	-	-	-	-
RL	-	-	1.0	1.0	5.0	0.005	0.005	0.005	0.005	0.005	0.005

TPH-g = Total Petroleum Hydrocarbons as gas, TPH-d = TPH as diesel, TPH-mo = TPH as motor oil  
 MTBE = Methyl tertiary-Butyl Ether  
 RL = Laboratory reporting limit  
 UST excavation and sampling routine performed by Golden Gate Tank Removal, Inc., October 2004.

mg/kg = milligrams per kilogram (equivalent to parts per million)  
 µg/kg = micrograms per kilogram (equivalent to parts per billion)  
 UST = Underground Storage Tank

**Table 3, 6310 Houston Place, Dublin, CA  
Groundwater Sample Analytical Data**

Sample ID	Sample Date	Sample Location	TPH-d	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
			$\mu\text{g/L}$ <i>EPA Method 8015M</i>	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$ <i>EPA Methods 5030 / 8020F</i>	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$ <i>EPA Method 8260B</i>
8559-D[3]	10/27/2004	Dispenser	23,800	1.1	<0.5	<0.5	<0.5	1.8	-
8559-Water	10/27/2004	UST Excavation	300	3.8	<0.5	<0.5	<0.5	<1.0	-
SB-1-W	3/14/2006	Adjacent to tank	450,000	-	<0.5	<0.5	<0.5	<0.5	<0.5
SB-2-W	3/14/2006	Product Piping	4,100	-	<0.5	<0.5	<0.5	<0.5	<0.5
SB-3-W	3/14/2006	Downgradient	340,000	-	<0.5	<0.5	<0.5	<0.5	<0.5
SB-4-W	3/14/2006	Dispenser	17,000	-	<0.5	<0.5	<0.5	<0.5	<0.5
SB-5-W	3/14/2006	Downgradient	580,000	-	<0.5	<0.5	<0.5	<0.5	<0.5
RL	-	-	0.05	0.5	0.5	0.5	0.5	0.5	0.5

TPH-d = Total Petroleum Hydrocarbons as diesel

MtBE = Methyl tertiary-Butyl Ether

RL = Laboratory reporting limit

UST excavation and sampling routine performed by Golden Gate Tank Removal, Inc., October 2004.

mg/L = milligrams per liter (equivalent to parts per million)

$\mu\text{g/L}$  = micrograms per kilogram (equivalent to parts per billion)

UST = Underground Storage Tank

**Table 4, 6310 Houston Place, Dublin, CA  
Groundwater Elevation Data**

Well ID (Screen Interval)	Date Collected	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
<b>DW-1</b> (7 - 17)	4/10/2007	334.23	7.44	326.79
<b>DW-2</b> (7 - 17)	4/10/2007	334.00	7.09	326.91
<b>DW-3</b> (7 - 17)	4/10/2007	334.56	7.90	326.66
<b>DW-4</b> (7 - 17)	4/10/2007	334.49	7.99	326.50
<b>DW-5</b> (7 - 17)	4/10/2007	333.91	7.00	326.91
<b>DW-6</b> (7 - 17)	4/10/2007	334.99	8.62	326.37
<b>DW-7</b> (7 - 17)	4/10/2007	335.18	8.11	327.07

Event #	Date	Average Water Table Elevation (ft amsl)	Change from Previous Episode (ft)	Flow Direction (gradient) (ft/ft)
1	3/9/2006	326.74	NA	S-SE / 0.005

ft amsl = feet above mean sea level  
All water level depths are measured from the top of casing

**Table 5, 375 6310 Houston Place, Dublin, CA**  
**Groundwater Sample Analytical Data - TPH, BTEX, Fuel Additives**

Sample ID	Date	TPH-g µg/L	TPH-d µg/L	TPH-mo µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	MTBE µg/L	TAME µg/L	TBA µg/L	DIPE µg/L	ETBE µg/L	Ethanol µg/L	Methanol µg/L
DW-1	4/10/2007	100	8,000	2,800	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500
DW-2	4/10/2007	180	8,200	<5,000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500
DW-3	4/10/2007	220	27,000	9,200	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500
DW-4	4/10/2007	<50	65	<250	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<5.0	<0.5	<0.5	<50	<500
DW-5	4/10/2007	<50	800	320	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500
DW-6	4/10/2007	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	0.81	<0.5	<50	<500
DW-7	4/10/2007	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500

Notes:

TPHmo = total petroleum hydrocarbons as motor oil (C18+) using EPA Method 8015

TPHd = total petroleum hydrocarbons as diesel (C10-C23) using EPA Method 8015

TPHg = total petroleum hydrocarbons as gasoline (C6-C12) using EPA Method 8015

Benzene, toluene, ethylbenzene, and xylenes using EPA Method 8021B

MTBE = methyl-tertiary butyl ether using EPA Method 8260B

TBA = tert-butyl alcohol using EPA Method 8260B

TAME = tert-amyl methyl ether using EPA Method 8260B

DIPE = diisopropyl ether using EPA Method 8260B

ETBE = ethyl tert-butyl ether using EPA Method 8260B

Methanol and Ethanol using EPA Method 8260B

SVOCs using EPA Method 8270C

µg/L= micrograms per liter

ND<50 = non detect at respective reporting limit

**Table 6, 6310 Houston Place, Dublin, CA**  
**Groundwater Sample Analytical Data - SVOCs, Inorganic Anions and COD**

Sample ID	Date	All SVOCs µg/L	Nitrite as N µg/L	Nitrate as N µg/L	Nitrate as NO <sub>3</sub> <sup>-</sup> µg/L	COD mg/L
DW-1	4/10/2007	-	<1.0	<0.1	<0.45	19
DW-2	4/10/2007	<MDL	<0.1	<0.1	<0.45	17
DW-3	4/10/2007	<MDL	<1.0	<0.1	<0.45	48
DW-4	4/10/2007	-	<1.0	<0.1	<0.45	<10
DW-5	4/10/2007	-	<0.50	<0.1	<0.45	<10
DW-6	4/10/2007	-	<1.0	3.4	15	<10
DW-7	4/10/2007	-	<1.0	5.2	23	<10

Notes:

SVOCs = semi-volatile organic compounds

COD = chemical oxygen demand using EPA Method SM5220D

nitrite and nitrates analyzed using EPA Method E300.1

mg/L= milligrams per liter

µg/L= micrograms per liter

<0.50 = non detect at respective reporting limit

"-" = not analyzed

## **APPENDIX A**

### **Monitoring Well Permit Documentation**





ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551-9486



PHONE (925) 454-5000

March 13, 2007

Mr. Adrian Angel  
AEI Consultants  
2500 Camino Diablo, Suite 200  
Walnut Creek, CA 94597

Dear Mr. Angel:

Enclosed is drilling permit 27047 for a monitoring well construction project at 6310 Houston Place in Dublin for Cary Greyson. Also enclosed is a current drilling permit application for your files. Drilling permit applications for future projects can also be downloaded from our web site at [www.zone7water.com](http://www.zone7water.com).

Please note that permit conditions A-2 requires that a well construction report be submitted after completion of the work. The report should include drilling and completion logs, location sketch, permit number and any analysis of the soil and water samples. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact me at extension 5056 or Matt Katen at extension 5071.

Sincerely,

Wyman Hong  
Water Resources Specialist

Enc.



# ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 454-5728

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 6310 Houston Place, Dublin, CA

PERMIT NUMBER 27047  
WELL NUMBER 3S/1E-6C19 to 6C25 (DW-1 to DW-7)  
APN 941-0550-067-00

California Coordinates Source \_\_\_\_\_ ft. Accuracy = \_\_\_\_\_ ft.  
CCN \_\_\_\_\_ ft. CCE \_\_\_\_\_ ft.  
APN 941-0550-067

### PERMIT CONDITIONS

(Circled Permit Requirements Apply)

CLIENT  
Name Mr. Cary Gregson  
Address 2413 Stierwald Ct Phone (425) 938-2200  
City Walnut Creek, CA Zip 94596

#### A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT  
Name Adrian Angel - AEI Consultants  
Address 2500 Camino Diablo Fax (925) 283-6121  
City Walnut Creek, CA Phone (425) 283-6000  
Zip 94597

#### B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
4. A sample port is required on the discharge pipe near the wellhead.

#### TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input type="checkbox"/>

#### C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

#### PROPOSED WELL USE

New Domestic	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Remediation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Groundwater Monitoring	<input checked="" type="checkbox"/>
Dewatering	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

#### D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

#### DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Hollow Stem Auger	<input checked="" type="checkbox"/>
Cable Tool	<input type="checkbox"/>	Direct Push	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

#### E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

DRILLING COMPANY Spectrum Exploration  
DRILLER'S LICENSE NO. C57-512268

#### F. WELL DESTRUCTION. See attached.

#### WELL PROJECTS

Drill Hole Diameter	<u>8 1/4</u> in.	Maximum	
Casing Diameter	<u>2</u> in.	Depth	<u>18</u> ft.
Surface Seal Depth	_____ ft.	Number	<u>7</u>

#### G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after the completion of permitted work the well installation report including all soil and water laboratory analysis results.

#### SOIL BORINGS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft.

ESTIMATED STARTING DATE 3/15/07  
ESTIMATED COMPLETION DATE 3/16/07

Approved Wyman Hong Date 3/12/07

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Adrian Angel Date \_\_\_\_\_  
Adrian Angel

ATTACH SITE PLAN OR SKETCH

Revised: April 27, 2005

## **APPENDIX B**

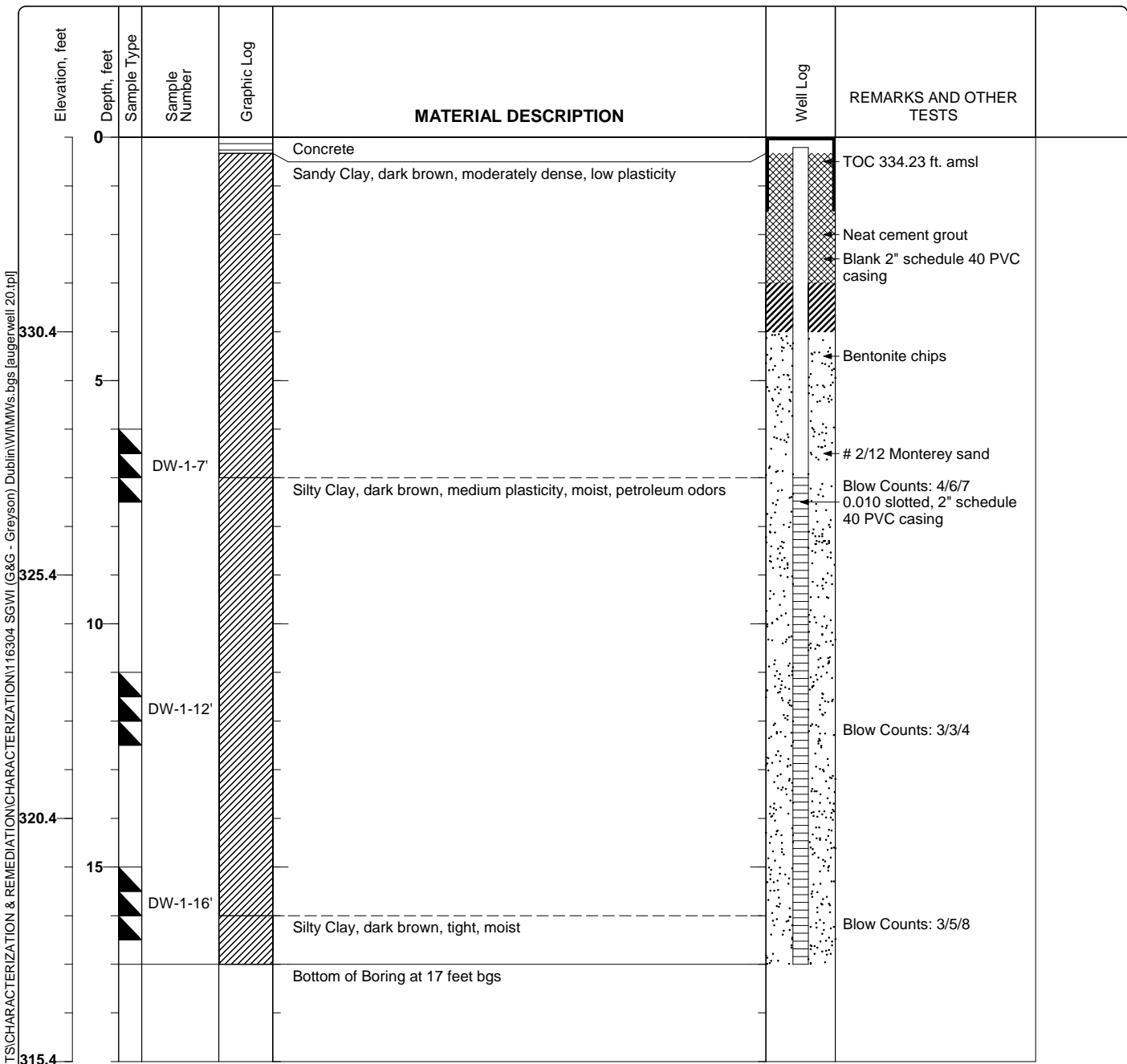
### **Monitoring Well Construction Logs**

Project: G&G International Holding  
 Project Location: 6310 Houston Place, Dublin, CA  
 Project Number: 261639

# Log of Boring DW-1

Sheet 1 of 1

Date(s) Drilled <b>March 14, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>334.44 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	

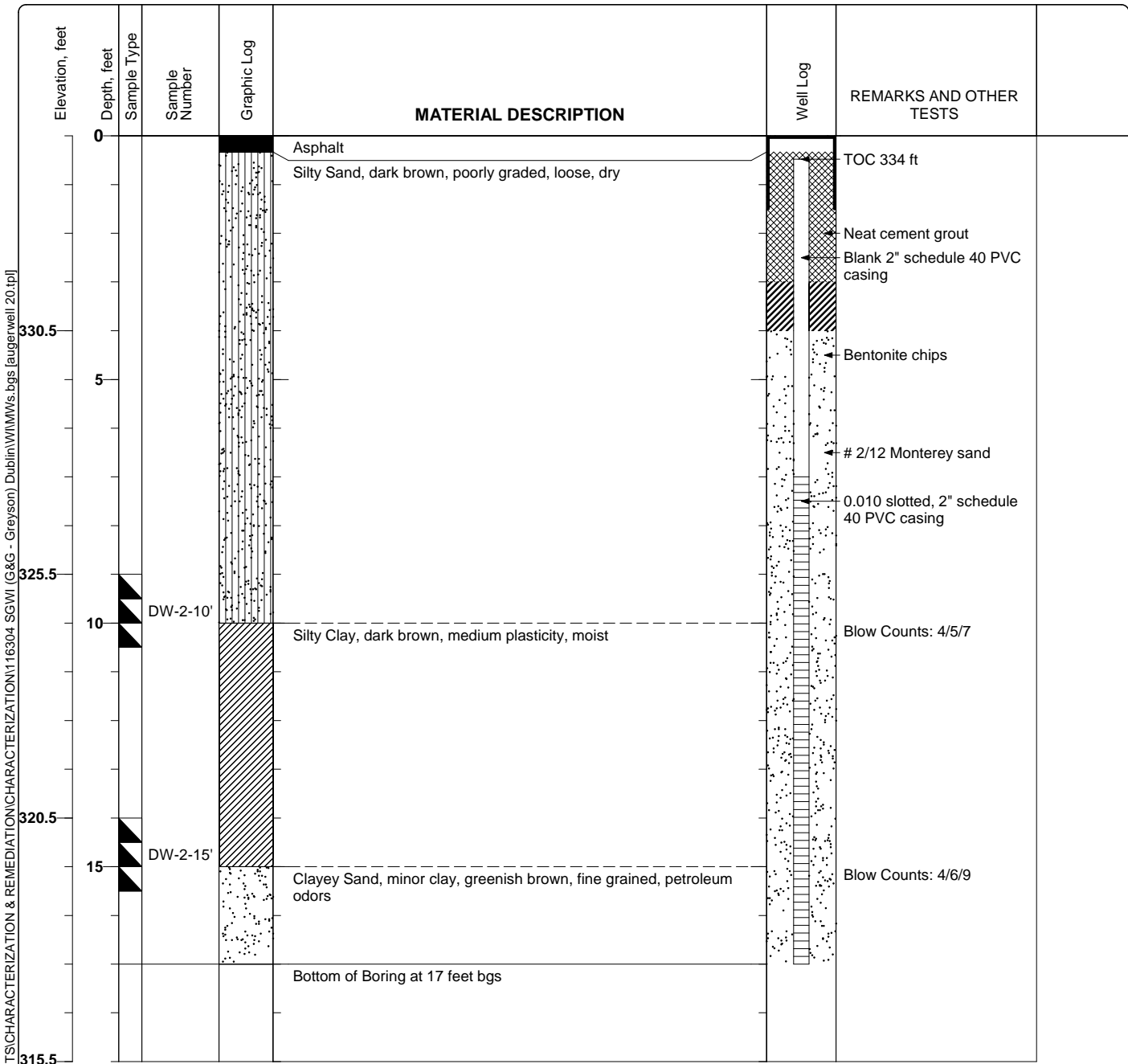


Figure

**Project: G&G International Holding**  
**Project Location: 6310 Houston Place, Dublin, CA**  
**Project Number: 261639**

**Log of Boring DW-2**  
 Sheet 1 of 1

Date(s) Drilled <b>March 14, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>334.48 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	

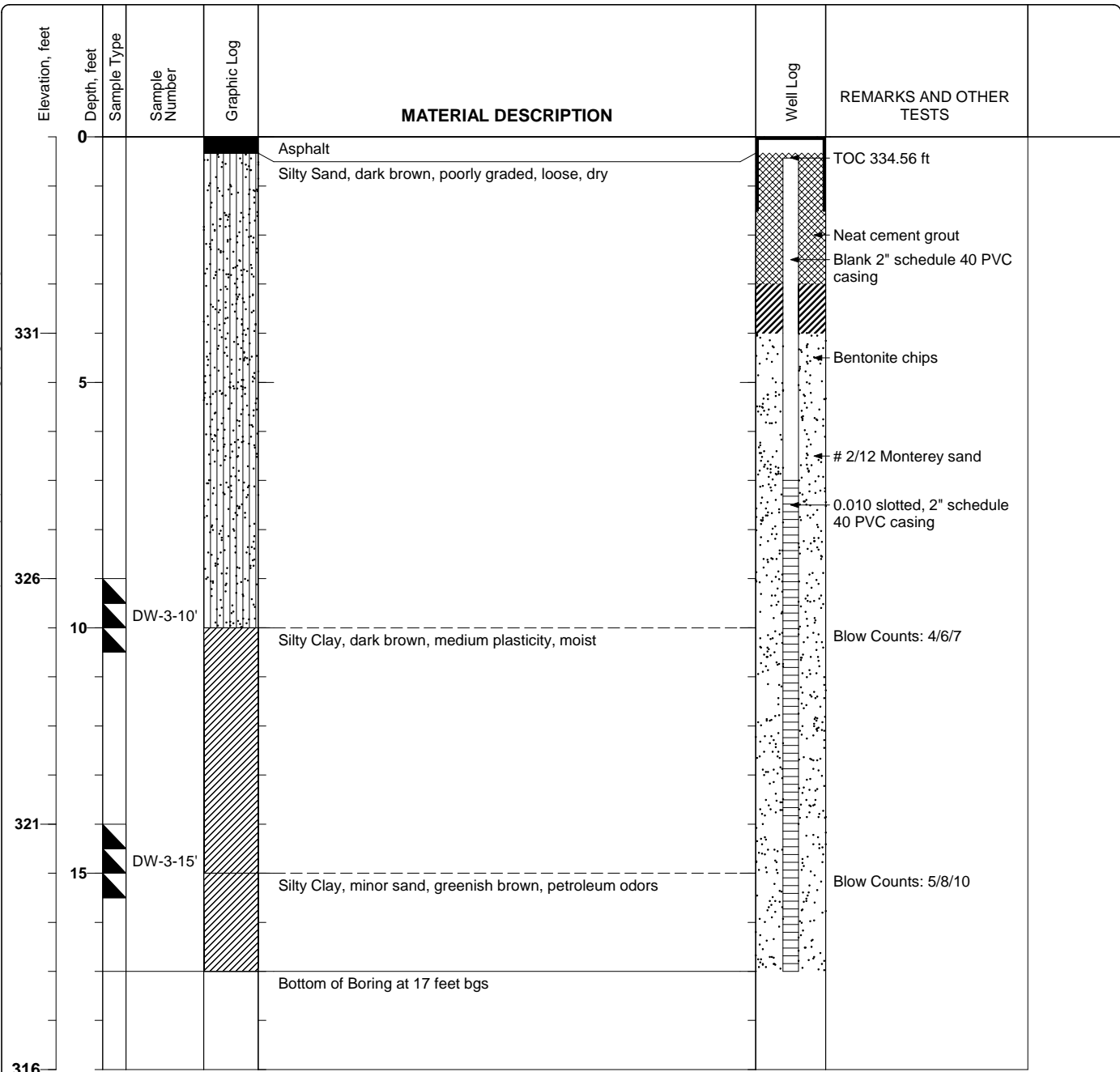


Figure

**Project: G&G International Holding**  
**Project Location: 6310 Houston Place, Dublin, CA**  
**Project Number: 261639**

**Log of Boring DW-3**  
 Sheet 1 of 1

Date(s) Drilled <b>March 14, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>334.99 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	



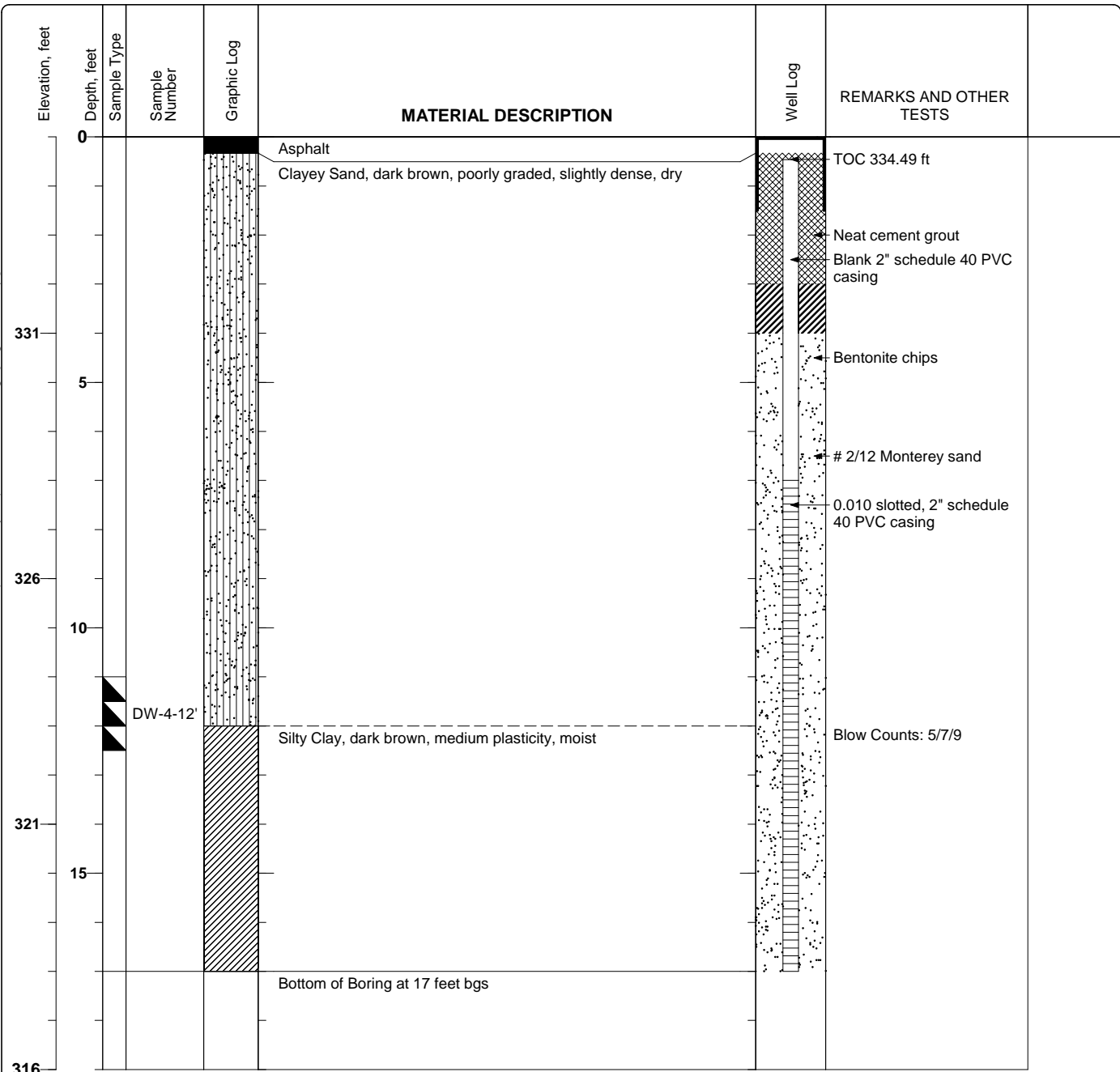
Figure

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**Project: G&G International Holding**  
**Project Location: 6310 Houston Place, Dublin, CA**  
**Project Number: 261639**

**Log of Boring DW-4**  
 Sheet 1 of 1

Date(s) Drilled <b>March 14, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>334.95 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	



Figure

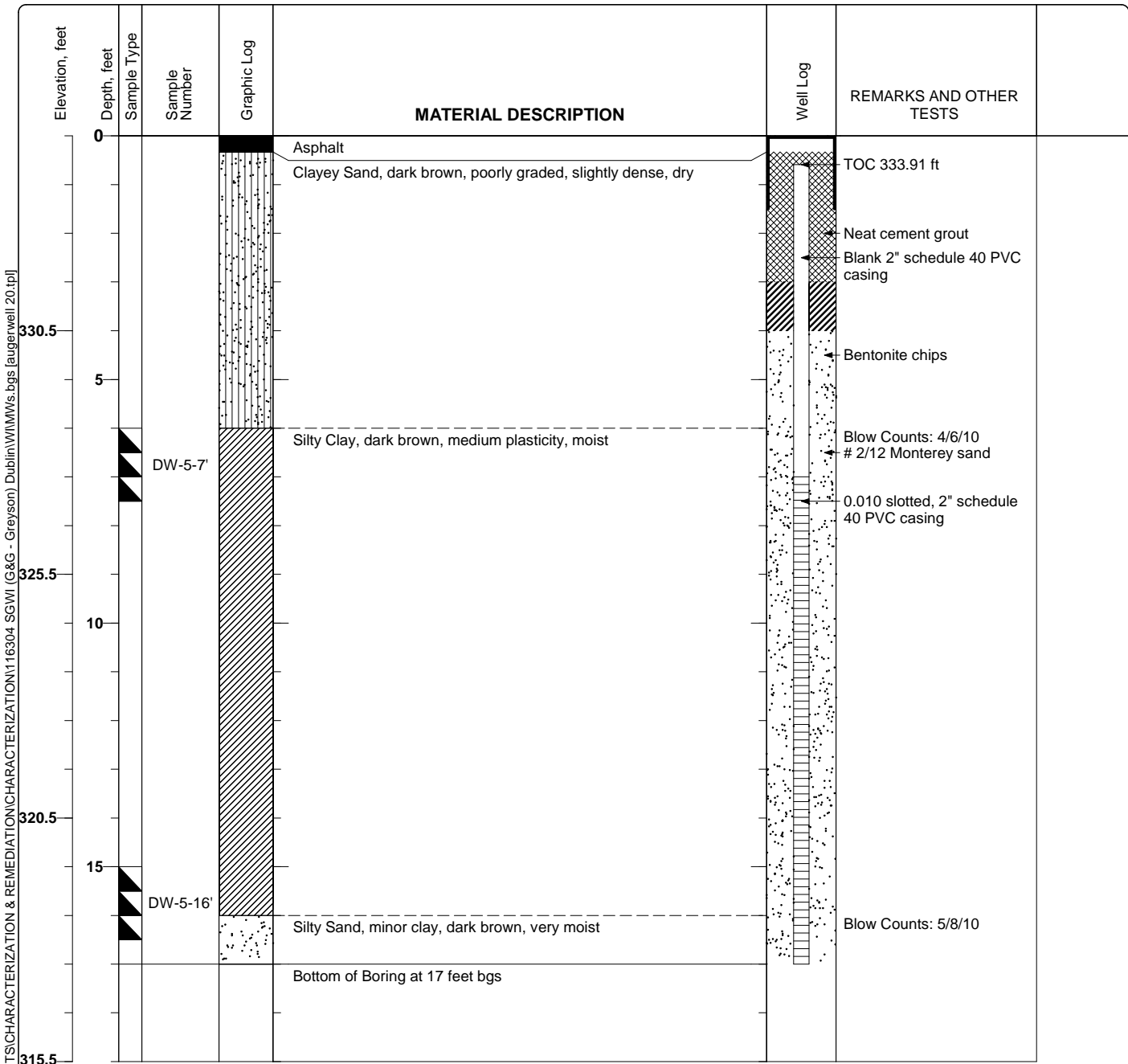
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Project: G&G International Holding  
 Project Location: 6310 Houston Place, Dublin, CA  
 Project Number: 261639

## Log of Boring DW-5

Sheet 1 of 1

Date(s) Drilled <b>March 15, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>334.5 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	



Figure

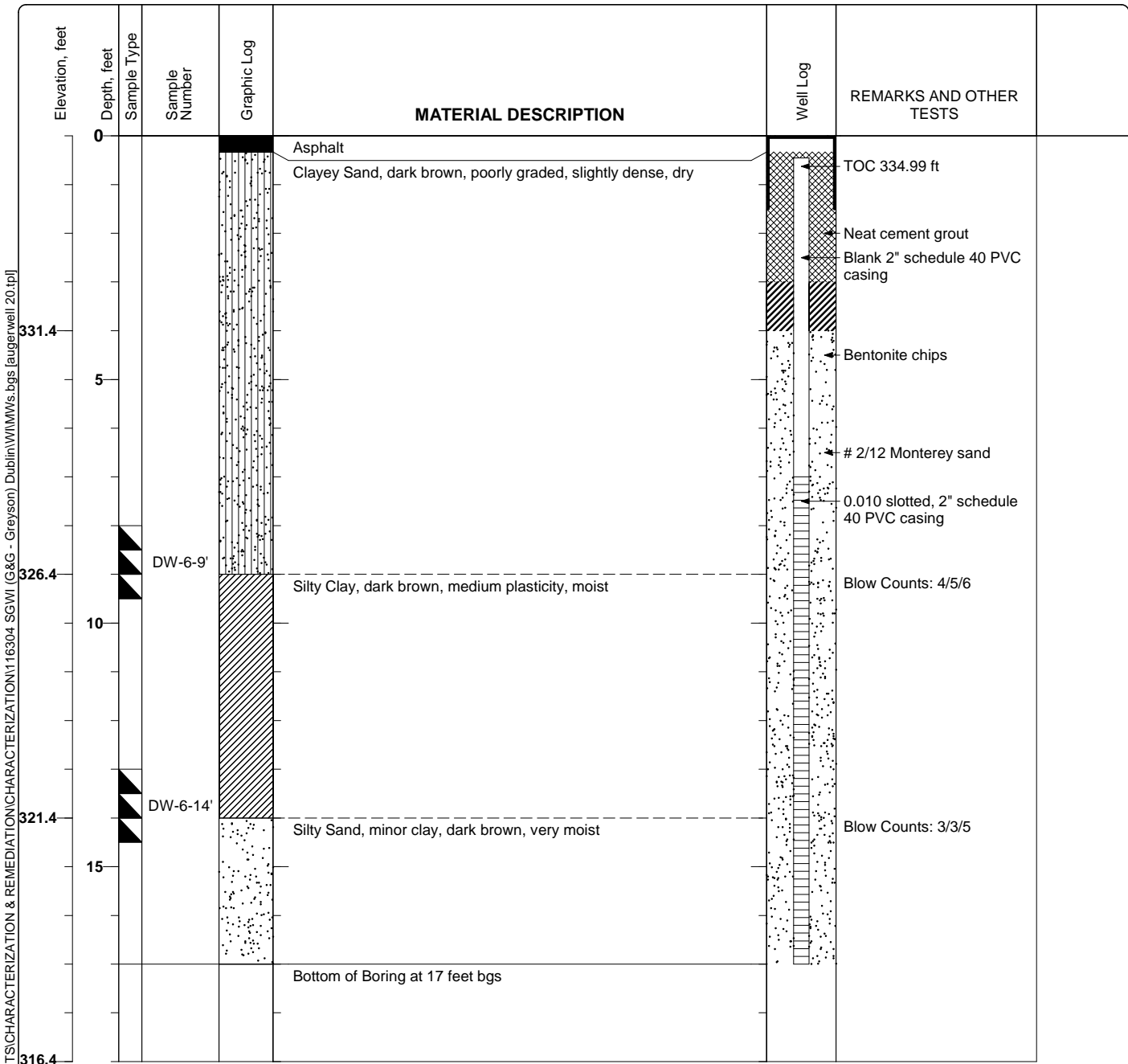
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**Project: G&G International Holding**  
**Project Location: 6310 Houston Place, Dublin, CA**  
**Project Number: 261639**

**Log of Boring DW-6**  
 Sheet 1 of 1

Date(s) Drilled <b>March 15, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>335.44 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	



Figure

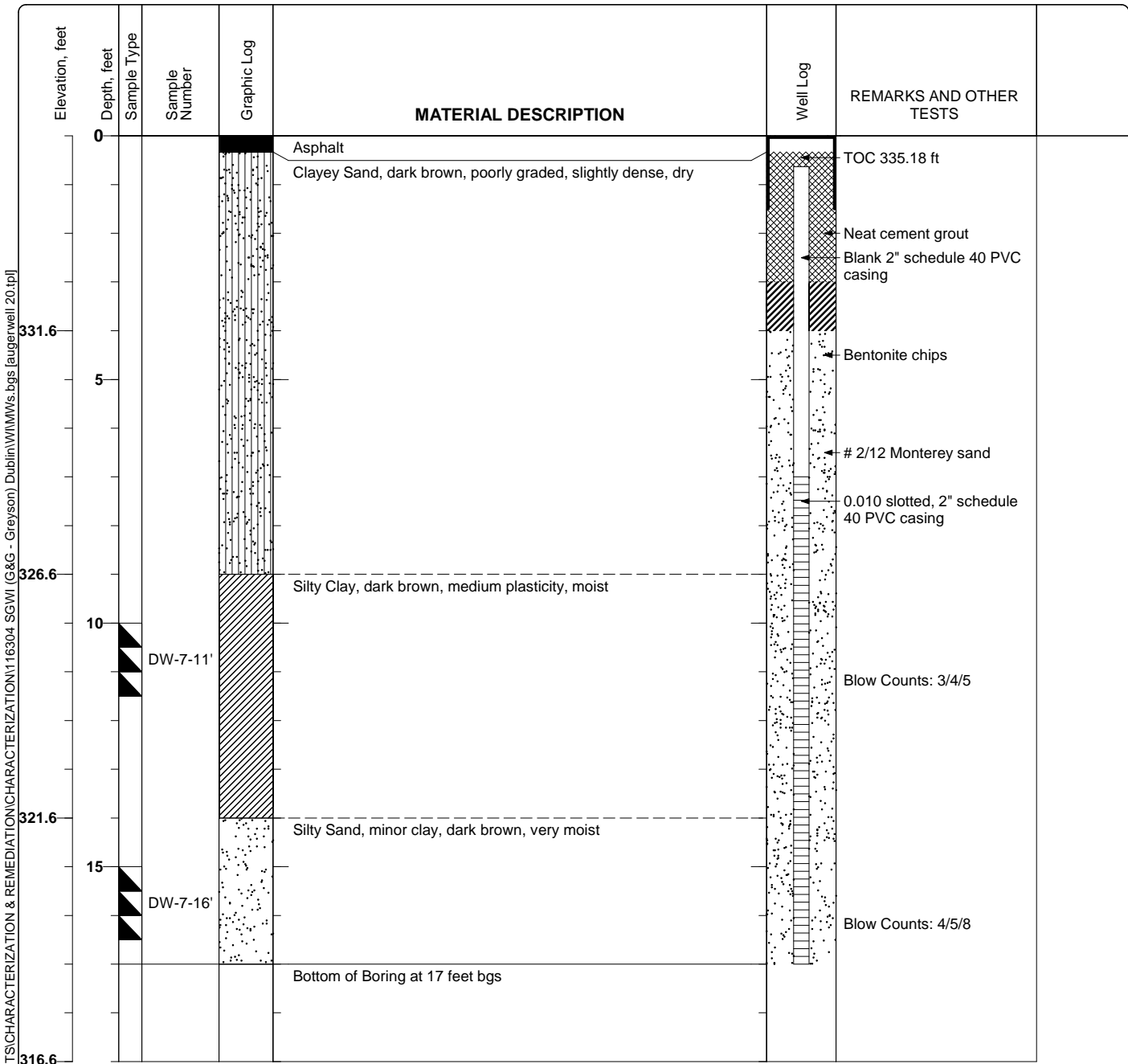
X:\PROJECTS\CHARACTERIZATION & REMEDIATION\CHARACTERIZATION\116304 SG\1 (G&G - Greystone) Dublin\WMMWs.bgs [augerwell 20.tpl]

Project: G&G International Holding  
 Project Location: 6310 Houston Place, Dublin, CA  
 Project Number: 261639

## Log of Boring DW-7

Sheet 1 of 1

Date(s) Drilled <b>March 15, 2007</b>	Logged By <b>Adrian Angel</b>	Checked By <b>Peter McIntyre</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type	Total Depth of Borehole <b>17 feet bgs</b>
Drill Rig Type <b>Mobil B61</b>	Drilling Contractor <b>Spectrum</b>	Approximate Surface Elevation <b>335.62 feet MSL</b>
Groundwater Level and Date Measured	Sampling Method(s) <b>California</b>	Hammer Data
Borehole Backfill <b>See Below</b>	Location	



Figure

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## **APPENDIX C**

### **Groundwater Monitoring Field Forms**

**AEI CONSULTANTS**  
**GROUNDWATER MONITORING WELL FIELD SAMPLING FORM**

**Monitoring Well Number: DW-1**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	334.23		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.44		
Water Elevation (feet above msl)	326.79		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.6</b>		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	Milky grey		
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.04	7.28	5101	3.80	-191.8	
	4	17.04	7.26	5162	2.55	-209.8	
	6	16.93	7.26	5182	1.25	-225.9	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

No petroleum odors noted.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: DW-2**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	334.00		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.09		
Water Elevation (feet above msl)	326.91		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.8</b>		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	Milky grey		
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	21.29	7.65	940	2.97	-179.4	
	4	19.59	7.62	2030	2.46	-193.8	
	6	19.01	7.64	1348	1.09	-242.7	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Strong petroleum odors noted.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: DW-3**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	334.56		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.90		
Water Elevation (feet above msl)	326.66		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.4</b>		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	Milky grey		
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	17.95	6.93	4323	6.83	-234.3	
	4	17.15	6.99	4458	5.02	-251.4	
	6	17.11	6.99	4434	3.15	-269.1	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Strong petroleum odors.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: DW-4**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	334.49		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.99		
Water Elevation (feet above msl)	326.50		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.3</b>		
Actual Volume Purged (gallons)	3.0		
Appearance of Purge Water	Milky grey		
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	17.67	7.60	3495	2.20	-242.1	
	4	17.37	7.28	3528	1.63	-269.1	
	6	17.38	7.34	1947	1.42	-249.8	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Strong Petroleum odors.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: DW-5**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	333.91		
Depth of Well	17.00		
Depth to Water (from top of casing)	7.00		
Water Elevation (feet above msl)	326.91		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.8</b>		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	Milky grey		
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	19.93	7.21	3355	4.07	-121.5	
	4	18.56	7.13	3661	2.07	-171.6	
	6	18.67	7.05	3227	1.43	-196.1	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Slight petroleum odors.



**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: DW-6**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	334.99		
Depth of Well	17.00		
Depth to Water (from top of casing)	8.62		
Water Elevation (feet above msl)	326.37		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.0</b>		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water			
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.49	7.27	4767	2.52	-186.7	
	4	17.71	7.24	4800	1.33	-174.7	
	6	17.84	7.19	4619	0.81	-203.4	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

No petroleum odors.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: DW-7**

Project Name:	G&G International Holding	Date of Sampling:	4/3/2007
Job Number:	261639	Name of Sampler:	R Bartlett
Project Address:	6310 Houston Place, Dublin, CA		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	335.18		
Depth of Well	17.00		
Depth to Water (from top of casing)	8.11		
Water Elevation (feet above msl)	327.07		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>4.3</b>		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water			
Free Product Present?	no	Thickness (ft):	

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs & 1-liter			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	1	21.03	6.90	23497	1.26	76.0	
	2	21.21	7.00	32164	1.13	61.4	
	3	21.36	7.43	33314	2.53	29.2	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

No petroleum odors.

## **APPENDIX D**

### **Laboratory Analytical Results With Chain of Custody Documentation**



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #261639; G&G	Date Sampled: 03/15/07
		Date Received: 03/16/07
	Client Contact: Adrian Angel	Date Reported: 03/23/07
	Client P.O.:	Date Completed: 03/23/07

**WorkOrder: 0703413**

March 23, 2007

Dear Adrian:

Enclosed are:

- 1). the results of **11** analyzed samples from your **#261639; G&G project**,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

AEI 0703413

**McCAMPBELL ANALYTICAL, INC.**  
 1534 WILLOW PASS ROAD  
 PITTSBURG, CA 94565-1701  
 Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
 Telephone: (877) 252-9262 Fax: (925) 252-9269

**CHAIN OF CUSTODY RECORD**  
**TURN AROUND TIME**       
 RUSH 24 HR 48 HR 72 HR 5 DAY  
 GeoTracker EDF  PDF  Excel  Write On (DW)   
 Check if sample is effluent and "J" flag is required

Report To: Adrian Angel Bill To: Same  
 Company: AEI Consultants  
2500 Camino Diablo  
Walnut Creek, CA E-Mail: angel@aeiconsultants.com  
 Tele: (925) 283-0000 Fax: (925) 283-6121  
 Project #: 201639 Project Name: 686  
 Project Location: 6310 Houston Pl., Dublin, CA  
 Sampler Signature: [Signature]

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED		Analysis Request	Other	Comments	
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL				HNO <sub>3</sub>
DW-1-7'		3/16/07		2	B	X					X					Filter Samples for Metals analysis: Yes / No  TPT multirange (gld/mo) (8015) GRAN SIZE DISTRIBUTION
DW-1-12'				2	B											
DW-1-16'				2	S											
DW-2-10'				2	S											
DW-2-15'				2	S											
DW-3-11'				1	S											
DW-3-15'				2	S											
DW-4-12'				2	S											
DW-4-15'				2	S											
DW-5-7'				2	S											
DW-5-16'				1	S											
DW-6-9'																
DW-6-14'																
DW-7-11'																

Relinquished By: [Signature] Date: 3/16/07 Time: 7:00P Received By: Enviro-Tech S.R.  
 Relinquished By: Enviro-Tech S.R. Date: 3/16/07 Time: 14:38 Received By: [Signature]  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

ICEA\*   
 GOOD CONDITION   
 HEAD SPACE ABSENT   
 DECHLORINATED IN LAB   
 APPROPRIATE CONTAINERS   
 PRESERVED IN LAB   
 COMMENTS:  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<

**McCAMPBELL ANALYTICAL, INC.**110 2<sup>nd</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5566Website: [www.mcccampbell.com](http://www.mcccampbell.com) Email: main@mcccampbell.com

Telephone: (877) 798-1620

252-9262

Fax: (925) 798-1622

252-9269

**CHAIN OF CUSTODY RECORD**TURN AROUND TIME     

RUSH

24 HR

48 HR

72 HR

5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)  Check if sample is effluent and "J" flag is requiredReport To: *Adrian Angel*Bill To: *Same*Company: *AEI Consultants*  
*2500 Camino Diablo*  
*Walnut Creek, CA*

Tele: (925) 283-6000

Project #: *26163A*Project Location: *Dublin, CA*Sampler Signature: *[Signature]*E-Mail: *angel@aeiconsultants.com*

Fax: (925) 283-6121

Project Name: *686***Analysis Request****Other****Comments**

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		Containers		MATRIX					METHOD PRESERVED								
		Date	Time	# Containers	Type Containers	Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other					
DW-7-15'		3/16/07		2	BVS														
Composite Sample #1		↓		1	↓														
Composite Sample #2		↓		1	↓														

BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE  
TPH as Diesel (8015)  
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)  
Total Petroleum Hydrocarbons (418.1)  
EPA 502.2 / 601 / 8010 / 8021 (HVOCs)  
MTBE / BTEX ONLY (EPA 602 / 8021)  
EPA 505/ 608 / 8081 (CI Pesticides)  
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners  
EPA 507 / 8141 (NP Pesticides)  
EPA 515 / 8151 (Acidic CI Herbicides)  
EPA 524.2 / 624 / 8260 (VOCs)  
EPA 525.2 / 625 / 8270 (SVOCs)  
EPA 8270 SIM / 8310 (PAHs / PNAs)  
CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)  
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)  
Lead (200.7 / 200.8 / 6010 / 6020)  
*TPH Multirange (g/l w/o) (8015)*

XX

Filter  
Samples  
for Metals  
analysis:  
Yes / No

Relinquished By: <i>[Signature]</i>	Date: 3/16/07	Time: 7:00P	Received By: <i>Enviro-Tech S.R.</i>
Relinquished By: <i>Enviro-Tech S.R.</i>	Date: 3/16/07	Time: 19:38	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:

ICE/# \_\_\_\_\_  
GOOD CONDITION \_\_\_\_\_  
HEAD SPACE ABSENT \_\_\_\_\_  
DECHLORINATED IN LAB \_\_\_\_\_  
APPROPRIATE CONTAINERS \_\_\_\_\_  
PRESERVED IN LAB \_\_\_\_\_  
COMMENTS:  
VOAS O&G METALS OTHER  
PRESERVATION pH-<

# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0703413

ClientID: AEL

EDF

Fax

Email

HardCopy

ThirdParty

**Report to:**

Adrian Angel  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597

Email: aangel@aeiconsultants.com  
TEL: (925) 283-600 FAX: (925) 283-612  
ProjectNo: #261639; G&G  
PO:

**Bill to:**

Denise Mockel  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
dmockel@aeiconsultants.com

**Requested TAT: 5 days**

*Date Received 03/16/2007*

*Date Printed: 03/19/2007*

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0703413-001	DW-1-7'	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-004	DW-2-10'	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-006	DW-3-11'	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-008	DW-4-12'	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-010	DW-5-7'	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-012	DW-6-9'	Soil	3/15/07	<input type="checkbox"/>	A	A											
0703413-013	DW-6-14'	Soil	3/15/07	<input type="checkbox"/>		A											
0703413-014	DW-7-11'	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-016	Composite Sample #1	Soil	3/15/07	<input type="checkbox"/>	A												
0703413-017	Composite Sample #2	Soil	3/15/07	<input type="checkbox"/>	A												

**Test Legend:**

1	G-MBTX S	2	GRAINSIZE	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 0703413-001A, 0703413-004A, 0703413-006A, 0703413-008A, 0703413-010A, 0703413-012A, 0703413-014A, 0703413-016A, 0703413-017A contain testgroup.

**Prepared by: Melissa Valles**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G	Date Sampled: 03/15/07
		Date Received: 03/16/07
	Client Contact: Adrian Angel	Date Extracted: 03/16/07
	Client P.O.:	Date Analyzed 03/17/07-03/18/07

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*

Extraction method SW5030B

Analytical methods SW8015Cm

Work Order: 0703413

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
001A	DW-1-7'	S	ND	1	89
004A	DW-2-10'	S	ND	1	86
006A	DW-3-11'	S	ND	1	95
008A	DW-4-12'	S	ND	1	87
010A	DW-5-7'	S	ND	1	88
012A	DW-6-9'	S	ND	1	95
014A	DW-7-11'	S	ND	1	87
016A	Composite Sample #1	S	ND	1	93
017A	Composite Sample #2	S	ND	1	96

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.





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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G	Date Sampled: 03/15/07
		Date Received: 03/16/07
	Client Contact: Adrian Angel	Date Extracted: 03/16/07
	Client P.O.:	Date Analyzed 03/19/07-03/22/07

### Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil\*

Extraction method: SW3550C

Analytical methods: SW8015C

Work Order: 0703413

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0703413-001A	DW-1-7'	S	2.0,b	ND	1	81
0703413-004A	DW-2-10'	S	9.2,c	ND	1	97
0703413-006A	DW-3-11'	S	12,c	6.2	1	97
0703413-008A	DW-4-12'	S	ND	ND	1	97
0703413-010A	DW-5-7'	S	ND	ND	1	96
0703413-012A	DW-6-9'	S	ND	ND	1	98
0703413-014A	DW-7-11'	S	ND	ND	1	106
0703413-016A	Composite Sample #1	S	ND	ND	1	105
0703413-017A	Composite Sample #2	S	ND	ND	1	103

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) mineral oil; p) see attached narrative.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0703413

EPA Method SW8015Cm	Extraction SW5030B			BatchID: 26885			Spiked Sample ID: 0703412-004A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	0.60	111	107	3.96	102	95.9	5.71	70 - 130	30	70 - 130	30
MTBE	ND	0.10	71.6	77	7.23	114	107	6.93	70 - 130	30	70 - 130	30
Benzene	ND	0.10	93.2	99.3	6.39	97	96.5	0.518	70 - 130	30	70 - 130	30
Toluene	ND	0.10	103	109	5.88	88	87.6	0.442	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	101	107	6.33	98.5	94.2	4.49	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	112	119	5.71	95.7	92	3.91	70 - 130	30	70 - 130	30
%SS:	106	0.10	95	95	0	88	95	7.82	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26885 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0703413-001A	03/15/07	03/16/07	03/17/07 8:12 PM	0703413-004A	03/15/07	03/16/07	03/17/07 9:12 PM
0703413-006A	03/15/07	03/16/07	03/17/07 10:12 PM	0703413-008A	03/15/07	03/16/07	03/17/07 11:12 PM
0703413-010A	03/15/07	03/16/07	03/17/07 11:42 PM	0703413-012A	03/15/07	03/16/07	03/18/07 12:12 AM
0703413-014A	03/15/07	03/16/07	03/18/07 12:42 AM	0703413-016A	03/15/07	03/16/07	03/18/07 1:12 AM
0703413-017A	03/15/07	03/16/07	03/18/07 1:41 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0703413

Analyte	EPA Method SW8015C		Extraction SW3550C			BatchID: 26886			Spiked Sample ID: 0703413-017A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	108	110	1.10	110	110	0	70 - 130	30	70 - 130	30
%SS:	103	50	94	96	1.86	92	93	0.493	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26886 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0703413-001A	03/15/07	03/16/07	03/19/07 9:48 PM	0703413-004A	03/15/07	03/16/07	03/22/07 6:52 AM
0703413-006A	03/15/07	03/16/07	03/19/07 7:22 PM	0703413-008A	03/15/07	03/16/07	03/19/07 6:13 PM
0703413-010A	03/15/07	03/16/07	03/19/07 5:05 PM	0703413-012A	03/15/07	03/16/07	03/22/07 6:52 AM
0703413-014A	03/15/07	03/16/07	03/19/07 7:22 PM	0703413-016A	03/15/07	03/16/07	03/19/07 6:13 PM
0703413-017A	03/15/07	03/16/07	03/19/07 5:05 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



## **McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mcccampbell.com](http://www.mcccampbell.com) E-mail: [main@mcccampbell.com](mailto:main@mcccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
		Date Received: 04/10/07
	Client Contact: Adrian Angel	Date Reported: 04/16/07
	Client P.O.:	Date Completed: 04/16/07

**WorkOrder: 0704210**

April 16, 2007

Dear Adrian:

Enclosed are:

- 1). the results of **7** analyzed samples from your **#261639; G&G Holding Co. project,**
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

AEV 0704210

**McCAMPBELL ANALYTICAL INC.**

110 2<sup>nd</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5560

Telephone: (925) 798-1620 Fax: (925) 798-1622

**CHAIN OF CUSTODY RECORD**

**TURN AROUND TIME**

RUSH  24 HR  48 HR  72 HR  5 DAY

EDF Required?  Yes  No Email PDF Report: YES

Report To: Adrian Angel Bill To: Same  
Company: AEI Consultants  
2500 Camino Diablo, Suite 200  
Walnut Creek, CA 94597 E-Mail: aangel@aeiconsultants.com  
Tel: (925) 944-2899, extension 132 Fax: (925) 944-2895  
Project #: 261639 Project Name: G&G Holding Co.  
Project Location: 6310 Houston Pl., Dublin CA  
Sampler Signature: *[Signature]*

**Analysis Request**

**Other**

**Comments**

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other					
DW-1	261639	4/10	1500	8	4	X					X								
DW-2		4/10	1440	8		X					X								
DW-3		4/10	1510	8		X					X								
DW-4		4/10	1422	8		X					X								
DW-5		4/10	1410	8		X					X								
DW-6		4/10	1350	8		X					X								
DW-7		4/10	1330	8		X					X								

BTEX & TPH as Gas (602/8020 + 8015)/MTBE																			
TPH as Diesel (8015)																			
Total Petroleum Oil & Grease (5520 E&F/B&F)																			
Total Petroleum Hydrocarbons (418.1)																			
HVOCs EPA 8260 (8010 list)																			
BTEX ONLY (EPA 602 / 8020)																			
Pesticides EPA 608 / 8080																			
PCBs EPA 608 / 8080																			
VOCs EPA 624 / 8260																			
EPA 625 / 8270																			
PAH's / PNA's by EPA 625 / 8270 / 8310																			
CAM-17 Metals																			
LUFT 5 Metals																			
SVOCs and PNA																			
Nine Fuel Oxygenates (8260B)																			
TPH multi-range (g/d/mo) by EPA 8015C																			
Chemical and biological oxygen demand																			
Nitrate and Nitrite																			
BTEX by 8015C/8021B																			

*Siilia bel  
Cleanup  
for of MB*

Relinquished By: <i>[Signature]</i>	Date: 4/10/07	Time: 1525	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/1° 11.2° ✓  
GOOD CONDITION ✓  
HEAD SPACE ABSENT ✓  
DECHLORINATED IN LAB \_\_\_\_\_  
PRESERVATION APPROPRIATE ✓  
CONTAINERS ✓  
PERSERVED IN LAB \_\_\_\_\_

NOT enough sample to run BOD

# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0704210

ClientID: AEL

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

**Report to:**

Adrian Angel  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597

Email: aangel@aeiconsultants.com  
TEL: (925) 283-600 FAX: (925) 944-289  
ProjectNo: #261639; G&G Holding Co.  
PO:

**Bill to:**

Denise Mockel  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
dmockel@aeiconsultants.com

**Requested TAT: 5 days**

*Date Received 04/10/2007*

*Date Printed: 04/11/2007*

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0704210-001	DW-1	Water	4/10/07 3:00:00	<input type="checkbox"/>	D		C	E	A	B						
0704210-002	DW-2	Water	4/10/07 2:40:00	<input type="checkbox"/>	D	F	C	E	A	B						
0704210-003	DW-3	Water	4/10/07 3:10:00	<input type="checkbox"/>	D	F	C	E	A	B						
0704210-004	DW-4	Water	4/10/07 2:22:00	<input type="checkbox"/>	D		C	E	A	B						
0704210-005	DW-5	Water	4/10/07 2:10:00	<input type="checkbox"/>	D		C	E	A	B						
0704210-006	DW-6	Water	4/10/07 1:50:00	<input type="checkbox"/>	D		C	E	A	B						
0704210-007	DW-7	Water	4/10/07 1:30:00	<input type="checkbox"/>	D		C	E	A	B						

**Test Legend:**

1	300_1_W	2	8270D_W	3	9-OXYS_W	4	COD_W	5	G-MBTEX_W
6	TPH(DMO)WSG_W	7		8		9		10	
11		12							

**Prepared by: Melissa Valles**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



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 Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received 04/10/07
	Client P.O.:	Date Extracted 04/10/07
		Date Analyze 04/10/07-04/12/07

## Inorganic Anions by IC\*

Extraction method E300.1

Analytical methods E300.1

Work Order: 0704210

Lab ID	Client ID	Matrix	Nitrite as N	DF	Nitrate as N	DF	Nitrate as NO <sub>3</sub> <sup>-</sup>	DF	% SS
001D	DW-1	W	ND<1.0,j,h	1	ND	1	ND	10	100
002D	DW-2	W	ND,h	1	ND	1	ND	1	98
003D	DW-3	W	ND<1.0,j,h	1	ND	1	ND	10	100
004D	DW-4	W	ND<1.0,j	1	ND	1	ND	10	95
005D	DW-5	W	ND<0.50,j	1	ND	1	ND	5	93
006D	DW-6	W	ND<1.0,j	1	3.4	1	15	10	94
007D	DW-7	W	ND<1.0,j	1	5.2	1	23	10	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	0.1	0.1	0.45	mg/L
	S	NA	NA	NA	mg/Kg

\* water samples are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

\* [Nitrate as NO<sub>3</sub><sup>-</sup>] = 4.4286 x [Nitrate as N]

# surrogate diluted out of range or surrogate coelutes with another peak; N/A means surrogate not applicable to this analysis.

h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted/reporting limit raised due to high inorganic content/matrix interference; k) sample arrived with head space.



AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received: 04/10/07
	Client P.O.:	Date Analyzed 04/12/07
		Date Extracted: 04/10/07

**Semi-Volatile Organics by GC/MS (Basic Target List)\***

Extraction Method: SW3510C

Analytical Method: SW8270C

Work Order: 0704210

Lab ID	0704210-002F
Client ID	DW-2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	10	Acenaphthylene	ND	1.0	10
Acetochlor	ND	1.0	10	Anthracene	ND	1.0	10
Benzdine	ND	1.0	50	Benzoic Acid	ND	1.0	50
Benzo(a)anthracene	ND	1.0	10	Benzo(b)fluoranthene	ND	1.0	10
Benzo(k)fluoranthene	ND	1.0	10	Benzo(g,h,i)perylene	ND	1.0	10
Benzo(a)pyrene	ND	1.0	10	Benzyl Alcohol	ND	1.0	20
1,1-Biphenyl	ND	1.0	10	Bis (2-chloroethoxy) Methane	ND	1.0	10
Bis (2-chloroethyl) Ether	ND	1.0	10	Bis (2-chloroisopropyl) Ether	ND	1.0	10
Bis (2-ethylhexyl) Phthalate	ND	1.0	10	4-Bromophenyl Phenyl Ether	ND	1.0	10
Butylbenzyl Phthalate	ND	1.0	10	4-Chloroaniline	ND	1.0	20
4-Chloro-3-methylphenol	ND	1.0	10	2-Chloronaphthalene	ND	1.0	10
2-Chlorophenol	ND	1.0	10	4-Chlorophenyl Phenyl Ether	ND	1.0	10
Chrysene	ND	1.0	10	Dibenzo(a,h)anthracene	ND	1.0	10
Dibenzofuran	ND	1.0	10	Di-n-butyl Phthalate	ND	1.0	10
1,2-Dichlorobenzene	ND	1.0	10	1,3-Dichlorobenzene	ND	1.0	10
1,4-Dichlorobenzene	ND	1.0	10	3,3-Dichlorobenzidine	ND	1.0	20
2,4-Dichlorophenol	ND	1.0	10	Diethyl Phthalate	ND	1.0	10
2,4-Dimethylphenol	ND	1.0	10	Dimethyl Phthalate	ND	1.0	10
4,6-Dinitro-2-methylphenol	ND	1.0	50	2,4-Dinitrophenol	ND	1.0	50
2,4-Dinitrotoluene	ND	1.0	10	2,6-Dinitrotoluene	ND	1.0	10
Di-n-octyl Phthalate	ND	1.0	10	1,2-Diphenylhydrazine	ND	1.0	10
Fluoranthene	ND	1.0	10	Fluorene	ND	1.0	10
Hexachlorobenzene	ND	1.0	10	Hexachlorobutadiene	ND	1.0	10
Hexachlorocyclopentadiene	ND	1.0	50	Hexachloroethane	ND	1.0	10
Indeno (1,2,3-cd) pyrene	ND	1.0	10	Isophorone	ND	1.0	10
2-Methylnaphthalene	ND	1.0	10	2-Methylphenol (o-Cresol)	ND	1.0	10
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	10	Naphthalene	ND	1.0	10
2-Nitroaniline	ND	1.0	50	3-Nitroaniline	ND	1.0	50
4-Nitroaniline	ND	1.0	50	Nitrobenzene	ND	1.0	10
2-Nitrophenol	ND	1.0	50	4-Nitrophenol	ND	1.0	50
N-Nitrosodiphenylamine	ND	1.0	10	N-Nitrosodi-n-propylamine	ND	1.0	10
Pentachlorophenol	ND	1.0	50	Phenanthrene	ND	1.0	10
Phenol	ND	1.0	10	Pyrene	ND	1.0	10
Pyridine	ND	1.0	50	1,2,4-Trichlorobenzene	ND	1.0	10
2,4,5-Trichlorophenol	ND	1.0	10	2,4,6-Trichlorophenol	ND	1.0	10

**Surrogate Recoveries (%)**

%SS1:	113	%SS2:	116
%SS3:	118	%SS4:	109
%SS5:	118	%SS6:	96

Comments: h

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits.





AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received: 04/10/07
	Client P.O.:	Date Extracted: 04/10/07
		Date Analyzed 04/13/07

**Semi-Volatile Organics by GC/MS (Basic Target List)\***

Extraction Method: SW3510C

Analytical Method: SW8270C

Work Order: 0704210

Lab ID	0704210-003F
Client ID	DW-3
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	10	Acenaphthylene	ND	1.0	10
Acetochlor	ND	1.0	10	Anthracene	ND	1.0	10
Benzdine	ND	1.0	50	Benzoic Acid	ND	1.0	50
Benzo(a)anthracene	ND	1.0	10	Benzo(b)fluoranthene	ND	1.0	10
Benzo(k)fluoranthene	ND	1.0	10	Benzo(g,h,i)perylene	ND	1.0	10
Benzo(a)pyrene	ND	1.0	10	Benzyl Alcohol	ND	1.0	20
1,1-Biphenyl	ND	1.0	10	Bis (2-chloroethoxy) Methane	ND	1.0	10
Bis (2-chloroethyl) Ether	ND	1.0	10	Bis (2-chloroisopropyl) Ether	ND	1.0	10
Bis (2-ethylhexyl) Phthalate	ND	1.0	10	4-Bromophenyl Phenyl Ether	ND	1.0	10
Butylbenzyl Phthalate	ND	1.0	10	4-Chloroaniline	ND	1.0	20
4-Chloro-3-methylphenol	ND	1.0	10	2-Chloronaphthalene	ND	1.0	10
2-Chlorophenol	ND	1.0	10	4-Chlorophenyl Phenyl Ether	ND	1.0	10
Chrysene	ND	1.0	10	Dibenzo(a,h)anthracene	ND	1.0	10
Dibenzofuran	ND	1.0	10	Di-n-butyl Phthalate	ND	1.0	10
1,2-Dichlorobenzene	ND	1.0	10	1,3-Dichlorobenzene	ND	1.0	10
1,4-Dichlorobenzene	ND	1.0	10	3,3-Dichlorobenzidine	ND	1.0	20
2,4-Dichlorophenol	ND	1.0	10	Diethyl Phthalate	ND	1.0	10
2,4-Dimethylphenol	ND	1.0	10	Dimethyl Phthalate	ND	1.0	10
4,6-Dinitro-2-methylphenol	ND	1.0	50	2,4-Dinitrophenol	ND	1.0	50
2,4-Dinitrotoluene	ND	1.0	10	2,6-Dinitrotoluene	ND	1.0	10
Di-n-octyl Phthalate	ND	1.0	10	1,2-Diphenylhydrazine	ND	1.0	10
Fluoranthene	ND	1.0	10	Fluorene	ND	1.0	10
Hexachlorobenzene	ND	1.0	10	Hexachlorobutadiene	ND	1.0	10
Hexachlorocyclopentadiene	ND	1.0	50	Hexachloroethane	ND	1.0	10
Indeno (1,2,3-cd) pyrene	ND	1.0	10	Isophorone	ND	1.0	10
2-Methylnaphthalene	ND	1.0	10	2-Methylphenol (o-Cresol)	ND	1.0	10
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	10	Naphthalene	ND	1.0	10
2-Nitroaniline	ND	1.0	50	3-Nitroaniline	ND	1.0	50
4-Nitroaniline	ND	1.0	50	Nitrobenzene	ND	1.0	10
2-Nitrophenol	ND	1.0	50	4-Nitrophenol	ND	1.0	50
N-Nitrosodiphenylamine	ND	1.0	10	N-Nitrosodi-n-propylamine	ND	1.0	10
Pentachlorophenol	ND	1.0	50	Phenanthrene	ND	1.0	10
Phenol	ND	1.0	10	Pyrene	ND	1.0	10
Pyridine	ND	1.0	50	1,2,4-Trichlorobenzene	ND	1.0	10
2,4,5-Trichlorophenol	ND	1.0	10	2,4,6-Trichlorophenol	ND	1.0	10

**Surrogate Recoveries (%)**

%SS1:	87	%SS2:	81
%SS3:	86	%SS4:	71
%SS5:	71	%SS6:	84

**Comments: h**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits.



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received: 04/10/07
	Client P.O.:	Date Analyzed: 04/11/07
		Date Extracted: 04/11/07

### Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0704210

Lab ID	0704210-001C	0704210-002C	0704210-003C	0704210-004C	Reporting Limit for DF =1	
Client ID	DW-1	DW-2	DW-3	DW-4		
Matrix	W	W	W	W		
DF	1	1	1	1		

Compound	Concentration				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND	ND	NA	5.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND	NA	0.5
Ethanol	ND	ND	ND	ND	NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	NA	0.5
Methanol	ND	ND	ND	ND	NA	500
Methyl-t-butyl ether (MTBE)	ND	ND	ND	0.67	NA	0.5

### Surrogate Recoveries (%)

%SS1:	103	103	102	101	
Comments	h	h	h		

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received: 04/10/07
	Client P.O.:	Date Extracted: 04/11/07
		Date Analyzed: 04/11/07

### Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0704210

Lab ID	0704210-005C	0704210-006C	0704210-007C		Reporting Limit for DF =1	
Client ID	DW-5	DW-6	DW-7			
Matrix	W	W	W			
DF	1	1	1			

Compound	Concentration				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND		NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND		NA	5.0
1,2-Dibromoethane (EDB)	ND	ND	ND		NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND		NA	0.5
Diisopropyl ether (DIPE)	ND	0.81	ND		NA	0.5
Ethanol	ND	ND	ND		NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND	ND		NA	0.5
Methanol	ND	ND	ND		NA	500
Methyl-t-butyl ether (MTBE)	ND	ND	ND		NA	0.5

### Surrogate Recoveries (%)

%SS1:	103	103	103		
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**Comments**

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received: 04/10/07
	Client P.O.:	Date Extracted: 04/11/07
		Date Analyzed: 04/11/07

### Chemical Oxygen Demand (COD)\*

Analytical Method: SM5220D

Work Order: 0704210

Lab ID	Client ID	Matrix	COD	DF
0704210-001E	DW-1	W	19	1
0704210-002E	DW-2	W	17	1
0704210-003E	DW-3	W	48	1
0704210-004E	DW-4	W	ND	1
0704210-005E	DW-5	W	ND	1
0704210-006E	DW-6	W	ND	1
0704210-007E	DW-7	W	ND	1

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	10 mg/L
	S	NA

\*water/product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
		Date Received: 04/10/07
	Client Contact: Adrian Angel	Date Extracted: 04/11/07-04/12/07
	Client P.O.:	Date Analyzed 04/11/07-04/12/07

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0704210

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	DW-1	W	100,g,h	---	ND	ND	ND	ND	1	87
002A	DW-2	W	180,g,h	---	ND	ND	ND	ND	1	81
003A	DW-3	W	220,g,h	---	ND	ND	ND	ND	1	91
004A	DW-4	W	ND	---	ND	ND	ND	ND	1	90
005A	DW-5	W	ND	---	ND	ND	ND	ND	1	93
006A	DW-6	W	ND	---	ND	ND	ND	ND	1	95
007A	DW-7	W	ND	---	ND	ND	ND	ND	1	92

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261639; G&G Holding Co.	Date Sampled: 04/10/07
	Client Contact: Adrian Angel	Date Received: 04/10/07
	Client P.O.:	Date Extracted: 04/10/07
		Date Analyzed: 04/10/07-04/12/07

### Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons with Silica Gel Clean-Up\*

Extraction method: SW3510C/3630C

Analytical methods: SW8015C

Work Order: 0704210

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0704210-001B	DW-1	W	8000,a,h	2800	5	99
0704210-002B	DW-2	W	8200,a,h	ND<5000	20	102
0704210-003B	DW-3	W	27,000,a,h	9200	20	98
0704210-004B	DW-4	W	65,a	ND	1	88
0704210-005B	DW-5	W	800,a	320	1	89
0704210-006B	DW-6	W	ND	ND	1	89
0704210-007B	DW-7	W	ND	ND	1	89

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to matrix interference; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; p) see attached narrative.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704210

EPA Method SW8015C		Extraction SW3510C/3630C			BatchID: 27330			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	102	103	1.02	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	100	101	0.923	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 27330 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704210-001B	04/10/07 3:00 PM	04/10/07	04/12/07 12:05 AM	0704210-002B	04/10/07 2:40 PM	04/10/07	04/11/07 6:04 AM
0704210-003B	04/10/07 3:10 PM	04/10/07	04/11/07 3:46 AM	0704210-004B	04/10/07 2:22 PM	04/10/07	04/11/07 2:37 AM
0704210-004B	04/10/07 2:22 PM	04/10/07	04/11/07 10:57 PM	0704210-005B	04/10/07 2:10 PM	04/10/07	04/11/07 1:27 AM
0704210-006B	04/10/07 1:50 PM	04/10/07	04/11/07 12:17 AM	0704210-007B	04/10/07 1:30 PM	04/10/07	04/10/07 11:07 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704210

EPA Method SW8270C	Extraction SW3510C			BatchID: 27360					Spiked Sample ID: N/A			
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Acenaphthene	N/A	50	N/A	N/A	N/A	75.3	76	0.899	N/A	N/A	30 - 130	30
4-Chloro-3-methylphenol	N/A	100	N/A	N/A	N/A	72.4	76.6	5.63	N/A	N/A	30 - 130	30
2-Chlorophenol	N/A	100	N/A	N/A	N/A	83.4	83.5	0.0839	N/A	N/A	30 - 130	30
1,4-Dichlorobenzene	N/A	50	N/A	N/A	N/A	87.3	85.4	2.13	N/A	N/A	30 - 130	30
2,4-Dinitrotoluene	N/A	50	N/A	N/A	N/A	99.5	97.5	2.10	N/A	N/A	30 - 130	30
4-Nitrophenol	N/A	100	N/A	N/A	N/A	70.8	70.6	0.233	N/A	N/A	30 - 130	30
N-Nitrosodi-n-propylamine	N/A	50	N/A	N/A	N/A	81	81.8	1.06	N/A	N/A	30 - 130	30
Pentachlorophenol	N/A	100	N/A	N/A	N/A	81.4	81.9	0.674	N/A	N/A	30 - 130	30
Phenol	N/A	100	N/A	N/A	N/A	73.2	71.4	2.47	N/A	N/A	30 - 130	30
Pyrene	N/A	50	N/A	N/A	N/A	82.2	79.6	3.30	N/A	N/A	30 - 130	30
1,2,4-Trichlorobenzene	N/A	50	N/A	N/A	N/A	86.6	85.7	1.01	N/A	N/A	30 - 130	30
%SS1:	N/A	5000	N/A	N/A	N/A	86	84	2.27	N/A	N/A	30 - 130	30
%SS2:	N/A	5000	N/A	N/A	N/A	87	85	2.46	N/A	N/A	30 - 130	30
%SS3:	N/A	5000	N/A	N/A	N/A	81	82	1.39	N/A	N/A	30 - 130	30
%SS4:	N/A	5000	N/A	N/A	N/A	82	83	1.75	N/A	N/A	30 - 130	30
%SS5:	N/A	5000	N/A	N/A	N/A	83	81	2.75	N/A	N/A	30 - 130	30
%SS6:	N/A	5000	N/A	N/A	N/A	85	81	5.38	N/A	N/A	30 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27360 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704210-002F	04/10/07 2:40 PM	04/10/07	04/12/07 10:31 AM	0704210-003F	04/10/07 3:10 PM	04/10/07	04/13/07 11:24 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.





### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704210

EPA Method SW8260B		Extraction SW5030B			BatchID: 27361				Spiked Sample ID: 0704210-006C			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	108	114	5.31	104	103	1.22	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	93.9	99.2	5.51	92.1	92.1	0	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	94.5	101	6.13	93.8	91	3.00	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	113	118	3.68	110	109	0.857	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	0.81	10	116	118	1.86	119	116	2.68	70 - 130	30	70 - 130	30
Ethanol	ND	500	97.6	95.1	2.35	98.7	98.1	0.526	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	116	121	4.55	111	109	2.27	70 - 130	30	70 - 130	30
Methanol	ND	2500	101	102	1.16	100	101	0.602	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	113	119	5.60	109	110	0.247	70 - 130	30	70 - 130	30
%SS1:	103	10	99	97	2.76	96	100	4.10	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27361 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704210-001C	04/10/07 3:00 PM	04/11/07	04/11/07 2:01 AM	0704210-002C	04/10/07 2:40 PM	04/11/07	04/11/07 2:45 AM
0704210-003C	04/10/07 3:10 PM	04/11/07	04/11/07 3:29 AM	0704210-004C	04/10/07 2:22 PM	04/11/07	04/11/07 4:13 AM
0704210-005C	04/10/07 2:10 PM	04/11/07	04/11/07 4:56 AM	0704210-006C	04/10/07 1:50 PM	04/11/07	04/11/07 5:41 AM
0704210-007C	04/10/07 1:30 PM	04/11/07	04/11/07 6:25 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).  
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**QC SUMMARY REPORT FOR SW8021B/8015Cm**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704210

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 27379			Spiked Sample ID: 0704206-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	94.2	95.1	0.875	105	111	6.10	70 - 130	30	70 - 130	30
MTBE	ND	10	90.6	121	28.5	109	106	2.92	70 - 130	30	70 - 130	30
Benzene	ND	10	109	118	7.72	93.2	94.8	1.68	70 - 130	30	70 - 130	30
Toluene	ND	10	100	105	4.39	103	104	1.55	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	108	110	2.06	99.5	102	2.10	70 - 130	30	70 - 130	30
Xylenes	ND	30	107	107	0	110	113	2.99	70 - 130	30	70 - 130	30
%SS:	102	10	99	105	5.58	94	95	0.440	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 27379 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704210-001A	04/10/07 3:00 PM	04/11/07	04/11/07 8:10 PM	0704210-002A	04/10/07 2:40 PM	04/11/07	04/11/07 8:43 PM
0704210-003A	04/10/07 3:10 PM	04/11/07	04/11/07 9:16 PM	0704210-004A	04/10/07 2:22 PM	04/11/07	04/11/07 10:22 PM
0704210-005A	04/10/07 2:10 PM	04/11/07	04/11/07 1:07 PM	0704210-006A	04/10/07 1:50 PM	04/11/07	04/11/07 4:17 PM
0704210-007A	04/10/07 1:30 PM	04/12/07	04/12/07 2:45 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



### QC SUMMARY REPORT FOR E300.1

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704210

EPA Method E300.1	Extraction E300.1			BatchID: 27385			Spiked Sample ID: N/A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Nitrate as N	N/A	1	N/A	N/A	N/A	91	92	1.08	N/A	N/A	85 - 115	15
Nitrite as N	N/A	1	N/A	N/A	N/A	96.6	95.4	1.30	N/A	N/A	85 - 115	15
%SS:	N/A	0.10	N/A	N/A	N/A	98	98	0	N/A	N/A	90 - 115	10

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27385 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704210-001D	04/10/07 3:00 PM	04/10/07	04/10/07 10:24 PM	0704210-001D	04/10/07 3:00 PM	04/10/07	04/11/07 9:19 PM
0704210-002D	04/10/07 2:40 PM	04/10/07	04/10/07 10:53 PM	0704210-003D	04/10/07 3:10 PM	04/10/07	04/10/07 11:22 PM
0704210-003D	04/10/07 3:10 PM	04/10/07	04/11/07 9:47 PM	0704210-004D	04/10/07 2:22 PM	04/10/07	04/10/07 11:50 PM
0704210-004D	04/10/07 2:22 PM	04/10/07	04/11/07 10:16 PM	0704210-005D	04/10/07 2:10 PM	04/10/07	04/11/07 12:19 AM
0704210-005D	04/10/07 2:10 PM	04/10/07	04/11/07 10:45 PM	0704210-006D	04/10/07 1:50 PM	04/10/07	04/11/07 12:48 AM
0704210-006D	04/10/07 1:50 PM	04/10/07	04/12/07 7:40 PM	0704210-007D	04/10/07 1:30 PM	04/10/07	04/11/07 1:17 PM
0704210-007D	04/10/07 1:30 PM	04/10/07	04/12/07 8:08 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SM5220D

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704210

EPA Method SM5220D	Extraction SM5220D			BatchID: 27386			Spiked Sample ID: 0704210-007E					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
COD	ND	400	92.8	95.8	3.17	102	98.8	2.99	80 - 120	20	90 - 110	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27386 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704210-001E	04/10/07 3:00 PM	04/11/07	04/11/07 10:01 AM	0704210-002E	04/10/07 2:40 PM	04/11/07	04/11/07 10:07 AM
0704210-003E	04/10/07 3:10 PM	04/11/07	04/11/07 10:13 AM	0704210-004E	04/10/07 2:22 PM	04/11/07	04/11/07 10:19 AM
0704210-005E	04/10/07 2:10 PM	04/11/07	04/11/07 10:25 AM	0704210-006E	04/10/07 1:50 PM	04/11/07	04/11/07 10:31 AM
0704210-007E	04/10/07 1:30 PM	04/11/07	04/11/07 10:37 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

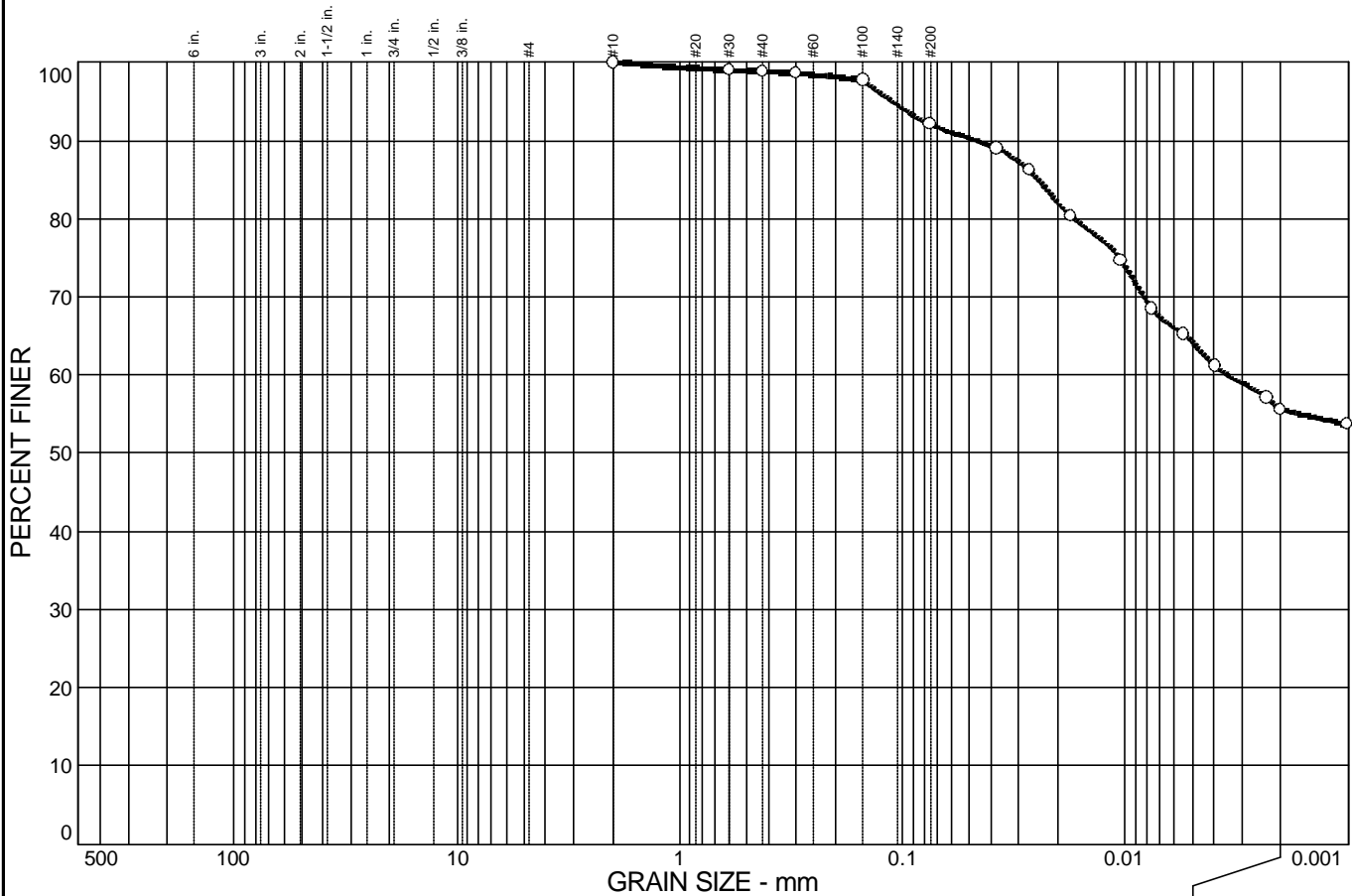
% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

# PARTICLE SIZE DISTRIBUTION TEST REPORT



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	1.2	6.7	36.5	55.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#30	99.0		
#40	98.8		
#50	98.6		
#100	97.7		
#200	92.1		
0.0377 mm.	89.0		
0.0270 mm.	86.2		
0.0176 mm.	80.4		
0.0105 mm.	74.7		
0.0076 mm.	68.5		
0.0055 mm.	65.2		
0.0039 mm.	61.2		
0.0023 mm.	57.1		
0.0020 mm.	55.6		
0.0010 mm.	53.7		

**Soil Description**

Gray CLAY

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>85</sub>= 0.0246      D<sub>60</sub>= 0.0035      D<sub>50</sub>=

D<sub>30</sub>=                      D<sub>15</sub>=                      D<sub>10</sub>=

C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

The final hydrometer reading is estimated.

\* (no specification provided)

**Sample No.:** 0703413-012A  
**Location:**

**Source of Sample:** DW

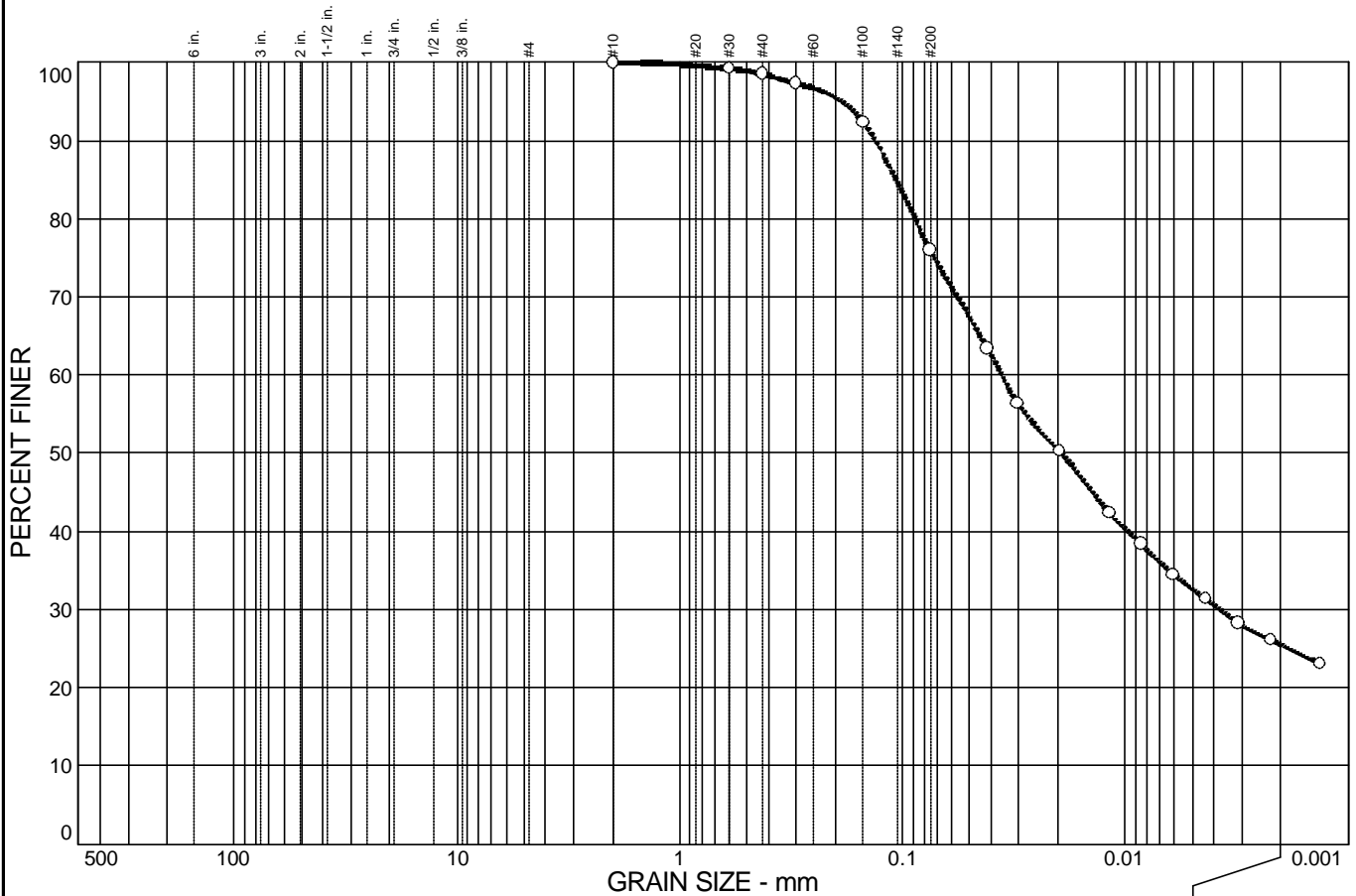
**Date:**  
**Elev./Depth:** 6-9'

**COOPER TESTING LABORATORY**

**Client:** McCampbell Analytical, Inc.  
**Project:** G&G - #261639  
**Project No:** 385-029

**Figure**

# PARTICLE SIZE DISTRIBUTION TEST REPORT



% + 3"	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	1.5	22.5	50.5	25.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#30	99.2		
#40	98.5		
#50	97.3		
#100	92.3		
#200	76.0		
0.0416 mm.	63.4		
0.0304 mm.	56.4		
0.0198 mm.	50.3		
0.0118 mm.	42.4		
0.0085 mm.	38.4		
0.0061 mm.	34.5		
0.0043 mm.	31.4		
0.0031 mm.	28.3		
0.0022 mm.	26.1		
0.0013 mm.	23.1		

**Soil Description**

Olive Gray SILT w/ Sand

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>85</sub>= 0.107              D<sub>60</sub>= 0.0359              D<sub>50</sub>= 0.0193  
 D<sub>30</sub>= 0.0038              D<sub>15</sub>=                      D<sub>10</sub>=  
 C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

\* (no specification provided)

**Sample No.:** 0703413-013A  
**Location:**

**Source of Sample:** DW

**Date:**  
**Elev./Depth:** 6-14'

**COOPER TESTING LABORATORY**

**Client:** McCampbell Analytical, Inc.  
**Project:** G&G - #261639  
**Project No:** 385-029

**Figure**

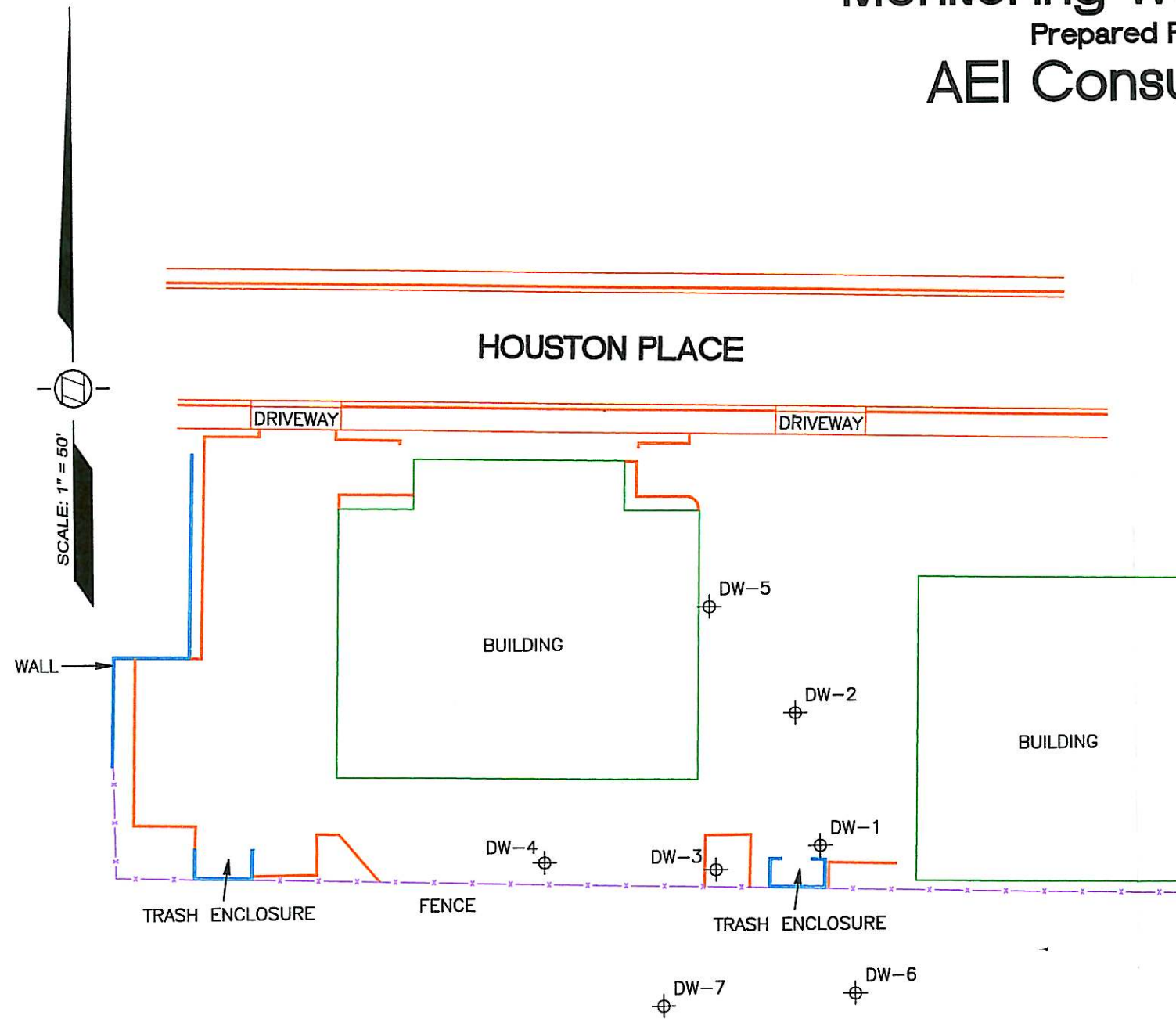
## **APPENDIX E**

### **Survey Data**

# Monitoring Well Exhibit

Prepared For:

## AEI Consultants



DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)
DW-1	2083009.5	6154166.4	37.7071254	-121.9086971	334.23	334.44
DW-2	2083053.7	6154158.5	37.7072463	-121.9087267	334.00	334.48
DW-3	2083001.9	6154131.7	37.7071032	-121.9088166	334.56	334.99
DW-4	2083005.0	6154074.7	37.7071091	-121.9090140	334.49	334.95
DW-5	2083089.3	6154130.3	37.7073431	-121.9088261	333.91	334.50
DW-6	2082960.4	6154177.7	37.7069910	-121.9086556	334.99	335.44
DW-7	2082956.8	6154113.9	37.7069786	-121.9088758	335.18	335.62

### BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986)

DATUM ELLIPSOID IS GRS80

REFERENCE GEOID IS NGS99

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS

CORS STATIONS USED WERE CHAB AND MONB.



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Scale: 1" = 50'  
Sheet 1 of 1  
Revised:  
Field Book: MW-33  
Dwg. No. 0116-030 JL