July 30, 2009
Project SCA5251H1A
SAP #: 135785

Mr. Jerry Wickham, PG, CEG, CHG
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: 2009 Well Installation Report
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, California

DELTA

Dear Mr. Wickham:

On behalf of Shell Oil Products US (Shell), Delta Consultants (Delta) has prepared this report to document the installation of two onsite groundwater monitoring wells (S-10 and S-12) and one offsite groundwater monitoring well (S-11) at the referenced site. The wells were installed in general accordance with Delta's *Revised Work Plan for the Installation of Monitoring Wells S-10 through S-12*, dated March 19, 2009, which was approved by the Alameda County Health Care Services Agency (ACHCSA) in a letter to Shell dated March 27, 2009.

SITE DESCRIPTION

The subject site is located on the eastern corner at the intersection of Hopyard Road and Owen Drive in a primarily commercial area of Pleasanton, California (Figure 1). The facility consists of a station building, two rows of product dispenser islands, four underground storage tanks (USTs), and a car wash.

SCOPE OF WORK

On June 18 and 19, 2009, Delta installed three groundwater monitoring wells (S-10 through S-12) to further delineate the extent of groundwater contamination northwest (down-gradient), northeast (cross-gradient), and south (up-gradient) of the previous and current UST complexes.

Pre-field

Prior to field activities, Delta obtained a drilling permit from the Zone 7 Water Agency, and confirmed a valid Access Agreement between Shell and the offsite property owner to the northeast. Copies of the permit and Access Agreement are presented as Appendix A. Prior to drilling, the borehole locations were marked for subsurface utility clearance, Underground Services Alert (USA) was notified a minimum of 48 hours before work began, and a private utility locating company was contracted to survey the boring locations for the presence of subsurface utilities. To further avoid damaging any existing subsurface utilities, each boring location was cleared to a depth of approximately 8 feet below ground surface (bgs) using an air-knife.

Well Installations

The borings for monitoring wells S-10 through S-12 were advanced using 8-inch diameter hollow-stem auger drilling equipment. Each boring was converted to a groundwater monitoring well by the installation 4-inch diameter polyvinyl chloride (PVC) well casing with 14 feet of 0.02-inch slotted screen placed from 6 to 20 feet bgs. A filter pack of # 2/12 sand was placed in the annular space from 20 to 5 feet bgs, followed by a seal consisting of approximately 1 foot of hydrated bentonite and 3 feet of cement. The top of each well was finished with a flush-mounted, traffic-rated a well vault box set in concrete dyed to match the existing surface material.

All down-hole drilling and sampling equipment was cleaned prior to use and between boring locations. All soils, water and debris generated during the well installation activities were stored onsite in Department of Transportation (DOT) rated, 55-gallon drums pending characterization and appropriate disposal.

Soil Sampling

Soil was collected continuously from each well boring between 8 and 20 feet bgs using a direct-push sampler with acetate liners. The soil types were logged by Delta field staff. Boring logs are presented in Appendix B.

Samples were cut from the acetate liners at approximate 5-foot depth intervals and field-screened using a photo-ionization detector (PID). None of the soil samples had a PID reading greater than 10 parts per million by volume (ppmv). A soil sample from the soil/groundwater interface in each well boring was retained for laboratory analyses. The retained samples were sealed with *Teflon* tape and tight fitting end caps and placed on ice for transport to a California State certified laboratory for analysis. The soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) by Environmental Protection Agency (EPA) Method 8015B; and for benzene, toluene, ethylbenzene and total xylenes (BTEX compounds), methyl tert-butyl ether (MTBE); tert-amyl methyl ether (TAME), diisopropyl ether (DIPE); ethyl tert-butyl ether (ETBE), and tert-butyl alcohol (TBA) by EPA Method 8260B. Soil sample results are summarized in Table 1. The laboratory analytical report and chain of custody documentation is included in Appendix C.

Groundwater Sampling

On June 30, 2009, the new monitoring wells were developed by Blaine Tech Services, Inc. (Blaine) using a surge and bail technique. Each well was developed until a minimum of ten casing volumes were removed, groundwater quality parameters began to stabilize and a relative change in groundwater clarity was observed. The well development field data sheets are presented in Appendix D.

Following development, the new wells were gauged and sampled by Blaine during the third quarter 2009 monitoring and sampling event on July 6, 2009. The groundwater samples were analyzed for total purgeable petroleum hydrocarbons (TPPH), BTEX compounds, MTBE, TAME, DIPE, ETBE and TBA by EPA Method 8260B. The groundwater analytical results are summarized in Table 2 and presented on Figure 2. The laboratory analytical report and chain of custody documentation is included in Appendix C. Field data sheets from Blaine are included in Appendix D.

Well Surveying

On June 25, 2009, wells S-10 through S-12 were surveyed for northings, eastings, latitude, longitude and elevation relative to mean sea level using both conventional survey techniques and GPS technology. The survey data will be uploaded to the California State GeoTracker database. The report from the California state licensed surveyor is included as Appendix E.

FINDINGS

The primary contaminants of concern (COC) beneath the Shell-branded service station are TPPH, benzene, MTBE, and TBA. With the exception of a very low concentration of MTBE (0.0059 milligrams per kilogram) in the soil sample collected from the S-12 well boring near the soil/groundwater interface at approximately 10 feet bgs, the COC, and additional chemicals tested during this event, were not detected at concentrations above the laboratory reporting limits in any of the soil analyzed. In groundwater, TPPH was detected in the samples collected from wells S-10 and S-12 at concentrations of 340 micrograms per liter (µg/l) and 83 µg/l, respectively. MTBE was only detected in the groundwater sample from Well S-12 at a concentration of 37 µg/l. TBA was only detected in the groundwater sample from Well S-10 at a concentration of 5,100 µg/l. Benzene and the other chemical analyzed were not detected in any of the groundwater samples from the three new wells.

Historically, the groundwater flow direction beneath the site has been variable. The COC concentrations in Well S-10 confirm that the predominant direction of groundwater flow is to the northwest. Well S-11 completes delineation of the plume to the northeast in the cross-gradient direction. The TPPH and MTBE concentrations in Well S-12 suggest that there is some migration of the plume in the up-gradient direction, which is most likely due to the variations in groundwater flow and the relatively flat gradient beneath the site.

REMARKS

The recommendations contained in this document represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This document is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this document were performed. This document is intended only for the use of Delta's Client and anyone else specifically listed on this document. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this document.

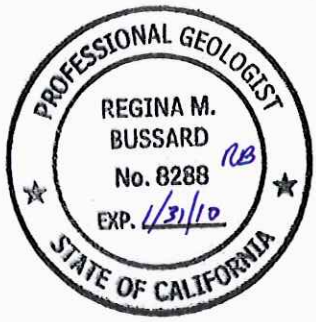
If you have any questions regarding this site, please contact Suzanne McClurkin-Nelson (Delta) at (408) 826-1875 or Mr. Denis Brown (Shell) at (707) 865-0251.

Sincerely,
DELTA CONSULTANTS

Cora Olson
Staff Engineer

Suzanne McClurkin-Nelson
Senior Project Manager

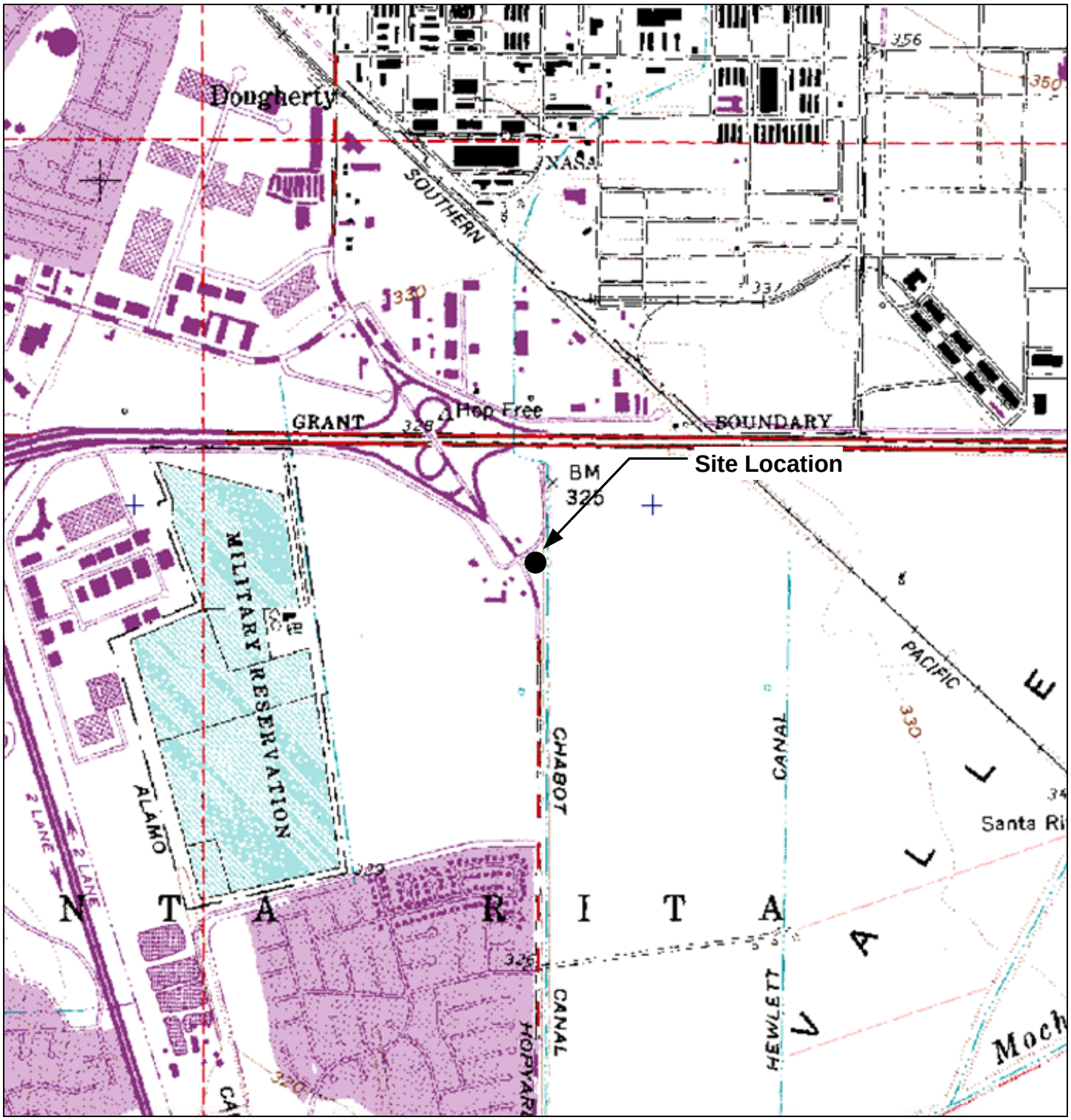
Regina Bussard, P.G.
Project Geologist



Attachments:
- Figure 1 – Site Location Map
- Figure 2 – Groundwater Hydrocarbon Concentration Map
- Table 1 – Soil Analytical Data
- Table 2 – Groundwater Analytical Data
- Appendix A – Permit and Access Agreement
- Appendix B – Boring Logs and Field Data Sheets
- Appendix C – Certified Analytical Reports with Chain-of-Custody Documentation
- Appendix D – Blaine Tech Services, Inc. Field Data Sheets
- Appendix E – Survey Report

cc: Denis Brown, Shell Oil Products US, Monte Rio
Matt Katen, Zone 7 Water District
Colleen Winey, Zone 7 Water Agency, Livermore
Carl Cox, C and J Cox Corporation, Pleasanton
Danielle Stefani, Livermore-Pleasanton Fire Department, Pleasanton

FIGURES



GENERAL NOTES:
Base Map from: DeLorme Yarmouth, ME 04096
Source Data: USGS

North

QUADRANGLE LOCATION

0 1,300 2,600
Scale, Feet

FIGURE 1
SITE LOCATION MAP

SHELL-BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

PROJECT NO. SCA5251H1A	DRAWN BY V. F. 3/31/05
FILE NO.	PREPARED BY VF
REVISION NO.	REVIEWED BY

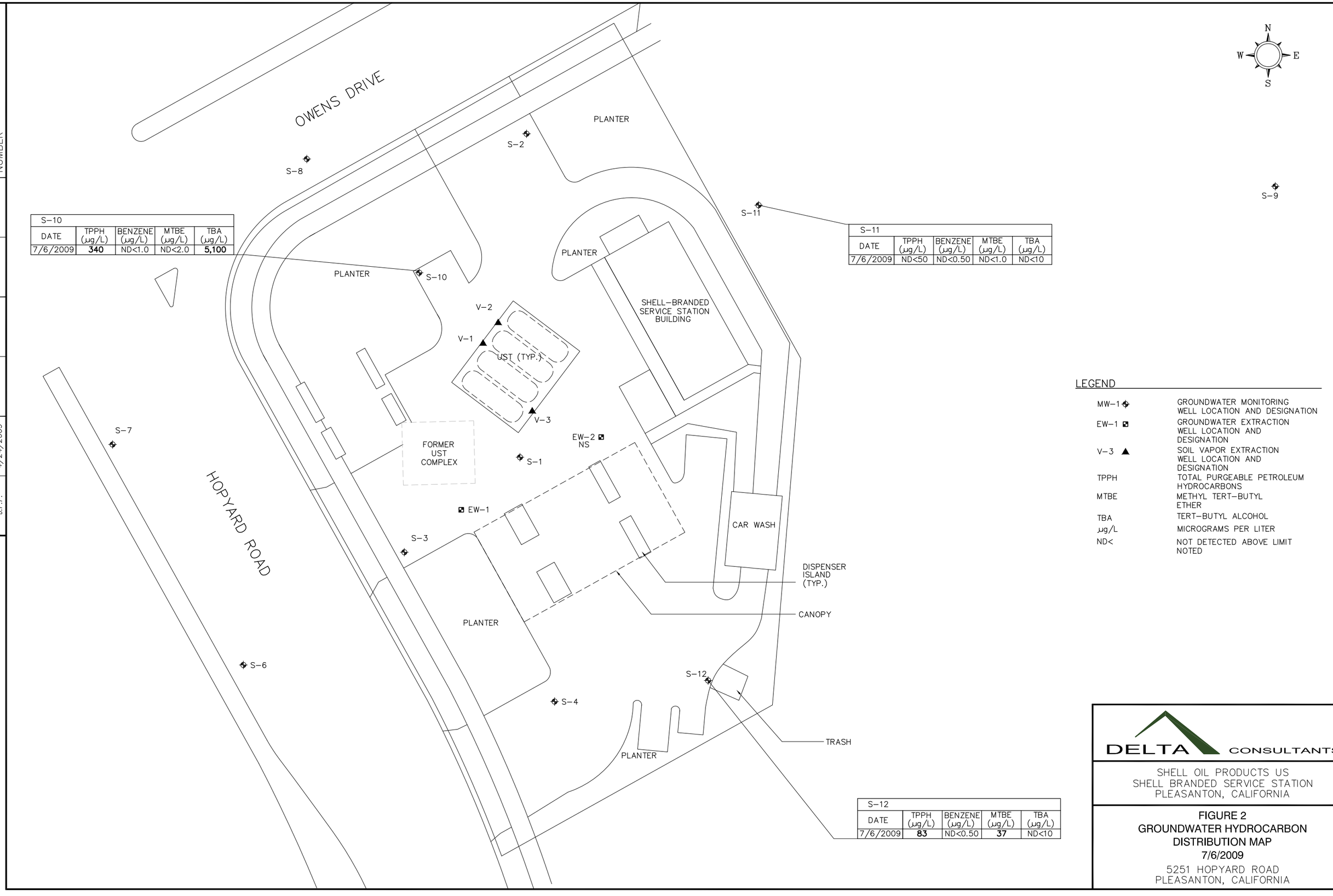
DELTA CONSULTANTS

PROJECT NUMBER SCA5251H1A

APPROVED BY

CHECKED BY

DRAWN BY J.F.F. 4/24/2009



S-10				
DATE	TPPH (µg/L)	BENZENE (µg/L)	MTBE (µg/L)	TBA (µg/L)
7/6/2009	**340**	ND<1.0	ND<2.0	**5,100**

S-11				
DATE	TPPH (µg/L)	BENZENE (µg/L)	MTBE (µg/L)	TBA (µg/L)
7/6/2009	ND<50	ND<0.50	ND<1.0	ND<10

S-12				
DATE	TPPH (µg/L)	BENZENE (µg/L)	MTBE (µg/L)	TBA (µg/L)
7/6/2009	**83**	ND<0.50	**37**	ND<10

LEGEND

MW-1 ⊕	GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
EW-1 ◘	GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
V-3 ▲	SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
TPPH	TOTAL PURGEABLE PETROLEUM HYDROCARBONS
MTBE	METHYL TERT-BUTYL ETHER
TBA	TERT-BUTYL ALCOHOL
µg/L	MICROGRAMS PER LITER
ND<	NOT DETECTED ABOVE LIMIT NOTED

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SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA

FIGURE 2
GROUNDWATER HYDROCARBON DISTRIBUTION MAP
7/6/2009

5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

TABLES

TABLE 1
SOIL ANALYTICAL DATA
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, CA

Sample ID	Date Collected	TPH-G (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)
S-10 @10'	6/18/2009	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.10	<0.10	<0.10
S-11 @10'	6/18/2009	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.10	<0.10	<0.10
S-12 @10'	6/19/2009	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	0.0059	<0.050	<0.10	<0.10	<0.10

Abbreviations:
TPH-G = Total petroleum hydrocarbons calculated as gasoline by EPA Method 8015B.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.
MTBE = Methyl tertiary butyl ether by EPA Method 8260B
TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B
DIPE = Diisopropyl Ether by EPA Method 8260B
ETBE = Ethyl-tert-Butyl Ether by EPA Method 8260B
TAME = Tert-Amyl-Methyl Ether by EPA Method 8260B
mg/kg = milligrams per kilogram (parts per million)
<n = Below the specified detection limit

TABLE 2
GROUNDWATER ANALYTICAL DATA
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, CA

Sample ID	Date Collected	TPH-G ug/L	B ug/L	T ug/L	E ug/L	X ug/L	MTBE ug/L	TBA ug/L	DIPE ug/L	ETBE ug/L	TAME ug/L
S-10	7/6/2009	340	<1.0	<2.0	<2.0	<2.0	<2.0	5,100	<4.0	<4.0	<4.0
S-11	7/6/2009	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<10	<2.0	<2.0	<2.0
S-12	7/6/2009	83	<0.50	<1.0	<1.0	<1.0	37	<10	<2.0	<2.0	<2.0

Abbreviations:
TPH-G = Total petroleum hydrocarbons calculated as gasoline by EPA Method 8260B.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.
MTBE = Methyl tertiary butyl ether by EPA Method 8260B
TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B
DIPE = Diisopropyl Ether by EPA Method 8260B
ETBE = Ethyl-tert-Butyl Ether by EPA Method 8260B
TAME = Tert-Amyl-Methyl Ether by EPA Method 8260B
ug/L = micrograms per liter (parts per billion)
<n = Below the specified detection limit

APPENDIX A

PERMIT AND ACCESS AGREEMENT

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306
E-MAIL whong@zone7water.com

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 5251 Hopyard Road
Pleasanton, CA
1 Off-site well at 5900 Owens Drive

Coordinates Source _____ ft. Accuracy _____ ft.
LAT: 37° 41' 54.607" N ft. LONG: 121° 54' 12.66" ft.
APN 941-2771-1

CLIENT
Name Shell Oil Products US
Address 20945 S. Wilmington Ave Phone 707-864-1617
City Carson Zip 90810

APPLICANT
Name Cora Olson for Delta Consultants
Email COlson@deltaenv.com Fax 408-225-8506
Address 312 Piercy Road Phone 408-826-1877
City San Jose Zip 95138

TYPE OF PROJECT:

(Well Construction)	9	Geotechnical Investigation	9
Well Destruction	9	Contamination Investigation	9
Cathodic Protection	9	Other _____	9

PROPOSED WELL USE:

Domestic	9	Irrigation	9
Municipal	9	Remediation	9
Industrial	9	(Groundwater Monitoring)	9
Dewatering	9	Other _____	9

DRILLING METHOD:

Mud Rotary	9	Air Rotary	9	(Hollow Stem Auger)	9
Cable Tool	9	Direct Push	9	Other _____	9

DRILLING COMPANY RSI Drilling
DRILLER'S LICENSE NO. 802334
WELL SPECIFICATIONS:
Drill Hole Diameter 10 in. Maximum
Casing Diameter 4 in. Depth 20 ft.
Surface Seal Depth 6 ft. Number 3 wells
S-10, S-11, S-12

SOIL BORINGS:
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 6/16/09
ESTIMATED COMPLETION DATE 6/17/09

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

APPLICANT'S SIGNATURE _____ Date 5/7/09

ATTACH SITE PLAN OR SKETCH

PERMIT NUMBER 29032
WELL NUMBER 3S/1E-6K21 to 6K23 (S-10 to S-12)
APN 941-2772-001-00

PERMIT CONDITIONS
(Circled Permit Requirements Apply)

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your 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 (DWR Form 188), signed by the driller.**
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
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. Grout placed by tremie.
4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
5. A sample port is required on the discharge pipe near the wellhead.

(C.) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
3. Grout placed by tremie.

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.

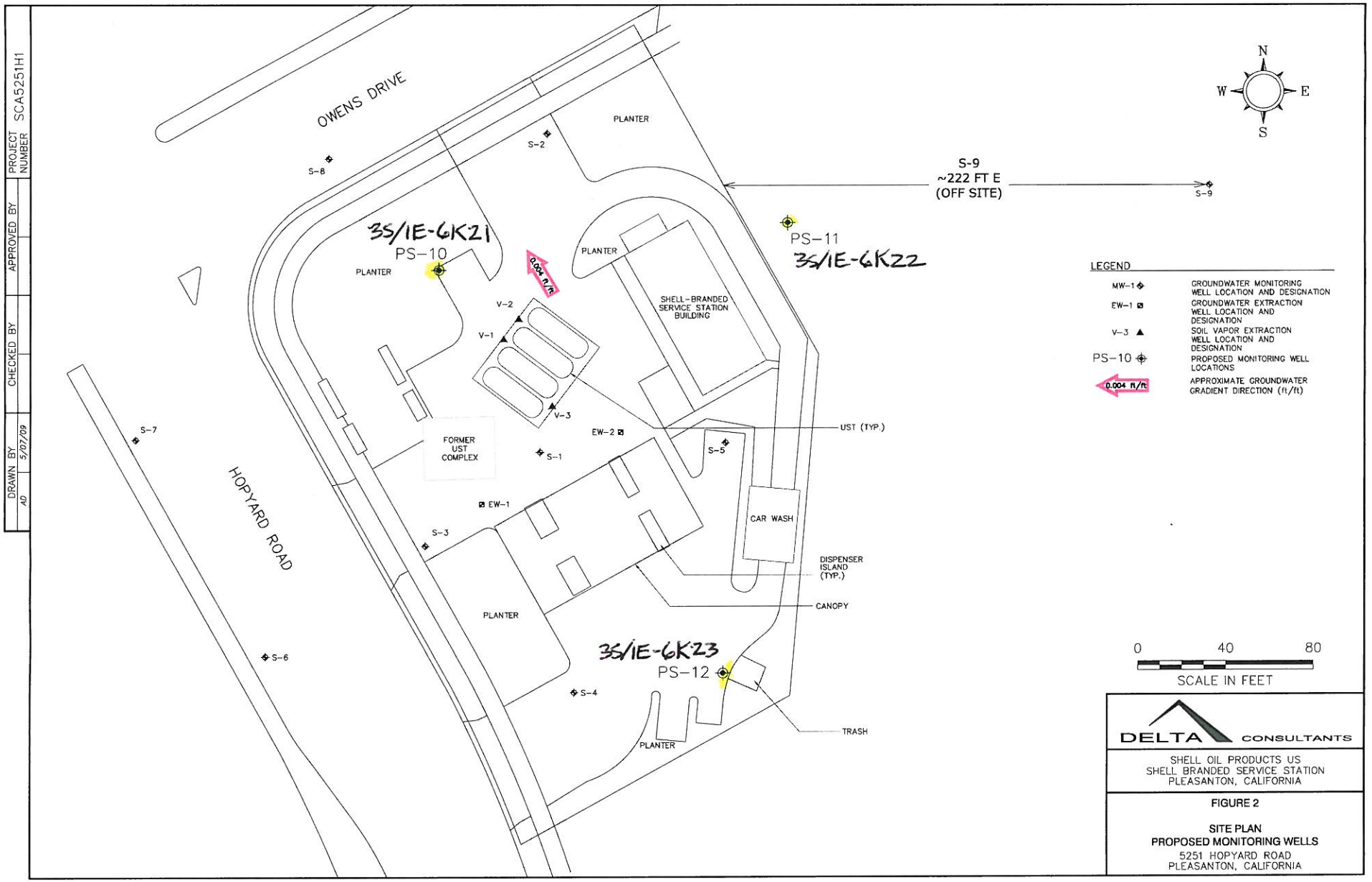
E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached.

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

Approved Wyman Hong Date 5/27/09
Wyman Hong

Revised: April 23, 2008



DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
AD 5/07/09			SCA5251H1

DELTA CONSULTANTS

SHELL OIL PRODUCTS US
SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA

FIGURE 2

SITE PLAN
PROPOSED MONITORING WELLS
5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

May 12, 2009

Re: Request for Access to Property Located at
5900 Owens Drive
Pleasanton, California

The undersigned has reviewed your request and hereby consents to the entry by Shell Oil Products US upon its property for the purpose of performing the work described herein. The undersigned understands that it may be prevented from using a portion of its property and agrees to the minor disruption of the normal use of the premises as described.

The undersigned further represents and warrants that it is the owner of the property located at 4900 Owens Drive in Pleasanton, California, with full authority to provide the consent given above. YOU ARE ASKED TO INFORM US TWO DAYS BEFORE YOUR WORK TO BEGIN! PLS CALL 650. 248-8035

Northern California DL
4780 Chabot Drive
Pleasanton, CA 94588

By Northern California DL, its general partner

By: _____

Date: 5-27-09

ADDENDUM

Request for Access to Property Located at
5900 Owens Drive, Pleasanton California

DESCRIPTION OF FIELD ACTIVITIES
Proposed for May 2009

SUMMARY

Field activities are to include (1) marking of the boring location PMW-11 (see attached site map), (2) clearing the boring location for public utilities by Underground Services Alert (USA) and onsite by a private subsurface utility location company, (3) air-knife excavation of the boring location to approximately 8 feet below ground surface, (4) advancement of one boring to a depth of approximately 25 feet, (5) completion of the boring as a groundwater monitoring well, and (6) development and sampling of the well, which will be added to the quarterly sampling program.

DETAILS

Notification of the scheduled field date(s) will be made at least 10 days prior to the field event. A minimum of 48 hours prior to drilling, the PMW-11 boring location will be marked with white paint at a location approved by the property owner. This event should require 15 to 30 minutes.

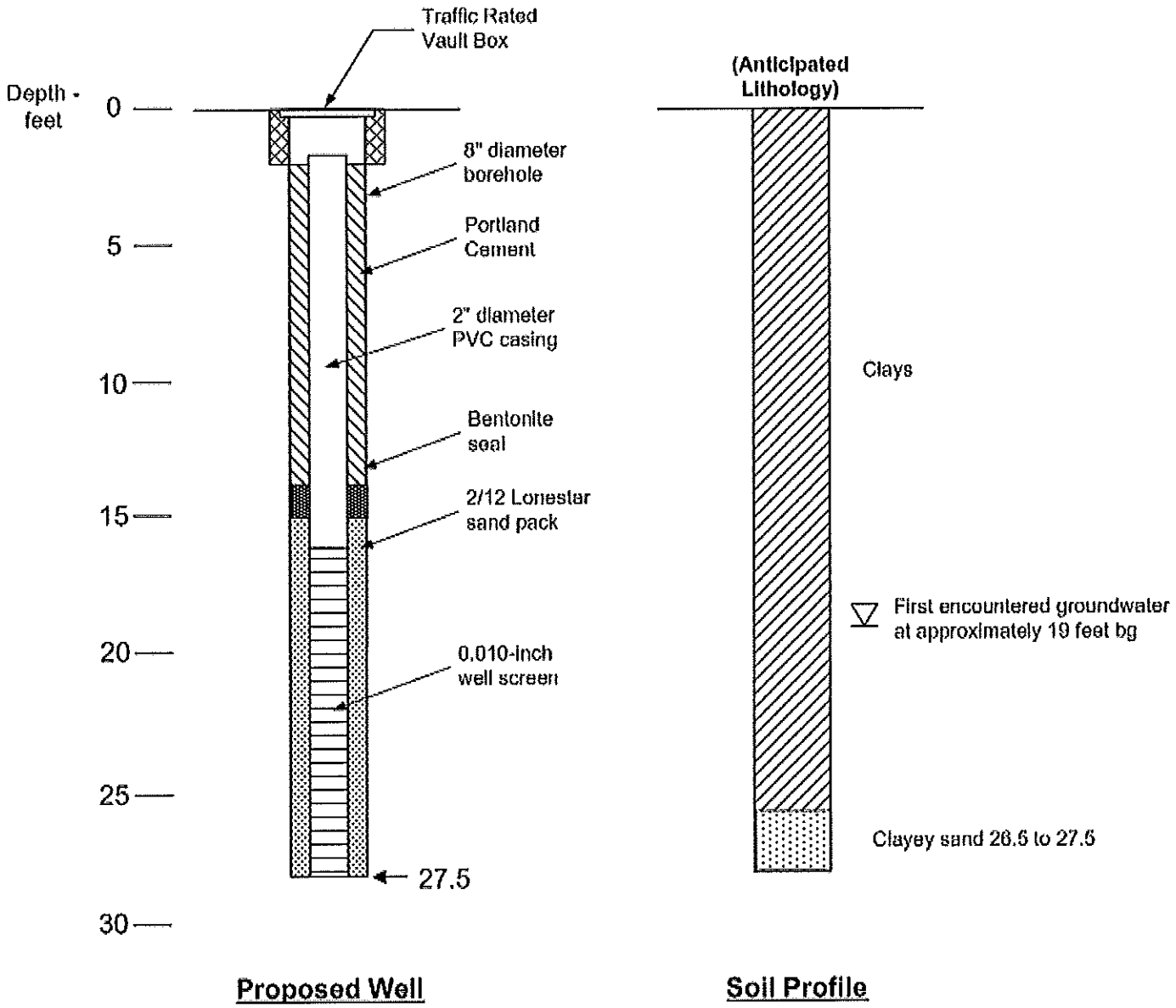
Various local utility companies will arrive on site prior to the scheduled field event to verify the location or absence of subsurface utilities in the vicinity of the proposed boring location. Each utility representative should be on site for no more than 15 minutes.

A representative of Delta Consultants will be on site with a subsurface utility location company prior to drilling to evaluate the potential for subsurface utilities in the vicinity of the proposed boring. This event should take no more than 30 minutes.

The first day of field activities, a representative of Delta Consultants will arrive with a contracted drilling company to pre-excavate of the boring location to a depth of 8 feet using air-knife technology to minimize potential damage to undetected subsurface utilities. The excavated location will be backfilled to eliminate hazards prior to drilling the next day. This activity is expected to require approximately 2-3 hours.

The second day on site, a representative of Delta Consultants will arrive with a contracted drilling company to advance a 10-inch diameter boring to a depth of 25 feet. A groundwater monitoring well will be installed in the bore hole. The top of the monitoring well will be finished flush with the surface, with a well vault set in concrete dyed black to match the surrounding asphalt. All debris generated during field activities will be placed in closed 55-gallon steel drums, labeled, and stored onsite at the Shell station for characterization and offsite removal.

A minimum of 72 hours after completion of the well, a subcontractor will arrive to develop the well (remove several gallons of groundwater). This event should take no more than one hour and may be combined with the next scheduled quarterly monitoring and sampling event. On a quarterly basis (4 times a year), a well sampling company will visit the well location to collect groundwater samples. This event should take no more than one hour.



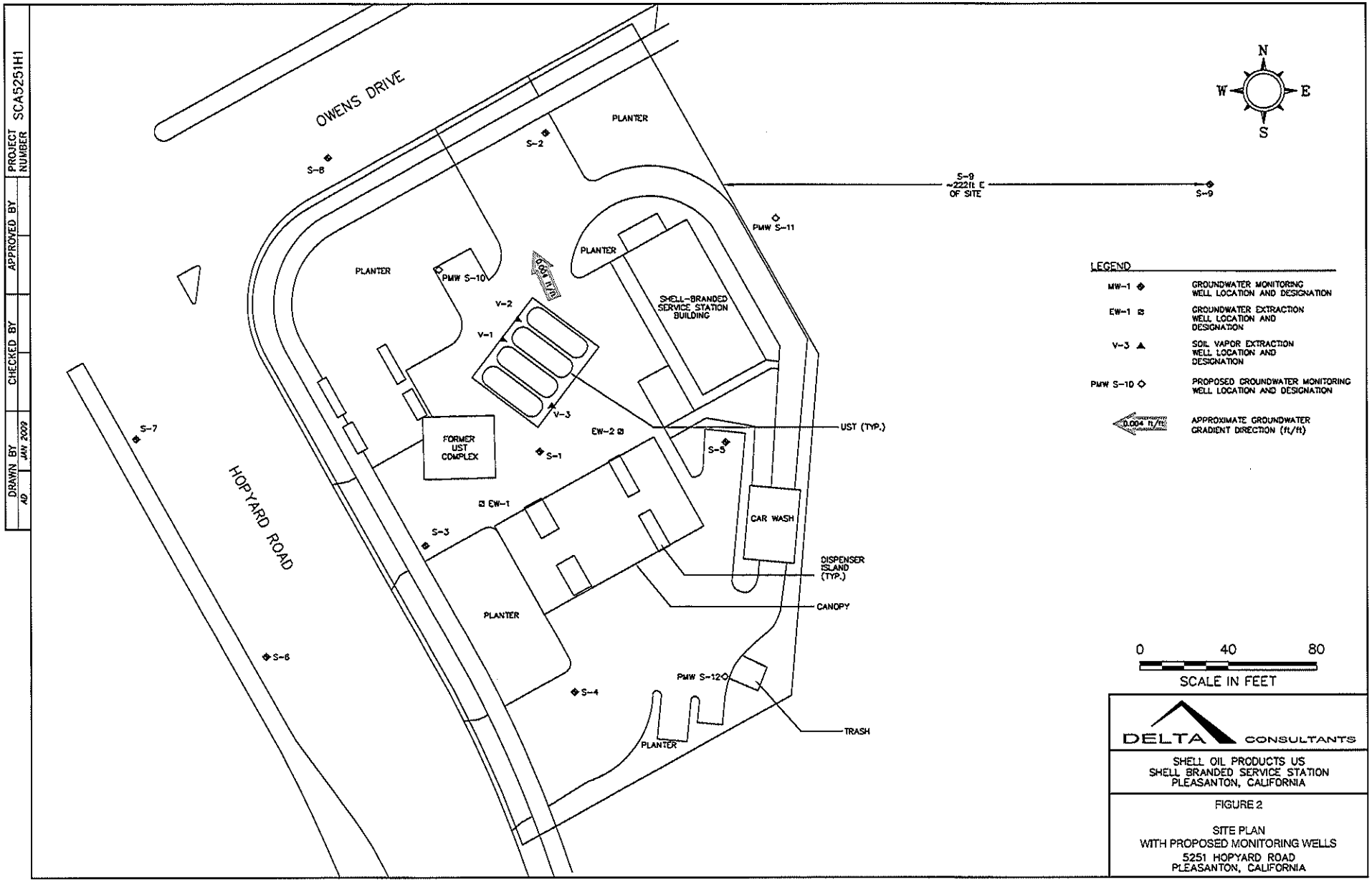
Proposed Well **Soil Profile**

FIGURE 1
TYPICAL WELL DETAILS

5251 Hopyard Road
Dublin, California

PROJECT NO. SJ5251H-1	DRAWN BY JL 07/07/05
FILE NO. SJ5251H-1	PREPARED BY HB
REVISION NO. 1	REVIEWED BY

Delta
Environmental
Consultants, Inc.


PROJECT NUMBER SCA5251H1
APPROVED BY
CHECKED BY
DRAWN BY AD JAN 2009
OWENS DRIVE
HOPYARD ROAD
PLANTER
S-2
S-8
S-9
~2221ft E OF SITE
S-9
PMW S-11
PMW S-10
0.004 ft/ft
V-2
V-1
V-3
SHELL-BRANDED SERVICE STATION BUILDING
FORMER UST COMPLEX
EW-2
EW-1
S-1
S-5
UST (TYP.)
CAR WASH
DISPENSER ISLAND (TYP.)
CANOPY
S-3
S-7
S-6
S-4
PMW S-12
TRASH
N
W
E
S
LEGEND
MW-1 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
EW-1 GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
V-3 SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
PMW S-10 PROPOSED GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
0.004 ft/ft APPROXIMATE GROUNDWATER GRADIENT DIRECTION (ft/ft)
0
40
80
SCALE IN FEET
DELTA CONSULTANTS
SHELL OIL PRODUCTS US
SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA
FIGURE 2
SITE PLAN
WITH PROPOSED MONITORING WELLS
5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

July 19, 2005

Mr. and Mrs. George and Luna Dai
27073 Horseshoe Lane
Los Altos Hills, CA

Re: Request for Access to Property Located at
5900 Owens Drive
Pleasanton, California

Dear Property Owner:

As a result of an ongoing environmental assessment at the Shell-branded service station located at **5251 Hopyard Road, Pleasanton, California**, Shell Oil Products US (Shell) has been advised that there may be hydrocarbons (gasoline, oil, etc.) in or about your property located at **5900 Owens Drive, Pleasanton, California** in the vicinity of the service station. Therefore, on behalf of Shell, we request permission to enter your property and perform the work outlined below to determine if hydrocarbons originating from the Shell-branded service station are present and remediate such hydrocarbons as may be required by applicable law.

The work to be performed may include the installation of monitoring well(s) and periodic monitoring of such wells, tests, inspections, borings, engineering studies, surveys, appraisals, environmental studies, remediation operations and/or other activities that Shell deems necessary to comply with all applicable federal, state and local statutes, regulations, ordinances, directives, orders and standards governing underground storage tank systems and the assessment or remediation of petroleum hydrocarbons. Any monitoring wells we install will be capped at grade level per the attached typical installation drawing (Figure 1). **Currently, two (2) small diameter, adjacent soil borings are proposed at the location indicated on the attached site map (Figure 2).**

A licensed contractor retained by Shell will perform the above work. This work is being performed on behalf of Shell to comply with the environmental requirements of the State of California.

The work may result in minor disruptions of the normal use of your property. The property will be restored to its approximate former condition as soon as possible after we have ascertained if hydrocarbons from the Shell-branded service station are present and, to the extent required, such hydrocarbons have been remediated. Shell agrees to defend indemnify, and hold harmless you and your partners, officers, employees and other representatives from any and all claims by third parties arising out of the contamination or the work performed by Shell under this agreement.

Please sign both copies of this letter to signify your consent, and return one signed copy with the attachments to Delta in the enclosed stamped envelope. Please keep the other copy for your files.

We appreciate your cooperation in this matter and would appreciate your timely response. If you have any questions, please call Lee Dooley of Delta Environmental Consultants, Inc. at (408) 224-4724.

Very truly yours,

SHELL OIL PRODUCTS US

By: _____
Denis Brown, Environmental Engineer

The undersigned has reviewed your request and hereby consents to the entry by Shell Oil Products US upon its property for the purpose of performing the work described herein. The undersigned understands that it may be prevented from using a portion of its property and agrees to the minor disruption of the normal use of the premises as described.

The undersigned further represents and warrants that it is the owner of the property located at 5900 Owens Drive, Pleasanton, California, with full authority to provide the consent given above.

George and Luna Dai
27073 Horseshoe Lane
Los Altos Hills, CA 94022

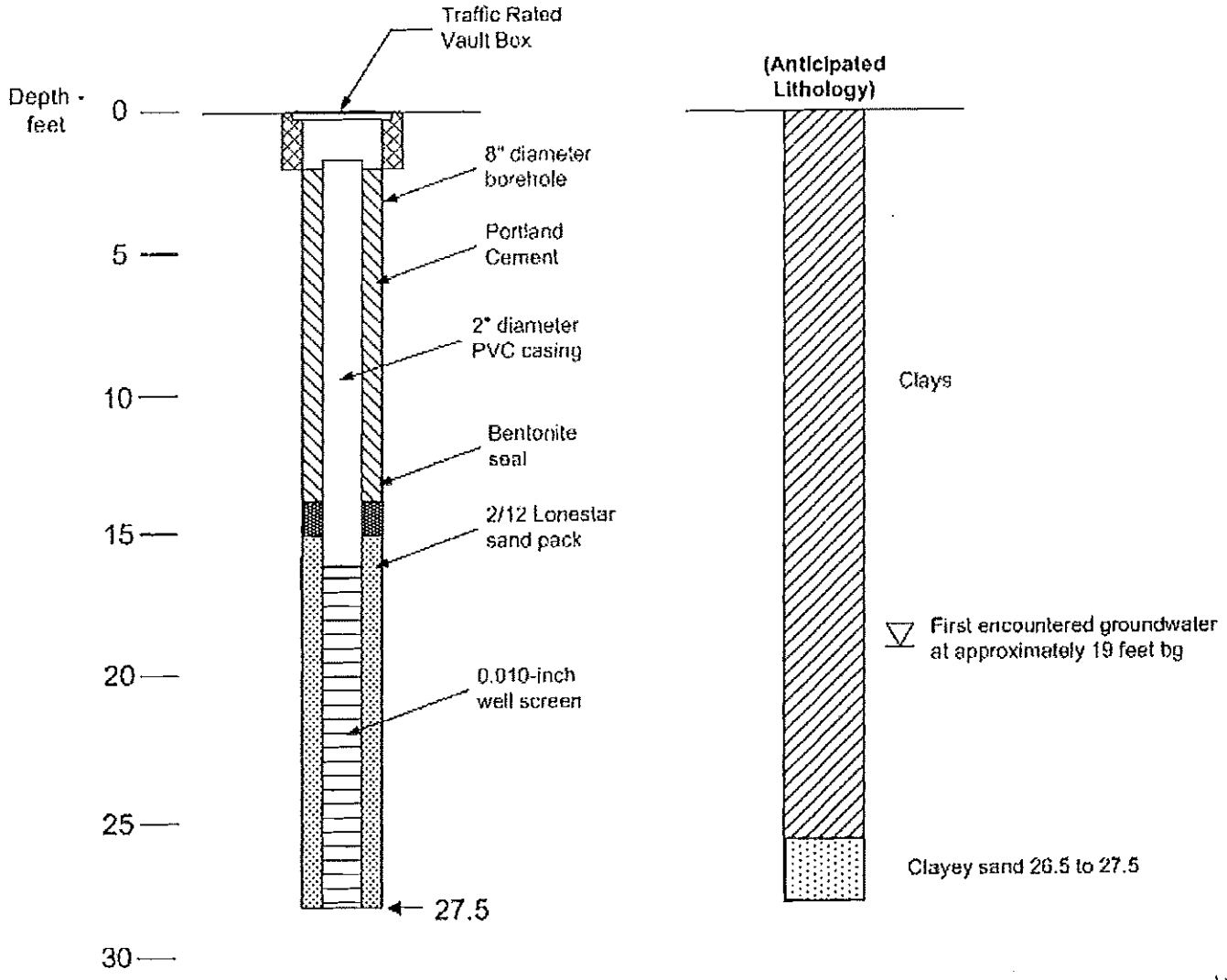
By George or Luna Dai

By: _____

Date: _____

Attachments (2):

Figure 1 – Typical Well Details
Figure 2 – Site Map (showing Proposed Soil Boring Location)



Proposed Well

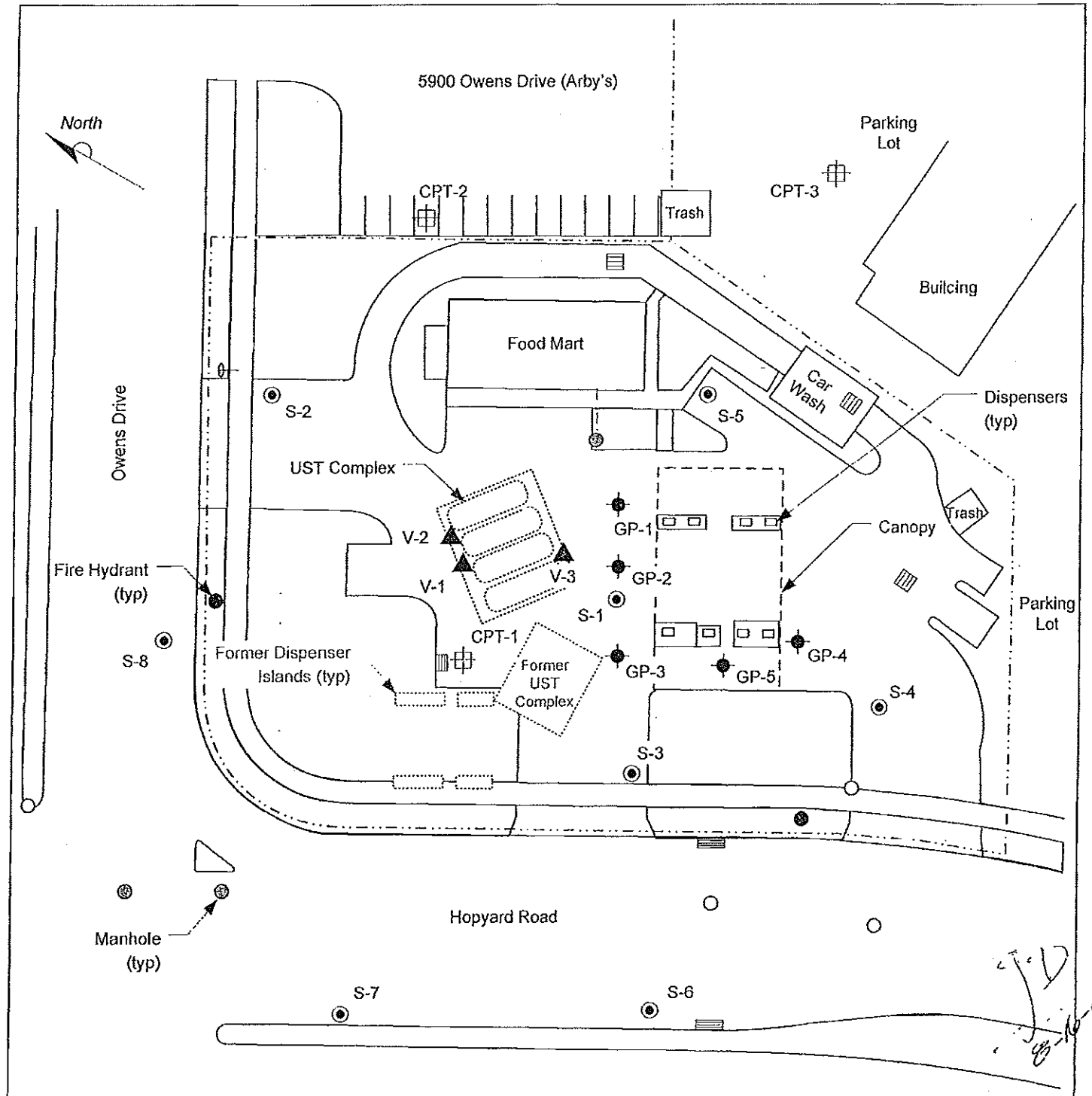
Soil Profile

FIGURE 1
TYPICAL WELL DETAILS

5251 Hopyard Road
Dublin, California

PROJECT NO. SJ5251H-1	DRAWN BY JL 07/07/05
FILE NO. SJ5251H-1	PREPARED BY HB
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



LEGEND

- S-1 — **GROUNDWATER MONITORING WELL**
- V-3 — **SOIL VAPOR EXTRACTION WELL**
- GP-2 — **PROPOSED SOIL BORING**
- CPT-1 — **PROPOSED CPT BORING AND SAMPLING LOCATION**

0 50 FT

APPROX. SCALE

FIGURE # 2

SITE MAP

SHELL-BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

PROJECT NO. SJ52-51H-1.2005	DRAWN BY V. F. 3/30/05
FILE NO. SJ52-51H-1.2005	PREPARED BY V.F.
REVISION NO. 3	REVIEWED BY

Delta Environmental Consultants, Inc

APPENDIX B

BORING LOGS
AND FIELD DATA SHEETS

Delta
Consultants

Project No:	SCA5251H1A	Client:	Shell	Well No: S-10
Logged By:	Cora Olson	Location:	5251 Hopyard Rd.; Pleasanton	Page 1 of 1
Driller:	RSI	Date Drilled:	6/19/2009	
Drilling Method:	Hollow Stem Auger	Boring Diameter:	8"	
Sampling Method:	Direct Push	Boring Depth:	20'	
Casing Type:	Sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.02"	Well Depth:	20'	
Sand Pack:	# 2/12	Screened Interval:	6' - 20 '	
Elevation		Latitude		Longitude

Location Map

Please see site map

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Interval	Sample: Recovery (%)	Soil Type	LITHOLOGY / DESCRIPTION
							1.0				No Recovery - Airknife to 8'
							2.0				
							3.0				
							4.0				
							5.0				
							6.0				
							7.0				
							8.0				
			▽	wet	0.7			X	100		**CL -** Clay, grey/brown, medium to high plasticity, wet,
							9.0	X			
							10.0	X			
							11.0	X			
							12.0	X			
								X	100		
							13.0	X			
							14.0	X			
							15.0	X			
				wet	0.9		16.0				**CL -** Clay, grey/brown, medium to high plasticity, wet
							17.0	X	100		
							18.0	X			
							19.0	X			
				damp	0.6		**20.0**	X			**CL -** Clay, grey/brown, medium to high plasticity, damp

Legend

- Sand Pack
- Bentonite
- Cement Grout
- Screen
- SP - Poorly Graded Sand
- CL - Clay
- ML - Silt

Delta
Consultants

Project No:	SCA5251H1A	Client:	Shell	Well No: S-11
Logged By:	Cora Olson	Location:	5251 Hopyard Rd.; Pleasanton	Page 1 of 1
Driller:	RSI	Date Drilled:	6/18/2009	
Drilling Method:	Hollow Stem Auger	Boring Diameter:	8"	
Sampling Method:	Direct Push	Boring Depth:	20'	
Casing Type:	Sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.02"	Well Depth:	20'	
Sand Pack:	# 2/12	Screened Interval:	6' - 20 '	
Elevation		Latitude		Longitude

Location Map

Please see site map

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Interval	Sample: Recovery (%)	Soil Type	LITHOLOGY / DESCRIPTION
							1.0				No Recovery - Airknife to 8'
							2.0				
							3.0				
							4.0				
							5.0				
							6.0				
							7.0				
							8.0				
				damp	0.0			X	100		**CL -** Clay,/brown, grey staining, medium to high plasticity, damp
							9.0	X			
							10.0	X			
							11.0	X			
								X			
							12.0	X			
								X	100		
							13.0	X			
								X			
							14.0	X			
								X			
							15.0	X			
				damp	0.0						(same as above) , damp
							16.0	X	100		
							17.0	X			
								X			
							18.0	X			
								X			
							19.0	X			
				damp	0.1		**20.0**				(same as above) , damp

Legend

- Sand Pack
- Bentonite
- Cement Grout
- Screen
- SP - Poorly Graded Sand
- CL - Clay
- ML - Silt

Delta Consultants

Project No:	SCA5251H1A	Client:	Shell	Well No: S-12
Logged By:	Cora Olson	Location:	5251 Hopyard Rd.; Pleasanton	Page 1 of 1
Driller:	RSI	Date Drilled:	6/18/2009	
Drilling Method:	Hollow Stem Auger	Boring Diameter:	8"	
Sampling Method:	Direct Push	Boring Depth:	20'	
Casing Type:	Sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.02"	Well Depth:	20'	
Sand Pack:	# 2/12	Screened Interval:	6' - 20 '	
Elevation		Latitude		Longitude

Location Map

Please see site map

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Interval	Sample: Recovery (%)	Soil Type	LITHOLOGY / DESCRIPTION
							1.0				No Recovery - Airknife to 8'
							2.0				
							3.0				
							4.0				
							5.0				
							6.0				
							7.0				
							8.0				
				damp	1.1			X	100		**CL -** Clay, grey/brown, medium to high plasticity, damp
							9.0	X			
							10.0				
							11.0	X			
							12.0	X	100		
							13.0	X			
							14.0	X			
							15.0	X			
				damp	0.2		16.0				**CL -** Clay, grey/brown, medium to high plasticity, grey streaking, damp
							17.0	X	100		
							18.0	X			
							19.0	X			
				damp	0.1		**20.0**				(same as above)

Legend

- Sand Pack
- Bentonite
- Cement Grout
- Screen
- SP - Poorly Graded Sand
- CL - Clay
- ML - Silt

Job Cle[illegible]ce Form

CONTACTOR INSTRU[illegible]ONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign bottom of this fo[illegible] 2. Inform dealer, manager, or site representative of the job to be performed and potential safety concerns and [illegible]n signature

Station #	Station Address: 5251 Hayward			Work Order Number:			Date: 6/8/09		
Contractor Company Name: Delta		Contractor person in charge (print name): Carr Olson	Number of Workers: 1	JSA Reference Number:	Start Time: 6:30	End Time:	Labor:	Travel Time:	Travel Distance:

Problem/Work Description: Site Mark

Return Call: yes / no
Damage Claim: yes / no

PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE)

☐ SAFETY VEST ☐ HARD HAT ☐ SHOES & BOOTS ☐ HEARING PROTECTION ☐ RESPIRATOR
☐ PROTECTIVE CLOTHING ☐ GLOVES ☐ SAFETY GLASSES/GOGGLES ☐ WELDING PPE ☐ OTHER:

Contractor to complete the section below if circumstances, either on-site or specific to this job, may generate additional hazards that are not described in the JSA

TASK STEP	Hazards not covered by JSA	How to reduce or eliminate risk-PPE to be Worn

WORK DOCUMENTATION REQUIREMENTS: Lower Risk - no JSA required Medium Risk / Higher Risk - JSA required Higher Risk - JSA required & appropriate checklist completed (see below)

Examples of Higher / Medium risk tasks:

☐ Work at heights: in all cases on open sites - on closed sites if no JSA present
☐ Trenching or excavation related to underground tank / product line
☐ Heavy lifting
☐ Work in confined spaces (e.g. tank, interceptor or deep manhole entry)
☐ Hot work with risk of product or vapor ignition
☐ LPG system degassing, installation or maintenance

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified

SIGN IN

Operating sites: to be signed by the Site Representative
Non-operating sites: to be signed by the Contractor Representative only

Contractor representative name	Signature
Carr Olson	Carr Olson

GENERAL SAFETY CHECKS

- Have all site personnel been informed? Y
- Has fuel delivery service been informed? Y
- Is a fuel delivery due? N/A
- Have isolation procedures been agreed - lock out/tag out? Y
- Are work areas cordoned off to protect workers, site staff & public? Y

Other

Site Representative Name	Signature
Julio Leon	Julio Leon

SIGN OUT

Contractor signature: Carr Olson

GENERAL SAFETY CHECKS

- Has the work area been left tidy and safe? Y
- Are site personnel aware of status of work including remaining isolation? Y
- Are changes to equipment documented and communicated? Y

Other

Site Representative Name	Signature
Julio Leon	Julio Leon

PARTS - Ordered, replaced, and/or disposed of (include model and serial #'s as appropriate)

The contractor, through is authorized representative, shall sign, issue, and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.

Job Clea[illegible]ce Form

CONTACTOR INSTRU[illegible]ONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign bottom of this fo[illegible] 2. Inform dealer, manager, or site representative of the job to be performed and potential safety concerns and [illegible] signature.

Station #	Station Address:	Work Order Number:	Date:
	5251 Hopyard Rd; Pleasanton	SCA525IH1A	6/10/09

Contractor Company Name:	Contractor person in charge (print name):	Number of Workers:	JSA Reference Number:	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:
Delta	Cora Olsen	2		8:55				

Problem/Work Description: Utility Locate

Return Call: yes / no
Damage Claim: yes / no

PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE)

- ☑ SAFETY VEST
- ☑ HARD HAT
- ☑ SHOES & BOOTS
- ☐ HEARING PROTECTION
- ☐ RESPIRATOR
- ☑ PROTECTIVE CLOTHING
- ☑ GLOVES
- ☐ SAFETY GLASSES/GOGGLES
- ☐ WELDING PPE
- ☐ OTHER:

Contractor to complete the section below if circumstances, either on-site or specific to this job, may generate additional hazards that are not described in the JSA

TASK STEP	Hazards not covered by JSA	How to reduce or eliminate risk - PPE to be Worn

WORK DOCUMENTATION REQUIREMENTS: **Lower Risk** - no JSA required **Medium Risk / Higher Risk** - JSA required **Higher Risk** - JSA required & appropriate checklist completed (see below)

Examples of Higher / Medium risk tasks:

- ☐ Work at heights: in all cases on open sites - on closed sites if no JSA present
- ☐ Trenching or excavation related to underground tank / product line
- ☐ Heavy lifting
- ☐ Work in confined spaces (e.g. tank, interceptor or deep manhole entry)
- ☐ Hot work with risk of product or vapor ignition
- ☐ LPG system degassing, installation or maintenance

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified

SIGN IN

Operating sites: to be signed by the Site Representative
Non-operating sites: to be signed by the Contractor Representative only

Contractor representative name	Signature
[signature]	Cora Olsen

GENERAL SAFETY CHECKS

- Have all site personnel been informed? Y
- Has fuel delivery service been informed? Y
- Is a fuel delivery due? NA
- Have isolation procedures been agreed - lock out/tag out? NA
- Are work areas cordoned off to protect workers, site staff & public? NA

Other

Site Representative Name	Signature
[signature]	MOHSIN

SIGN OUT

GENERAL SAFETY CHECKS

- Has the work area been left tidy and safe? Y
- Are site personnel aware of status of work including remaining isolation? Y
- Are changes to equipment documented and communicated?

Other

Contractor signature
[signature]

Site Representative Name	Signature
A. RAJAN	[signature]

PARTS - Ordered, replaced, and/or disposed of (include model and serial #'s as appropriate)

The contractor, through is authorized representative, shall sign, issue, and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.

2/27/2009

Job Clea[hole punch]ce Form

CONTACTOR INSTRU[hole punch]ONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign bottom of this fo[hole punch] 2. Inform dealer, manager, or site representative of the job to be performed and potential safety concerns and [hole punch] signature

Station #	Station Address:	Work Order Number:	Date:
	5251 Hopyard Rd; Pleasanton, CA	SCA5251H1A	6/16/09

Contractor Company Name:	Contractor person in charge (print name):	Number of Workers:	JSA Reference Number:	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:
Delta	Cory Olsen			7:30				

Problem/Work Description:
Arkinthus
Drilling and well installations

Return Call: yes / no
Damage Claim: yes / no

PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE)

- ☑ SAFETY VEST
- ☑ HARD HAT
- ☑ SHOES & BOOTS
- ☑ HEARING PROTECTION
- ☐ RESPIRATOR
- ☑ PROTECTIVE CLOTHING
- ☑ GLOVES
- ☑ SAFETY GLASSES/GOGGLES
- ☐ WELDING PPE
- ☐ OTHER:

Contractor to complete the section below if circumstances, either on-site or specific to this job, may generate additional hazards that are not described in the JSA

TASK STEP	Hazards not covered by JSA	How to reduce or eliminate risk - PPE to be Worn

WORK DOCUMENTATION REQUIREMENTS: **Lower Risk** - no JSA required **Medium Risk / Higher Risk** - JSA required **Higher Risk** - JSA required & appropriate checklist completed (see below)

Examples of Higher / Medium risk tasks:

- ☐ Work at heights: in all cases on open sites - on closed sites if no JSA present
- ☐ Trenching or excavation related to underground tank / product line
- ☐ Heavy lifting
- ☐ Work in confined spaces (e.g. tank, interceptor or deep manhole entry)
- ☐ Hot work with risk of product or vapor ignition
- ☐ LPG system degassing, installation or maintenance

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified

SIGN IN

Operating sites: to be signed by the Site Representative
Non-operating sites: to be signed by the Contractor Representative only

Contractor representative name	Signature
[signature]	Cory Olsen

GENERAL SAFETY CHECKS

- Have all site personnel been informed? Y
- Has fuel delivery service been informed? Y
- Is a fuel delivery due? Y
- Have isolation procedures been agreed - lock out/tag out? Y
- Are work areas cordoned off to protect workers, site staff & public? Y

Site Representative Name	Signature
MOHSIN.	[signature]

SIGN OUT

Contractor signature
[signature]

GENERAL SAFETY CHECKS

- Has the work area been left tidy and safe? Y
- Are site personnel aware of status of work including remaining isolation? Y
- Are changes to equipment documented and communicated?

Site Representative Name	Signature
	[signature]

PARTS - Ordered, replaced, and/or disposed of (include model and serial #'s as appropriate)

The contractor, through is authorized representative, shall sign, issue, and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.

2/27/2009

Job Clea[hole]ce Form

CONTACTOR INSTRU[hole]ONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign bottom of this fo[hole] 2. Inform dealer, manager, or site representative of the job to be performed and potential safety concerns and [hole] signature

Station #	Station Address: 5251 Hopyard Rd; Pleasanton		Work Order Number: SCA5251H1A1			Date: 6/17/09		
Contractor Company Name: Delta	Contractor person in charge (print name): Cora Olson	Number of Workers:	JSA Reference Number:	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:

Problem/Work Description: Airknifing

Return Call: yes / no
Damage Claim: yes / no

PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE

- [x] SAFETY VEST
- [ ] HARD HAT
- [ ] SHOES & BOOTS
- [ ] HEARING PROTECTION
- [ ] RESPIRATOR
- [ ] PROTECTIVE CLOTHING
- [x] GLOVES
- [x] SAFETY GLASSES/GOGGLES
- [ ] WELDING PPE
- [ ] OTHER:

Contractor to complete the section below if circumstances, either on-site or specific to this job, may generate additional hazards that are not described in the JSA

TASK STEP	Hazards not covered by JSA	How to reduce or eliminate risk - PPE to be Worn

WORK DOCUMENTATION REQUIREMENTS: **Lower Risk** - no JSA required **Medium Risk / Higher Risk** - JSA required **Higher Risk** - JSA required & appropriate checklist completed (see below)

Examples of Higher / Medium risk tasks:

- [ ] Work at heights: in all cases on open sites - on closed sites if no JSA present
- [ ] Trenching or excavation related to underground tank / product line
- [ ] Heavy lifting
- [ ] Work in confined spaces (e.g. tank, interceptor or deep manhole entry)
- [ ] Hot work with risk of product or vapor ignition
- [ ] LPG system degassing, installation or maintenance

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified

SIGN IN

Operating sites: to be signed by the Site Representative
Non-operating sites: to be signed by the Contractor Representative only

Contractor representative name	Signature
Cora Olson	[signature]

Site Representative Name	Signature
Julio Lopez	[signature]

GENERAL SAFETY CHECKS

- Have all site personnel been informed?
- Has fuel delivery service been informed?
- Is a fuel delivery due?
- Have isolation procedures been agreed - lock out/tag out?
- Are work areas cordoned off to protect workers, site staff & public?
- Other

SIGN OUT

Contractor signature
[signature]

GENERAL SAFETY CHECKS

- Has the work area been left tidy and safe?
- Are site personnel aware of status of work including remaining isolation?
- Are changes to equipment documented and communicated?
- Other

Site Representative Name	Signature

PARTS - Ordered, replaced, and/or disposed of (include model and serial #'s as appropriate)

The contractor, through is authorized representative, shall sign, issue, and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.

2/27/2009

Job Clea[hole]ce Form

CONTACTOR INSTRU[hole]ONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign bottom of this fo[hole] 2. Inform dealer, manager, or site representative of the job to be performed and potential safety concerns and [hole] signature

Station #	Station Address: 5251 Hopyard Rd; Pleasanton	Work Order Number: SCA5251HJA	Date: 6/18/09

Contractor Company Name: Delta	Contractor person in charge (print name): Cora Olson	Number of Workers: 4	JSA Reference Number:	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:

Problem/Work Description: Install 3 Monitoring wells

Return Call: yes / no
Damage Claim: yes / no

PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE

- [x] SAFETY VEST
- [x] HARD HAT
- [x] SHOES & BOOTS
- [x] HEARING PROTECTION
- [ ] RESPIRATOR
- [x] PROTECTIVE CLOTHING
- [x] GLOVES
- [x] SAFETY GLASSES/GOGGLES
- [ ] WELDING PPE
- [ ] OTHER:

Contractor to complete the section below if circumstances at their on-site or specific to this job may generate additional hazards to what not described in the JSA

TASK STEP	Hazards not covered by JSA	How to reduce or eliminate risk -PPE to be Worn

WORK DOCUMENTATION REQUIREMENTS: **Lower Risk** - no JSA required **Medium Risk / Higher Risk** - JSA required **Higher Risk** - JSA required & appropriate checklist completed (see below)

Examples of Higher / Medium risk tasks:

- [ ] Work at heights: in all cases on open sites - on closed sites if no JSA present
- [ ] Trenching or excavation related to underground tank / product line
- [ ] Heavy lifting
- [ ] Work in confined spaces (e.g. tank, interceptor or deep manhole entry)
- [ ] Hot work with risk of product or vapor ignition
- [ ] LPG system degassing, installation or maintenance

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified

SIGN IN

Operating sites: to be signed by the Site Representative
Non-operating sites: to be signed by the Contractor Representative only

Contractor representative name	Signature
[signature]	Cora Olson

GENERAL SAFETY CHECKS

- Have all site personnel been informed?
- Has fuel delivery service been informed?
- Is a fuel delivery due?
- Have isolation procedures been agreed - lock out/tag out?
- Are work areas cordoned off to protect workers, site staff & public?

Site Representative Name	Signature
Julio Leon	Julio Leon

SIGN OUT

GENERAL SAFETY CHECKS

- Has the work area been left tidy and safe?
- Are site personnel aware of status of work including remaining isolation?
- Are changes to equipment documented and communicated?

Other?

Contractor Signature
[signature]

Site Representative Name	Signature

PARTS - Ordered, replaced, and/or disposed of (include model and serial #'s as appropriate)

The contractor, through is authorized representative, shall sign, issue, and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.

2/27/2009

Job Cle[hole]ce Form

CONTACTOR INSTRU[hole]ONS PRIOR TO START OF WORK: 1. Review form, check appropriate boxes, read and sign bottom of this fo[hole] 2. Inform dealer, manager, or site representative of the job to be performed and potential safety concerns anc[hole] signature

Station #	Station Address:	Work Order Number:	Date:
	5251 Hopyard Rd	SCA5251HA1A	6/19/09

Contractor Company Name:	Contractor person in charge (print name):	Number of Workers:	JSA Reference Number:	Start Time:	End Time:	Labor:	Travel Time:	Travel Distance:
Delta	Cora Olsen	4						

Problem/Work Description:
1 Well Install

Return Call: yes / no
Damage Claim: yes / no

PPE REQUIRED (CHECK AND/OR FILL BLANK SPACE

- ☑ SAFETY VEST
- ☑ HARD HAT
- ☑ SHOES & BOOTS
- ☑ HEARING PROTECTION
- ☐ RESPIRATOR
- ☑ PROTECTIVE CLOTHING
- ☑ GLOVES
- ☑ SAFETY GLASSES/GOGGLES
- ☐ WELDING PPE
- ☐ OTHER:

Contractor to complete the section below if circumstances, either on-site or specific to this job, may generate additional hazards that are not described in the JSA

TASK STEP	Hazards not covered by JSA	How to reduce or eliminate risk -PPE to be Worn

WORK DOCUMENTATION REQUIREMENTS: Lower Risk - no JSA required Medium Risk / Higher Risk - JSA required Higher Risk - JSA required & appropriate checklist completed (see below)

Examples of Higher / Medium risk tasks:

- ☐ Work at heights: in all cases on open sites - on closed sites if no JSA present
- ☐ Trenching or excavation related to underground tank / product line
- ☐ Heavy lifting
- ☐ Work in confined spaces (e.g. tank, interceptor or deep manhole entry)
- ☐ Hot work with risk of product or vapor ignition
- ☐ LPG system degassing, installation or maintenance

This form must be completed for each job and updated and re-signed if circumstances change or additional hazards identified

SIGN IN

Operating sites: to be signed by the Site Representative
Non-operating sites: to be signed by the Contractor Representative only

GENERAL SAFETY CHECKS

- Have all site personnel been informed?
- Has fuel delivery service been informed?
- Is a fuel delivery due?
- Have isolation procedures been agreed - lock out/tag out?
- Are work areas cordoned off to protect workers, site staff & public?

Other?

Contractor representative name	Signature
Cora Olsen	[signature]

Site Representative Name	Signature
Julio Leon	Julio Leon

SIGN OUT

GENERAL SAFETY CHECKS

- Has the work area been left tidy and safe?
- Are site personnel aware of status of work including remaining isolation?
- Are changes to equipment documented and communicated?

Other?

Contractor signature: [signature]

Site Representative Name	Signature
MOHSIN.	[signature]

PARTS - Ordered, replaced, and/or disposed of (include model and serial #'s as appropriate)

The contractor, through is authorized representative, shall sign, issue, and be solely responsible for all job clearance forms and the obligations arising there under applicable to the work.

2/27/2009

DELTA

FIELD WORK LOG

CLIENT: Shell JOB NO. SCA5251HA

PERSONNEL: Cora Olson, ~~RSI~~ RSI DATE: 6/16/09

TIME	NOTES/OBSERVATIONS
7:30	Arrive on site
	Site walk + ~~setup~~ HSM
8:30	Begin Setup
9:15	Ugccom not working
	Call Suzanne about "Stop work"
9:40	Denis Brown arrived
10:00	Suzanne arrived on site
11:00	Denis + Suzanne leave site
11:45	Call off work because Hertz tech can not fix
12:15	Leave site.

SIGNATURE: _____ DATE: _____ PAGE ____ OF ____

DELTA

FIELD WORK LOG

CLIENT: Shell JOB NO. SCA 52511-1A

PERSONNEL: Cory Olsen, RSI DATE: 6/16/09

17 CEO

TIME	NOTES/OBSERVATIONS
~~7:30~~	~~Arrive on site~~ CEO 6-17-09
7:00	Arrive on site HSM + Setup
7:30	Begin work on S-11
	. Waiting for AIR compressor that had flat tire
8:30	AIR Compressor arrives
9:30	Difficulty with hose clogging w/clay @ 5.5'
10:30	Get to 8' in S-11
	Cleanup + Move to S-12
11:00	Begin work on S-12
12:30	Finish S-12 to 8'
12:40	Lunch
1:20	Fuel delivery
1:45	Begin AK on S-10
3:27	Finish S-10 to 8'
3:40	Start Cleanout at Vac truck
5:00	Finish Cleanup - do paperwork
5:30	Leave site

SIGNATURE: [signature] DATE: 6/17/09 PAGE ___ OF ___

DELTA

FIELD WORK LOG

CLIENT: Shell JOB NO. SCAS2S1 H1A

PERSONNEL: Cora Olsen, RSI DATE: 6/18/09

TIME	NOTES/OBSERVATIONS
7:00	Arrive onsite
7:15	RSI Arrive
7:30	HSM
8:20	Begin setup
9:00	Begin Sampling of S-11
9:30	Consult Suzanne + rich to see if we should go past 20'
9:40	Begin drilling w/Augers
10:15	Begin well Install
11:00	Decon Augers + finish well.
12:00	Break for Porch fuel delivery
12:30	Move drums + grout S-11 ? Wait for cnr wash to clear out
13:20	Move to S-12 and begin sampling
14:05	Begin to drill S-12 w/Augers
15:00	Begin well Install on S-12
15:45	Begin decon of Augers + Cleanup
16:45	Begin concreting well box
17:15	Finish Cleanup to leave site.
17:30	Leave site

SIGNATURE: _____ DATE: _____ PAGE ____ OF ____

DELTA

FIELD WORK LOG

CLIENT: Shell JOB NO. SCA5251 1HA

PERSONNEL: Cory Olson, RSF DATE: 6/19/09

TIME	NOTES/OBSERVATIONS
7:00	Arrive on site
7:15	HSM
7:45	Setup
8:00	Begin Drilling on S-10 (Sampling)
8:30	Begin drilling with Augers on S-10
9:45	Begin Well Install
10:30	Cleanup and wait for Bentonite to hydrate
10:45	Pour grout and install well box
11:00	Finish Cleanup of Doon trailer
11:45	Leave Site

SIGNATURE: _____ DATE: _____ PAGE ____ OF ____

DELTA ENVIRONMENTAL CONSULTANTS
DAILY (TAILGATE) HEALTH AND SAFETY BRIEFING LOG

Date: 6/10/09

Start Time: _____

Subjects Reviewed:

✓	Protective Clothing Requirements (hard hat, steel toes, vest, glasses, plugs, & gloves)
	Emergency Procedures (hospital route)
✓	Physical Hazards
	Chemical Hazards
✓	Exclusion Zone (cones with flags 42", caution tape, totally enclosed)
✓	Vehicular Traffic
	Hand Tools
	Other:
	Other:
	Other:

Work to be performed:

Utility Locate by Cruz Brothers

Attendees:

Print Name	Signature
Mike Gil	Mike Gil

Meeting Conducted by: Cora Olson

Name (Site Health and Safety Officer): (same)

Signature: _____

DELTA ENVIRONMENTAL CONSULTANTS
DAILY (TAILGATE) HEALTH AND SAFETY BRIEFING LOG

Date: 10/16/09

Start Time: 7:30

Subjects Reviewed:

✓	Protective Clothing Requirements (hard hat, steel toes, vest, glasses, plugs, & gloves)
✓	Emergency Procedures (hospital route)
✓	Physical Hazards
	Chemical Hazards
✓	Exclusion Zone (cones with flags 42", caution tape, totally enclosed)
✓	Vehicular Traffic
	Hand Tools Site walk + setup
	Other: Saw cut
	Other: Arrknife + Vaccum
	Other: Drum moving, 12 Life saving Rules

Work to be performed:

Arrknife 3 hole + drill

Attendees:

Print Name	Signature
Artemio Villegas	
Ruben Moreno	

Meeting Conducted by: Cora Olson

Name (Site Health and Safety Officer):

Signature:

DELTA ENVIRONMENTAL CONSULTANTS
DAILY (TAILGATE) HEALTH AND SAFETY BRIEFING LOG

Date: 6/17/09

Start Time: _____

Subjects Reviewed:

	Protective Clothing Requirements (hard hat, steel toes, vest, glasses, plugs, & gloves)
	Emergency Procedures (hospital route)
	Physical Hazards
	Chemical Hazards
	Exclusion Zone (cones with flags 42", caution tape, totally enclosed)
	Vehicular Traffic
	Hand Tools
	Other: Site setup, Airknife, ground disturb (vac truck
	Other:
	Other:

Work to be performed:
Airknife 3 holes to 8'

Attendees:

Print Name	Signature
Roberto Villegas	
Ruben Moreno	R. M.

Meeting Conducted by: _____
Name (Site Health and Safety Officer): _____
Signature: _____

DELTA ENVIRONMENTAL CONSULTANTS
DAILY (TAILGATE) HEALTH AND SAFETY BRIEFING LOG

Date: 6/18/09

Start Time: 7:30

Subjects Reviewed:

✓	Protective Clothing Requirements (hard hat, steel toes, vest, glasses, plugs, & gloves)
✓	Emergency Procedures (hospital route)
✓	Physical Hazards
✓	Chemical Hazards
✓	Exclusion Zone (cones with flags 42", caution tape, totally enclosed)
✓	Vehicular Traffic
✓	Hand Tools
✓ JSA	Other: Hollowstem Auger, Well Instn'l
✓	Other: Site setup + walk, Drum Moving
	Other:

Work to be performed:

3 Well Instn'ls

Attendees:

Print Name	Signature

Meeting Conducted by: Lora Olson

Name (Site Health and Safety Officer): (Same)

Signature: Lora Olson

DELTA ENVIRONMENTAL CONSULTANTS
DAILY (TAILGATE) HEALTH AND SAFETY BRIEFING LOG

Date: 6/19/09

Start Time: 7:15

Subjects Reviewed:

	Protective Clothing Requirements (hard hat, steel toes, vest, glasses, plugs, & gloves)
	Emergency Procedures (hospital route)
	Physical Hazards
	Chemical Hazards
	Exclusion Zone (cones with flags 42", caution tape, totally enclosed)
	Vehicular Traffic
	Hand Tools
	Other: JSA: Site walk + setup, decon,
	Other:
	Other:

Work to be performed:

Attendees:

Print Name	Signature
Joan Cervantes	
Juan Muñoz	
Fernando Ambriz	

Meeting Conducted by:

Name (Site Health and Safety Officer):

Signature:

Delta Consultants Job Safety Analysis (JSA)

DELTA
Health Safety Security Environment

Task Description: Utility Locates **Date JSA Developed:** 6/10/09

Name and Address of Worksite: 5251 Hopyard Rd

Project Manager/Site Supervisor: Suzanne McClurkin-Nelson

PPE Required for this Job

- [x] Hard Hat
- [ ] Safety Glasses
- [x] Safety Toe Shoes
- [ ] Hearing Protection
- [x] Hi-Vis Traffic Safety Vest
- [ ] Respirator
- [x] Gloves (specify type): Nitrile/Paint
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Special Considerations

- [ ] Lighting
- [ ] Nearby Activities
- [ ] Simultaneous Operations
- [ ] Weather and Temperature Extremes
- [ ] Time of Day/Night
- [ ] Tight/Crowded Work Space
- [ ] Environmental Sensitivities
- [ ] Automatic Equipment
- [ ] Other:

Required Permits

- [ ] None
- [ ] Confined Space
- [ ] Hot Work
- [ ] Ground Disturbance
- [ ] Working From Heights
- [ ] Other Permit _____

JOB SAFETY ANALYSIS

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Site Walkover/Locate Dig Areas**	Motion- Traffic	Wear reflective safety vest. Be aware of traffic patterns. Set up traffic control. Use buddy system if more than one person. Be aware of other potential activities/work being conducted at site.	Proper PPE not available, or in poor condition. Traffic control equipment inadequate.
		Gravity, Motion- Slip/trip/fall, debris, unsafe surfaces	Inspect/be aware of ground conditions. Clear hazards, if possible.	Debris, hazards cannot be cleared. Ground condition not safe to walk on.
2.	**Locating Utilities/Use of Spray Paint,**	Pressure, Motion- Injuries (hand scrapes, pinch points, back safety)	Proper PPE (leather or synthetic work gloves, hard hat, safety glasses), Use right tools for the job. Use proper lifting techniques. Do not lift over 40 lbs without assistance. Bend at knees, use your legs, do not bend with your back	Proper PPE not available or in poor condition. Right tool for the job not available or in poor condition. Objects too heavy to be lifted safely.
		Biological Hazards	Be aware of potential insect hazards, and take action to avoid contact (long sleeve shirts, insect repellent), Inspect area for potential poisonous plants, and take action to avoid contact (long sleeve shirts, avoid contact w/outer clothing, etc.)	Biological hazards at site cannot be managed to avoid contact

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

12 LIFE SAVING RULES

✓ Work with a valid work permit when required.

X Conduct gas tests when required.

✓ Verify energy isolation before work begins.

X Obtain authorization before entering a confined space.

X Obtain authorization before overriding or disabling critical equipment.

X Protect yourself from fall when working at height.

X Do not walk under a suspended load.

X Do not smoke outside of designated areas.

✓ No alcohol or drugs while working or driving.

✓ While driving, do not use your phone and do not exceed Speed limits.

✓ Wear your seat belt.

✓ Follow prescribed Journey Management Plan.

PLEASE CHECK ALL THAT APPLY

Initials A/. R.M. CEO Company RSI Date 6-16-09

Delta

Delta Consultants Job Safety Analysis (JSA)

DELTA
Health Safety Security Environment

Task Description: Decon Procedures **Date JSA Developed:** 6/16/09

Name and Address of Worksite: 5251 Hopyard; Pleasanton

Project Manager/Site Supervisor: Suzanne McWorkman-Nelson / Lori Olsen

PPE Required for this Job

- [x] Hard Hat
- [x] Safety Glasses
- [ ] Safety Toe Shoes
- [ ] Hearing Protection
- [ ] Hi-Vis Traffic Safety Vest
- [ ] Respirator
- [ ] Gloves (specify type):
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Special Considerations

- [ ] Lighting
- [ ] Nearby Activities
- [ ] Simultaneous Operations
- [ ] Weather and Temperature Extremes
- [ ] Time of Day/Night
- [ ] Tight/Crowded Work Space
- [ ] Environmental Sensitivities
- [ ] Automatic Equipment
- [ ] Other:

Required Permits

- [ ] None
- [ ] Confined Space
- [ ] Hot Work
- [ ] Ground Disturbance
- [ ] Working From Heights
- [ ] Other Permit _____

JOB SAFETY ANALYSIS FOR

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Decon Set-Up**	Motion- Exposure to site traffic	Proper PPE (reflective vest), Identify high traffic areas, Use buddy system if more than one person, and Be aware of other potential activities/work being conducted at site, Set up exclusion zone to include decon	Safe decon location cannot be identified
		Motion, Gravity- Decon unit shifting while disconnecting from equipment	Chalk tire to prevent unit from moving	Unable to chalk tires
2	**Decon Operations**	Pressure- Noise	Hearing Protection must be worn	Hearing PPE not available
		Motion, Gravity- Pinch points and falling objects	Secure equipment, wear hard hat, safety glasses, leather or synthetic work gloves, safety toed boots	Correct PPE not available
		Pressure, Heat/Cold- High pressure water or steam	Proper PPE to include safety face shield and gloves	Correct PPE not available

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

6/16/09 5251 Hopyard Rd.

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction	☐ New ☒ Revised	Date: 9/15/04
Cascade Drilling: Norwalk	Client: General	Loc: Various
Work Type: Environmental	Work Activity: Drilling / Well Installation	

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	CA General Manager	
Scott Campbell	Operations Manager	Vera chapman	SAC Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, lightning).

PROJECT MANAGER: HEALTH & SAFETY DIRECTOR:

❶ Job Steps	❷ Potential Hazard	❸ Critical Actions
		• Perform SPSA before each step
1. Site Walk & Set-up	Vehicle Traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Follow all critical action established on the JSA for "Site Walk and Set-up"
2. Remove asphalt borehole surface patch	Hitting someone with bar pick	• Communicate with co-workers and make sure nobody is in the way • Wear hard hats
	Back strain	• Use proper lifting techniques – stand close to object, bend knees, position one foot to the side of the object if possible, lift head to straighten and arch your back. • Stretch before lifting • Get assistance with heavy or awkward objects • Use appropriate tools such as hand trucks, booms, lift trucks, etc.
3. Mast-up drill rig	Overhead obstructions/ Power lines	• Double-check area for obstructions beforehand • Have a lookout watch while driller moves vehicle or raises mast • Do not move drill rig with mast raised • Keep mast a **minimum** of 15 feet from overhead power lines (20 ft. if 230, 285 kv / 25 ft. if 345 kv / 35 ft if 500 kv) Check with utility company if in doubt
	Uneven surfaces	• Level truck using hydraulic jacks and jack pads if needed
(If drilling at an angle, see JSA for Angle Drilling)		
4. Unload tooling	Strain and sprains	• Buddy system • Proper lifting techniques as listed above under "Back Strain"
5. Drill, Well installation, Collect mples	Pinch points	• Be aware of hazards • Stay away from moving parts and fall from height hazards when possible
	Flying dirt/mud	• Safety Glasses required
	Back strains	• Same precautions as listed above
	Fall from height	• Fall protection required when working 6' off the ground

6/16/04 5251 Hopyard Rd.

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction	☐ New ☒ Revised	Date: 6/1/04
Cascade Drilling: Norwalk, Sacramento, Portland, Seattle	Client: General	Loc: Various
Work Type: Environmental	Work Activity:	Drilling / Air Rotary

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	LA General Manager	
Scott Campbell	Operations Manager	Vera Chapman	SAC Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, lightning).

PROJECT MANAGER: HEALTH & SAFETY DIRECTOR:

❶ Job Steps	❷ Potential Hazard	❸ Critical Actions
1. Site Walk and Set-up	Vehicle traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Follow all critical action established on the JSA for "Site Walk and Set-up"
	High pressure hoses	• Secure air hose connections with whip-checks • Check all hoses for cracks
		•
2. Remove asphalt borehole patch	Hitting someone with pick bar	• Communicate with co-workers and make sure nobody is in the way • Wear hard hats
	Back strain	• Use proper lifting techniques – stand close to object, bend knees, position one foot to the side of the object if possible, lift head to straighten and arch your back. • Stretch before lifting • Get assistance with heavy or awkward objects • Use appropriate tools such as hand trucks, booms, lift trucks, etc.
3. Mast-up drill rig	Overhead obstructions/ Power lines	• Double check area for obstructions beforehand • Have a lookout watch while driller moves vehicle or raises mast • Do not move drill rig with mast raised • Keep mast at least 15 feet from overhead power lines
	Uneven surfaces	• Level truck using hydraulic jacks and jack pads
4. Unload tooling	Strain and sprains	• Buddy system • Proper lifting techniques
	Pinch points from heavy tooling	• Be aware of hazards • Stay away from moving parts • Do not let heavy tooling land on hands or feet • If dropped, do not try to catch or stop with your body
Drill, collect samples	Pinch points	• Be aware of hazards • Stay away from moving parts
	Tripping hazard from the air hoses,	• Watch your step • Side-step over larger items

Delta Consultants Job Safety Analysis (JSA)

DELTA
Health Safety Security Environment

Task Description: Soil Sampling **Date JSA Developed:** 6/16/09

Name and Address of Worksite: 5251 Hopyard Rd, Pleasanton

Project Manager/Site Supervisor: Suzanne McClorkin-Nelson Cox Olsen

PPE Required for this Job

- ☐ Hard Hat
- ☐ Safety Glasses
- ☐ Safety Toe Shoes
- ☐ Hearing Protection
- ☐ Hi-Vis Traffic Safety Vest
- ☐ Respirator
- ☐ Gloves (specify type):
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Special Considerations

- ☐ Lighting
- ☐ Nearby Activities
- ☐ Simultaneous Operations
- ☐ Weather and Temperature Extremes
- ☐ Time of Day/Night
- ☐ Tight/Crowded Work Space
- ☐ Environmental Sensitivities
- ☐ Automatic Equipment
- ☐ Other:

Required Permits

- ☐ None
- ☐ Confined Space
- ☐ Hot Work
- ☐ Ground Disturbance
- ☐ Working From Heights
- ☐ Other Permit _____

JOB SAFETY ANALYSIS

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	STOP Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Mobilization- Loading/unloading vehicle**	Gravity, Motion- Back strain from lifting moving materials	Use two people if needed, use proper lifting techniques, do not lift over 40 lbs	Equipment too heavy to lift safety, correct tools for job not available
		Motion- Hand injuries – pinch points, scrapes	Wear leather or synthetic work gloves, avoid pinch points.	PPE not available
		Motion- Traffic	Wear reflective safety vest, Identify high traffic areas, Set up traffic control. Use buddy system if more than one person, and be aware of other potential activities/work being conducted at site.	Traffic too heavy to work safely, sufficient traffic control not available
		Gravity, Motion- Equipment falling off of vehicle	Use straps or rope, not bungee cords.	Correct equipment not available
		Motion, Heat/Cold- Weather	Wear sunscreen and/or protective clothing when working in intense sunlight, Wear proper clothing to avoid heat/cold stress, Drink plenty of fluids to avoid dehydration. Take breaks as needed.	Weather too dangerous to work in. Workers not properly dressed for weather.
2.	**Site Walkover**	Gravity, Motion- Debris/tripping hazards	Inspect/be aware of ground conditions, Clear hazards, if possible, for icy surfaces- use sand or ice melt for walk/work areas	Walking/working surfaces not safe for workers

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

6/16/09 5251 Hopyard Rd

Job Safety Analysis

A Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction	☐ New ☒ Revised	Date: 9/15/04
Cascade Drilling: Norwalk, Sacramento, Portland, Seattle	Client: General	Loc: Various
Work Type: Environmental	Work Activity: Vacuum Truck Operations & Air-Vac Bore Hole Clearance	

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	LA General Manager	
Scott Campbell	Operations Manager	Vera Chapman	Sac Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, and lightning).

PROJECT MANAGER:		HEALTH & SAFETY DIRECTOR:
Job Steps	Potential Hazard	Critical Actions
		• Perform SPSA before each step
	All hazards listed on Pre-Ground Clearance and Saw Cutting JSA	• Continue following all critical actions listed on Pre-Ground Clearance and Saw Cutting JSA including proper PPE, traffic control, underground and overhead utilities precautions; Slips,Trips&Falls, bio-hazards, fire prevention, emergency reaction, noise, eye hazards, pinch hazards and truck stabilization.
1. Borehole clearance	Flying debris	• Set-up flying debris fencing • Use debris shield • Wear proper PPE to include face shield
	Slips, trips and falls due to hoses on ground and open holes	• Employee awareness and minimizing tripping hazards
	Noise	• Wear hearing protection
	Build-up of flammable vapors	• Use vacuum to remove debris and vapors
	Hitting subsurface structures including underground utilities, tanks, etc.	• Vac holes will be 2" larger in diameter than drilling equipment that is going to be used down the hole. • Use hand-held floodlight to look for utilities and other objects continuously. • Stop operations every 3 to 4 inches to observe down-hole conditions. • Air-knife will not be used as a probing tool or jabbed into the hole. • If any non-native material is discovered the geologist/primary contractor will be informed. Operations will not continue until directed by primary contractor. • When air pressure has met refusal, the primary consultant

6/16/09 5251 Hopyard Rd

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction		☐ New ☒ Revised	Date: 9/15/04
Cascade Drilling: Norwalk, Sacramento, Portland, Seattle		Client: General	Loc: Various
Work Type: Environmental	Work Activity:	Pre-Ground Disturbance & Saw Cut	

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	LA General Manager	
Scott Campbell	Operations Manager	Vera Chapman	Sac Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting. work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, and lightning).

PROJECT MANAGER: HEALTH & SAFETY DIRECTOR:

Job Steps	Potential Hazard	Critical Actions
		• Perform SPSA before each step
All pre-ground disturbance activities to include site walk,set-up,etc.	Station traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Wear proper PPE to include hard hat, safety glasses, traffic vests, safety shoes • Conduct tailgate safety meeting and review this JSA • Wear traffic vest and watch for vehicles • Set up exclusion zone and traffic control per written plan • Make sure the primary contractor has notified the station manager or attendant.
	Underground utilities	• Review utility maps and as-builts • Visual survey for trenches, cuts in asphalt, electrical boxes, manhole covers, water and gas meter locations • Check USA markings / numbers
	Overhead utilities	• Check all overhead locations for cables, wires, canopies and any other overhead obstructions • Keep a **minimum** of 15 feet from overhead power lines (20 ft. if 230, 285 kv / 25 ft. if 345 kv / 35 ft if 500 kv) Check with utility company if in doubt
	Slips, Trips & Falls	• Keep work area free of excess material and debris • Remove all trip hazards by keeping materials/objects organized and out of walkways • Keep work surfaces dry when possible • Wear appropriate PPE including non-slip rubber boots if working on wet or slick surfaces • Install rough work surface covers where possible • Stay aware of footing and do not run
	Insects, snakes, animals, vegetation	• Inspect work areas when arrive at site to identify hazard(s • Use insect repellant as necessary • Stay alert and safe distance away from biological hazards • Wear appropriate PPE including leather gloves, long sleeves

6/16/09 5251 Hopyard Rd

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction | ☐ New ☒ Revised | Date: 9/15/04

Cascade Drilling: Norwalk, Sacramento, Portland, Seattle | Client: General | Loc: Various

Work Type: Environmental | Work Activity: Site Walk and Set-Up

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	LA General Manager	
Scott Campbell	Operations Manager	Vera Chapman	SAC Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, lightning).

PROJECT MANAGER: | HEALTH & SAFETY DIRECTOR:

❶ Job Steps	❷ Potential Hazard	❸ Critical Actions
		• Perform SPSA before each step
1. Site Walk and Set-up	Vehicle traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Wear proper PPE to include hard hat, safety glasses, traffic vest, steel toed shoes, gloves and hearing protection when necessary • Conduct tailgate safety meeting and review this JSA • Watch for vehicles • Set up exclusion zone and traffic control per written plan • Make sure the primary contractor has notified the station attendant
	Slips, Trips & Falls	• Survey area for uneven surfaces and other tripping hazards • Keep work area free of excess material and debris • Remove all trip hazards by keeping materials/objects organized and out of walkways • Keep work surfaces dry when possible • Wear appropriate PPE including non-slip rubber boots if working on wet or slick surfaces • Install rough work surface covers where possible • Stay aware of footing and do not run • Secure drum lids in a safe manner, to prevent sliding into walkway
	Underground utilities	• Review utility maps and as-builts • Visual survey for trenches and cuts in asphalt, electrical boxes, manhole covers, water and gas meter locations • Check utility ground markings (USA, Dig Alert, etc.)
	Overhead utilities	• Check all overhead locations for cables, wires, canopies and any other overhead obstructions • Keep mast a minimum of 15 feet from overhead power lines (20 ft. if 230, 285 kv / 25 ft. if 345 kv / 35 ft if 500 kv) • Check with utility company if in doubt
	Interfering with Handicap Parking/ Access (ADA)	• Make sure client has made accommodations for Handicap Parking/Access • Do not block Handicap Parking/ Access with drill rig, trucks, or work area
	Noise	• Wear hearing protection during use of drill rig
	• Fire/Explosions	• As site conditions/activities warrant, establish Hot Work Permit including air monitoring using direct-reading, real-time instruments such as LEL/O2 meter. (Primary contractor supplies fire permit, fire watch, PID, and LEL

DELTA
Health Safety Security Environment

Delta Consultants Job Safety Analysis (JSA)

Task Description: Drum Moving **Date JSA Developed:** 6/16/04

Name and Address of Worksite: 5251 Hopyard Rd; Pleasanton, CA

Project Manager/Site Supervisor: Suzanne McClaskey-Nelson / Cara Olsen

PPE Required for this Job

- ☐ Hard Hat
- ☐ Safety Glasses
- ☐ Safety Toe Shoes
- ☐ Hearing Protection
- ☐ Hi-Vis Traffic Safety Vest
- ☐ Respirator
- ☐ Gloves (specify type):
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Special Considerations

- ☐ Lighting
- ☐ Nearby Activities
- ☐ Simultaneous Operations
- ☐ Weather and Temperature Extremes
- ☐ Time of Day/Night
- ☐ Tight/Crowded Work Space
- ☐ Environmental Sensitivities
- ☐ Automatic Equipment
- ☐ Other:

Required Permits

- ☐ None
- ☐ Confined Space
- ☐ Hot Work
- ☐ Ground Disturbance
- ☐ Working From Heights
- ☐ Other Permit _____

JOB SAFETY ANALYSIS

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Inspect Drums**	Motion, Gravity- Injuries (hands, back)	Proper PPE for task (cut-resistant gloves - leather or chemical resistant gloves - rubber), Use right tool for the job, proper lifting/bending techniques, do not lift over 40 lbs.	Correct tools not available to do job safely
		Chemical- Regulatory/Environmental (leaking drums)	Identify drums in poor condition (leaks/excessive damage). Overpack prior to transportation. Call for assistance (if needed) to overpack drum. Report to Delta immediately, Verify proper labeling of drum/contents.	Drum leak posses danger to workers, necessary overpack or clean up materials not available.
		Biological	Be aware of potential insect hazards, and take action to avoid contact (long sleeve shirts, insect repellent), Inspect area for potential poisonous plants, and take action to avoid contact (long sleeve shirts,	Contact with biological hazards cannot be prevented, minimized.

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

Delta Consultants Job Safety Analysis (JSA)

JOB SAFETY ANALYSIS				
Step Number	**Sequence of Basic Task Steps** (List the steps required to perform the activity in the sequence they occur)	**Potential Hazards Involved With This Step** (List the energy sources)	**How will the energy be managed? List Control Measures** (Eliminate, Control, Protect)	**Stop Work Triggers for this task?** (We will stop the job if any of these occur)
			is in operation, Ensure that feet are clear of the edge of lift gate where it meets the trailer (pinch point).	
4.	**Securing Load**	Motion- Movable equipment in vehicle	Use straps or rope, NOT bungee cords.	Correct equipment not available
		Motion- Drum shift	Use load locks for drums when vehicle is in motion.	Drums cannot be secured properly
		Motion, Gravity- Transporting drum within vehicle	Transport drums using drum cart to appropriate location, Use steady motion while maneuvering drum cart. Avoid "jerking motions" to reduce strain on body.	Drum cannot be moved safely within vehicle (space too small, awkward, etc.)
		Radiation- Poor lighting conditions	Vehicle inspection/maintenance (lights within vehicle).	Insufficient lighting to move around safely within vehicle
5.	**De-mobilization from site**	Motion, Gravity- Lift Gate	Ensure all safety pins are placed in the side rails.	Lift gate cannot be secured properly
		Notification (as necessary)	Sign out and/or check out with facility as required so your location is known to facility.	

SMN	Simon Neil	6-16-09
Project Manager	Signature	Date

Site Safety Officer	Signature	Date

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

12 LIFE SAVING RULES

✓ Work with a valid work permit when required.

✓ Conduct gas tests when required.

✓ Verify energy isolation before work begins.

X Obtain authorization before entering a confined space.

X Obtain authorization before overriding or disabling critical equipment.

✓ Protect yourself from fall when working at height.

✓ Do not walk under a suspended load.

✓ Do not smoke outside of designated areas.

✓ No alcohol or drugs while working or driving.

✓ While driving, do not use your phone and do not exceed Speed limits.

✓ Wear your seat belt.

✓ Follow prescribed Journey Management Plan.

PLEASE CHECK ALL THAT APPLY

Initials KO Company RSI, Delta Date _____

F.A

J.C

JM

6/1 18 CFC 109

5251 Hopyard Rd

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction	☐ New ☒ Revised	Date: 9/15/04
Cascade Drilling: Norwalk, Sacramento, Portland, Seattle	Client: General	Loc: Various
Work Type: Environmental	Work Activity: Site Walk and Set-Up	

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	LA General Manager	
Scott Campbell	Operations Manager	Vera Chapman	SAC Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, lightning).

PROJECT MANAGER: HEALTH & SAFETY DIRECTOR:

Job Steps	Potential Hazard	Critical Actions
		• Perform SPSA before each step
1. Site Walk and Set-up	Vehicle traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Wear proper PPE to include hard hat, safety glasses, traffic vest, steel toed shoes, gloves and hearing protection when necessary • Conduct tailgate safety meeting and review this JSA • Watch for vehicles. • Set up exclusion zone and traffic control per written plan • Make sure the primary contractor has notified the station attendant
	Slips, Trips & Falls	• Survey area for uneven surfaces and other tripping hazards • Keep work area free of excess material and debris • Remove all trip hazards by keeping materials/objects organized and out of walkways • Keep work surfaces dry when possible • Wear appropriate PPE including non-slip rubber boots if working on wet or slick surfaces • Install rough work surface covers where possible • Stay aware of footing and do not run • Secure drum lids in a safe manner, to prevent sliding into walkway
	Underground utilities	• Review utility maps and as-builts • Visual survey for trenches and cuts in asphalt, electrical boxes, manhole covers, water and gas meter locations • Check utility ground markings (USA, Dig Alert, etc.)
	Overhead utilities	• Check all overhead locations for cables, wires, canopies and any other overhead obstructions • Keep mast a minimum of 15 feet from overhead power lines (20 ft. if 230, 285 kv / 25 ft. if 345 kv / 35 ft if 500 kv) • Check with utility company if in doubt
	Interfering with Handicap Parking/ Access (ADA)	• Make sure client has made accommodations for Handicap Parking/Access • Do not block Handicap Parking/ Access with drill rig, trucks, or work area
	Noise	• Wear hearing protection during use of drill rig
	• Fire/Explosions	• As site conditions/activities warrant, establish Hot Work Permit including air monitoring using direct-reading, real-time instruments such as LEL/O2 meter. (Primary contractor supplies fire permit, fire watch, PID, and LEL

Delta Consultants Job Safety Analysis (JSA)

18

Task Description: Decon Procedures **Date JSA Developed:** 6/17/09

Name and Address of Worksite: 5751 Hopyard Rd; Pleasanton

Project Manager/Site Supervisor: Suzanne McCurtin-Nelson / Cora Olsen

PPE Required for this Job

- ☐ Hard Hat
- ☐ Safety Glasses
- ☐ Safety Toe Shoes
- ☐ Hearing Protection
- ☐ Hi-Vis Traffic Safety Vest
- ☐ Respirator
- ☐ Gloves (specify type):
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Special Considerations

- ☐ Lighting
- ☐ Nearby Activities
- ☐ Simultaneous Operations
- ☐ Weather and Temperature Extremes
- ☐ Time of Day/Night
- ☐ Tight/Crowded Work Space
- ☐ Environmental Sensitivities
- ☐ Automatic Equipment
- ☐ Other:

Required Permits

- ☐ None
- ☐ Confined Space
- ☐ Hot Work
- ☐ Ground Disturbance
- ☐ Working From Heights
- ☐ Other Permit _____

JOB SAFETY ANALYSIS FOR

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	STOP Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Decon Set-Up**	Motion- Exposure to site traffic	Proper PPE (reflective vest), Identify high traffic areas, Use buddy system if more than one person, and Be aware of other potential activities/work being conducted at site, Set up exclusion zone to include decon	Safe decon location cannot be identified
		Motion, Gravity- Decon unit shifting while disconnecting from equipment	Chalk tire to prevent unit from moving	Unable to chalk tires
2	**Decon Operations**	Pressure- Noise	Hearing Protection must be worn	Hearing PPE not available
		Motion, Gravity- Pinch points and falling objects	Secure equipment, wear hard hat, safety glasses, leather or synthetic work gloves, safety toed boots	Correct PPE not available
		Pressure, Heat/Cold- High pressure water or steam	Proper PPE to include safety face shield and gloves	Correct PPE not available

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

6/17/09 18 CFO

5251 Hopyard Rd

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction	☐ New ☒ Revised	Date: 9/15/04
Cascade Drilling: Norwalk	Client: General	Loc: Various
Work Type: Environmental	Work Activity: Drilling / Well Installation	

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	CA General Manager	
Scott Campbell	Operations Manager	Vera chapman	SAC Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, lightning).

PROJECT MANAGER: HEALTH & SAFETY DIRECTOR:

Job Steps	Potential Hazard	Critical Actions
		• Perform SPSA before each step
1. Site Walk & Set-up	Vehicle Traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Follow all critical action established on the JSA for "Site Walk and Set-up"
2. Remove asphalt borehole surface patch	Hitting someone with bar pick	• Communicate with co-workers and make sure nobody is in the way • Wear hard hats
	Back strain	• Use proper lifting techniques – stand close to object, bend knees, position one foot to the side of the object if possible, lift head to straighten and arch your back. • Stretch before lifting • Get assistance with heavy or awkward objects • Use appropriate tools such as hand trucks, booms, lift trucks, etc.
3. Mast-up drill rig	Overhead obstructions/ Power lines	• Double-check area for obstructions beforehand • Have a lookout watch while driller moves vehicle or raises mast • Do not move drill rig with mast raised • Keep mast a minimum of 15 feet from overhead power lines (20 ft. if 230, 285 kv / 25 ft. if 345 kv / 35 ft if 500 kv) Check with utility company if in doubt
	Uneven surfaces	• Level truck using hydraulic jacks and jack pads if needed
(If drilling at an angle, see JSA for Angle Drilling)		
4. Unload tooling	Strain and sprains	• Buddy system • Proper lifting techniques as listed above under "Back Strain"
5.Drill, Well Installation, Collect mples	Pinch points	• Be aware of hazards • Stay away from moving parts and fall from height hazards when possible
	Flying dirt/mud	• Safety Glasses required
	Back strains	• Same precautions as listed above
	Fall from height	• Fall protection required when working 6' off the ground

6/17/09 18CE0

5251 Hopyard Rd

Job Safety Analysis

Type: ☒ SAR Operations ☐ Transport ☐ Office ☐ Construction	☐ New ☒ Revised	Date: 6/1/04
Cascade Drilling: Norwalk, Sacramento, Portland, Seattle	Client: General	Loc: Various
Work Type: Environmental	Work Activity:	Drilling / Air Rotary

Personal Protective Equipment (PPE):

Minimum PPE is Level D including: safety glasses or goggles, hard hat, traffic vest, steel-toed boots, hearing protection, and gloves (type dependent on job-specific requirements)

Additional PPE may be required in the Health & Safety Plan (HASP). Also refer to the HASP for required traffic control, air monitoring, and emergency procedures.

Development Team	Position/Title	Reviewed By	Position/Title	Date
Mike Thomas, CSP	Regional Safety Manager	Dean Coblish	LA Operations Manager	
Shannon Magers	Field Supervisor	Don Kinloch	LA General Manager	
Scott Campbell	Operations Manager	Vera Chapman	SAC Operations Manager	
Kurt Magee	Operations Manager	John Murnane	WA Operations Manager	
			OR Operations Manager	

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). Additionally, a tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Also consider weather conditions (heat, cold, rain, lightning).

PROJECT MANAGER: HEALTH & SAFETY DIRECTOR:

Job Steps	Potential Hazard	Critical Actions
1. Site Walk and Set-up	Vehicle traffic (These hazards will be present in all phases of the job and all precautions will apply for the entire job.)	• Follow all critical action established on the JSA for "Site Walk and Set-up"
	High pressure hoses	• Secure air hose connections with whip-checks • Check all hoses for cracks
		•
2. Remove asphalt borehole patch	Hitting someone with pick bar	• Communicate with co-workers and make sure nobody is in the way • Wear hard hats
	Back strain	• Use proper lifting techniques – stand close to object, bend knees, position one foot to the side of the object if possible, lift head to straighten and arch your back. • Stretch before lifting • Get assistance with heavy or awkward objects • Use appropriate tools such as hand trucks, booms, lift trucks, etc.
3. Mast-up drill rig	Overhead obstructions/ Power lines	• Double check area for obstructions beforehand • Have a lookout watch while driller moves vehicle or raises mast • Do not move drill rig with mast raised • Keep mast at least 15 feet from overhead power lines
	Uneven surfaces	• Level truck using hydraulic jacks and jack pads
4. Unload tooling	Strain and sprains	• Buddy system • Proper lifting techniques
	Pinch points from heavy tooling	• Be aware of hazards • Stay away from moving parts • Do not let heavy tooling land on hands or feet • If dropped, do not try to catch or stop with your body
Drill, collect samples	Pinch points	• Be aware of hazards • Stay away from moving parts
	Tripping hazard from the air hoses,	• Watch your step • Side-step over larger items

Delta Consultants Job Safety Analysis (JSA)

18

Task Description: Soil Sampling **Date JSA Developed:** 6/17/09

Name and Address of Worksite: 5251 Hopyard Rd ; Pleasanton, CA

Project Manager/Site Supervisor: Suzanne McMasters-Nelson / Cori Olsen

PPE Required for this Job

- ☐ Hard Hat
- ☐ Safety Glasses
- ☐ Safety Toe Shoes
- ☐ Hearing Protection
- ☐ Hi-Vis Traffic Safety Vest
- ☐ Respirator
- ☐ Gloves (specify type):
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Special Considerations

- ☐ Lighting
- ☐ Nearby Activities
- ☐ Simultaneous Operations
- ☐ Weather and Temperature Extremes
- ☐ Time of Day/Night
- ☐ Tight/Crowded Work Space
- ☐ Environmental Sensitivities
- ☐ Automatic Equipment
- ☐ Other:

Required Permits

- ☐ None
- ☐ Confined Space
- ☐ Hot Work
- ☐ Ground Disturbance
- ☐ Working From Heights
- ☐ Other Permit _____

JOB SAFETY ANALYSIS

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Mobilization- Loading/unloading vehicle**	Gravity, Motion- Back strain from lifting moving materials	Use two people if needed, use proper lifting techniques, do not lift over 40 lbs	Equipment too heavy to lift safety, correct tools for job not available
		Motion- Hand injuries – pinch points, scrapes	Wear leather or synthetic work gloves, avoid pinch points.	PPE not available
		Motion- Traffic	Wear reflective safety vest, Identify high traffic areas, Set up traffic control. Use buddy system if more than one person, and be aware of other potential activities/work being conducted at site.	Traffic too heavy to work safely, sufficient traffic control not available
		Gravity, Motion- Equipment falling off of vehicle	Use straps or rope, not bungee cords.	Correct equipment not available
		Motion, Heat/Cold- Weather	Wear sunscreen and/or protective clothing when working in intense sunlight, Wear proper clothing to avoid heat/cold stress, Drink plenty of fluids to avoid dehydration. Take breaks as needed.	Weather too dangerous to work in. Workers not properly dressed for weather.
2.	**Site Walkover**	Gravity, Motion- Debris/tripping hazards	Inspect/be aware of ground conditions, Clear hazards, if possible, for icy surfaces- use sand or ice melt for walk/work areas	Walking/working surfaces not safe for workers

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

Delta Consultants Job Safety Analysis (JSA)

18

Task Description: Drum Moving **Date JSA Developed:** 6/17/09

Name and Address of Worksite: 5251 Hopyard Rd; Pleasanton, CA

Project Manager/Site Supervisor: Suzanne McClurkin-Nelson Cora Olsen

PPE Required for this Job

- ☐ Hard Hat
- ☐ Safety Glasses
- ☒ Safety Toe Shoes
- ☐ Hearing Protection
- ☐ Hi-Vis Traffic Safety Vest
- ☐ Respirator
- ☐ Gloves (specify type):
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Special Considerations

- ☐ Lighting
- ☐ Nearby Activities
- ☐ Simultaneous Operations
- ☐ Weather and Temperature Extremes
- ☐ Time of Day/Night
- ☐ Tight/Crowded Work Space
- ☐ Environmental Sensitivities
- ☐ Automatic Equipment
- ☐ Other:

Required Permits

- ☐ None
- ☐ Confined Space
- ☐ Hot Work
- ☐ Ground Disturbance
- ☐ Working From Heights
- ☐ Other Permit _____

JOB SAFETY ANALYSIS

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	Stop Work Triggers for this task? (We will stop the job if any of these occur)
1.	**Inspect Drums**	Motion, Gravity- Injuries (hands, back)	Proper PPE for task (cut-resistant gloves - leather or chemical resistant gloves - rubber), Use right tool for the job, proper lifting/bending techniques, do not lift over 40 lbs.	Correct tools not available to do job safely
		Chemical-Regulatory/Environmental (leaking drums)	Identify drums in poor condition (leaks/excessive damage). Overpack prior to transportation. Call for assistance (if needed) to overpack drum. Report to Delta immediately, Verify proper labeling of drum/contents.	Drum leak posses danger to workers, necessary overpack or clean up materials not available.
		Biological	Be aware of potential insect hazards, and take action to avoid contact (long sleeve shirts, insect repellent), Inspect area for potential poisonous plants, and take action to avoid contact (long sleeve shirts,	Contact with biological hazards cannot be prevented, minimized.

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

Delta Consultants Job Safety Analysis (JSA)

JOB SAFETY ANALYSIS

Step Number	Sequence of Basic Task Steps (List the steps required to perform the activity in the sequence they occur)	Potential Hazards Involved With This Step (List the energy sources)	How will the energy be managed? List Control Measures (Eliminate, Control, Protect)	Stop Work Triggers for this task? (We will stop the job if any of these occur)
			is in operation, Ensure that feet are clear of the edge of lift gate where it meets the trailer (pinch point).	
4.	**Securing Load**	Motion- Movable equipment in vehicle	Use straps or rope, NOT bungee cords.	Correct equipment not available
		Motion- Drum shift	Use load locks for drums when vehicle is in motion.	Drums cannot be secured properly
		Motion, Gravity- Transporting drum within vehicle	Transport drums using drum cart to appropriate location, Use steady motion while maneuvering drum cart. Avoid "jerking motions" to reduce strain on body.	Drum cannot be moved safely within vehicle (space too small, awkward, etc.)
		Radiation- Poor lighting conditions	Vehicle inspection/maintenance (lights within vehicle).	Insufficient lighting to move around safely within vehicle
5.	**De-mobilization from site**	Motion, Gravity- Lift Gate	Ensure all safety pins are placed in the side rails.	Lift gate cannot be secured properly
		Notification (as necessary)	Sign out and/or check out with facility as required so your location is known to facility.	

SMN	Susan Nuth Nel	6-16-09
Project Manager	Signature	Date

Site Safety Officer	Signature	Date

Consider all Energy Sources: Motion, Chemical, Radiation, Electrical, Gravity, Heat/Cold, Biological, and Pressure. Include all Stored Energy.

APPENDIX C

CERTIFIED ANALYTICAL REPORTS WITH CHAIN-OF-CUSTODY DOCUMENTATION

Calscience Environmental Laboratories, Inc.

June 29, 2009

Suzanne McClukin-Nelson
Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Subject: **Calscience Work Order No.: 09-06-1861**
Client Reference: 5251 Hopyard Rd, Pleasanton, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/20/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Jessie Lee
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 3050B / EPA 7471A Total
Method: EPA 6010B / EPA 7471A
Units: mg/kg

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Waste A,B,C)	**09-06-1861-13-A**	**06/19/09 00:00**	**Solid**	**ICP 5300**	**06/24/09**	**06/24/09 21:26**	**090624L02**

Comment(s): -Mercury was analyzed on 6/24/2009 2:27:38 PM with batch 090624L03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.750	1		Mercury	ND	0.0835	1	
Arsenic	4.95	0.750	1		Molybdenum	0.251	0.250	1	
Barium	222	0.500	1		Nickel	35.5	0.250	1	
Beryllium	0.481	0.250	1		Selenium	ND	0.750	1	
Cadmium	ND	0.500	1		Silver	ND	0.250	1	
Chromium	28.4	0.250	1		Thallium	ND	0.750	1	
Cobalt	11.1	0.250	1		Vanadium	41.4	0.250	1	
Copper	24.0	0.500	1		Zinc	60.8	1.00	1	
Lead	5.09	0.500	1						

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-04-007-6,374**	**N/A**	**Solid**	**Mercury**	**06/24/09**	**06/24/09 13:51**	**090624L03**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.0835	1	

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-12,443**	**N/A**	**Solid**	**ICP 5300**	**06/24/09**	**06/25/09 16:46**	**090624L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.750	1		Lead	ND	0.500	1	
Arsenic	ND	0.750	1		Molybdenum	ND	0.250	1	
Barium	ND	0.500	1		Nickel	ND	0.250	1	
Beryllium	ND	0.250	1		Selenium	ND	0.750	1	
Cadmium	ND	0.500	1		Silver	ND	0.250	1	
Chromium	ND	0.250	1		Thallium	ND	0.750	1	
Cobalt	ND	0.250	1		Vanadium	ND	0.250	1	
Copper	ND	0.500	1		Zinc	ND	1.00	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants, Inc.	Date Received:	06/20/09
312 Piercy RD.	Work Order No:	09-06-1861
San Jose, CA 95138-1401	Preparation:	EPA 3550B
	Method:	EPA 8015B

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Waste A,B,C)	**09-06-1861-13-A**	**06/19/09 00:00**	**Solid**	**GC 43**	**06/23/09**	**06/24/09 05:21**	**090623B03**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	98	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-025-755**	**N/A**	**Solid**	**GC 43**	**06/23/09**	**06/24/09 02:20**	**090623B03**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	94	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-11@10'	**09-06-1861-1-A**	**06/18/09 09:05**	**Solid**	**GC 5**	**06/22/09**	**06/23/09 00:24**	**090622B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	81	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-12@10'	**09-06-1861-4-A**	**06/18/09 13:35**	**Solid**	**GC 5**	**06/23/09**	**06/23/09 18:43**	**090623B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	79	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10@10'	**09-06-1861-7-A**	**06/19/09 08:05**	**Solid**	**GC 5**	**06/23/09**	**06/23/09 18:06**	**090623B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	79	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Waste A,B,C)	**09-06-1861-13-A**	**06/19/09 00:00**	**Solid**	**GC 5**	**06/23/09**	**06/23/09 16:34**	**090623B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	77	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-279-2,960**	**N/A**	**Solid**	**GC 5**	**06/22/09**	**06/22/09 12:11**	**090622B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	82	42-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-279-2,962**	**N/A**	**Solid**	**GC 5**	**06/23/09**	**06/23/09 10:51**	**090623B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene - FID	82	42-126	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants, Inc.		Date Received:	06/20/09
312 Piercy RD.		Work Order No:	09-06-1861
San Jose, CA 95138-1401		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	mg/kg

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Waste A,B,C)	**09-06-1861-13-A**	**06/19/09 00:00**	**Solid**	**GC/MS EE**	**06/24/09**	**06/24/09 20:27**	**090624L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Toluene	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Xylenes (total)	ND	0.0050	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	100	73-139			1,2-Dichloroethane-d4	103	73-145		
Toluene-d8	102	90-108			1,4-Bromofluorobenzene	97	71-113		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-1,677**	**N/A**	**Solid**	**GC/MS EE**	**06/24/09**	**06/24/09 16:11**	**090624L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Toluene	ND	0.0050	1	
Ethylbenzene	ND	0.0050	1		Xylenes (total)	ND	0.0050	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	99	73-139			1,2-Dichloroethane-d4	96	73-145		
Toluene-d8	100	90-108			1,4-Bromofluorobenzene	97	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8260B
Units: mg/kg

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-11@10'	**09-06-1861-1-A**	**06/18/09 09:05**	**Solid**	**GC/MS JJ**	**06/26/09**	**06/26/09 15:17**	**090626L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
Ethylbenzene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Toluene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	108	73-139			1,2-Dichloroethane-d4	117	73-145		
Toluene-d8	100	90-108			1,4-Bromofluorobenzene	98	71-113		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-12@10'	**09-06-1861-4-A**	**06/18/09 13:35**	**Solid**	**GC/MS JJ**	**06/26/09**	**06/26/09 15:46**	**090626L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
Ethylbenzene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Toluene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Methyl-t-Butyl Ether (MTBE)	0.0059	0.0050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	101	73-139			1,2-Dichloroethane-d4	103	73-145		
Toluene-d8	100	90-108			1,4-Bromofluorobenzene	98	71-113		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10@10'	**09-06-1861-7-A**	**06/19/09 08:05**	**Solid**	**GC/MS EE**	**06/24/09**	**06/24/09 17:15**	**090624L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
Ethylbenzene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Toluene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	101	73-139			1,2-Dichloroethane-d4	102	73-145		
Toluene-d8	101	90-108			1,4-Bromofluorobenzene	98	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Delta Environmental Consultants, Inc.		Date Received:	06/20/09
312 Piercy RD.		Work Order No:	09-06-1861
San Jose, CA 95138-1401		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	mg/kg

Project: 5251 Hopyard Rd, Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-1,677**	**N/A**	**Solid**	**GC/MS EE**	**06/24/09**	**06/24/09 16:11**	**090624L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
Ethylbenzene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Toluene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	73-139		1,2-Dichloroethane-d4	96	73-145	
Toluene-d8	100	90-108		1,4-Bromofluorobenzene	97	71-113	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-1,685**	**N/A**	**Solid**	**GC/MS JJ**	**06/26/09**	**06/26/09 12:45**	**090626L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
Ethylbenzene	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Toluene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	73-139		1,2-Dichloroethane-d4	99	73-145	
Toluene-d8	98	90-108		1,4-Bromofluorobenzene	95	71-113	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 3050B
Method: EPA 6010B

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-06-1892-7	**Solid**	**ICP 5300**	**06/24/09**	**06/24/09**	**090624S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	27	26	50-115	1	0-20	3
Arsenic	100	101	75-125	1	0-20	
Barium	43	62	75-125	5	0-20	3
Beryllium	100	104	75-125	4	0-20	
Cadmium	101	104	75-125	2	0-20	
Chromium	101	107	75-125	4	0-20	
Cobalt	105	108	75-125	2	0-20	
Copper	103	119	75-125	8	0-20	
Lead	100	107	75-125	5	0-20	
Molybdenum	92	91	75-125	1	0-20	
Nickel	101	106	75-125	4	0-20	
Selenium	93	95	75-125	3	0-20	
Silver	100	102	75-125	3	0-20	
Thallium	89	90	75-125	1	0-20	
Vanadium	105	115	75-125	5	0-20	
Zinc	68	69	75-125	0	0-20	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.		Date Received:	06/20/09
312 Piercy RD.		Work Order No:	09-06-1861
San Jose, CA 95138-1401		Preparation:	EPA 3550B
		Method:	EPA 8015B

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite (Waste A,B,C)	**Solid**	**GC 43**	**06/23/09**	**06/24/09**	**090623S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	104	100	64-130	4	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.		Date Received:	06/20/09
312 Piercy RD.		Work Order No:	09-06-1861
San Jose, CA 95138-1401		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-06-1810-1	**Solid**	**GC 5**	**06/22/09**	**06/22/09**	**090622S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	92	94	48-114	2	0-23	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.		Date Received:	06/20/09
312 Piercy RD.		Work Order No:	09-06-1861
San Jose, CA 95138-1401		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-06-1881-1	**Solid**	**GC 5**	**06/23/09**	**06/23/09**	**090623S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	91	93	48-114	2	0-23	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.		Date Received:	06/20/09
312 Piercy RD.		Work Order No:	09-06-1861
San Jose, CA 95138-1401		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-06-1892-7	**Solid**	**Mercury**	**06/24/09**	**06/24/09**	**090624S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	118	118	71-137	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8260B

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
S-10@10'	**Solid**	**GC/MS EE**	**06/24/09**	**06/24/09**	**090624S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	86	79-115	10	0-13	
Carbon Tetrachloride	100	92	55-139	9	0-15	
Chlorobenzene	91	81	79-115	12	0-17	
1,2-Dibromoethane	92	80	70-130	14	0-30	
1,2-Dichlorobenzene	88	75	63-123	15	0-23	
1,1-Dichloroethene	91	86	69-123	6	0-16	
Ethylbenzene	94	85	70-130	10	0-30	
Toluene	99	91	79-115	8	0-15	
Trichloroethene	105	96	66-144	9	0-14	
Vinyl Chloride	80	91	60-126	14	0-14	
Methyl-t-Butyl Ether (MTBE)	91	79	68-128	15	0-14	4
Tert-Butyl Alcohol (TBA)	74	59	44-134	22	0-37	
Diisopropyl Ether (DIPE)	77	69	75-123	11	0-12	3
Ethyl-t-Butyl Ether (ETBE)	89	78	75-117	14	0-12	4
Tert-Amyl-Methyl Ether (TAME)	90	79	79-115	13	0-12	4
Ethanol	57	43	42-138	29	0-28	4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

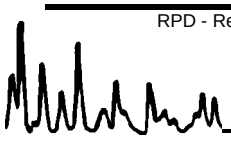
Date Received: 06/20/09
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8260B

Project 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-06-1881-2	**Solid**	**GC/MS JJ**	**06/26/09**	**06/26/09**	**090626S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	88	89	79-115	2	0-13	
Carbon Tetrachloride	94	102	55-139	8	0-15	
Chlorobenzene	94	95	79-115	1	0-17	
1,2-Dibromoethane	87	87	70-130	0	0-30	
1,2-Dichlorobenzene	92	95	63-123	3	0-23	
1,1-Dichloroethene	91	95	69-123	5	0-16	
Ethylbenzene	94	96	70-130	2	0-30	
Toluene	92	94	79-115	1	0-15	
Trichloroethene	88	91	66-144	3	0-14	
Vinyl Chloride	101	100	60-126	1	0-14	
Methyl-t-Butyl Ether (MTBE)	84	85	68-128	1	0-14	
Tert-Butyl Alcohol (TBA)	99	95	44-134	4	0-37	
Diisopropyl Ether (DIPE)	91	95	75-123	4	0-12	
Ethyl-t-Butyl Ether (ETBE)	84	88	75-117	4	0-12	
Tert-Amyl-Methyl Ether (TAME)	82	86	79-115	4	0-12	
Ethanol	116	109	42-138	6	0-28	

RPD - Relative Percent Difference , CL - Control Limit



Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 09-06-1861
Preparation: EPA 3050B
Method: EPA 6010B

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-12,443	**Solid**	**ICP 5300**	**06/24/09**	**06/24/09**	**090624L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	96	93	80-120	73-127	3	0-20	
Arsenic	96	94	80-120	73-127	2	0-20	
Barium	103	102	80-120	73-127	1	0-20	
Beryllium	94	93	80-120	73-127	1	0-20	
Cadmium	101	101	80-120	73-127	0	0-20	
Chromium	96	96	80-120	73-127	1	0-20	
Cobalt	105	103	80-120	73-127	1	0-20	
Copper	100	100	80-120	73-127	0	0-20	
Lead	102	99	80-120	73-127	2	0-20	
Molybdenum	100	98	80-120	73-127	1	0-20	
Nickel	102	99	80-120	73-127	3	0-20	
Selenium	92	91	80-120	73-127	0	0-20	
Silver	99	98	80-120	73-127	1	0-20	
Thallium	99	96	80-120	73-127	3	0-20	
Vanadium	97	97	80-120	73-127	0	0-20	
Zinc	101	99	80-120	73-127	2	0-20	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Delta Environmental Consultants, Inc.	Date Received:	N/A
312 Piercy RD.	Work Order No:	09-06-1861
San Jose, CA 95138-1401	Preparation:	EPA 3550B
	Method:	EPA 8015B

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-025-755	**Solid**	**GC 43**	**06/23/09**	**06/24/09**	**090623B03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	108	109	75-123	0	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-2,960	**Solid**	**GC 5**	**06/22/09**	**06/22/09**	**090622B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	92	93	70-124	1	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.	Date Received: N/A
312 Piercy RD.	Work Order No: 09-06-1861
San Jose, CA 95138-1401	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-2,962	**Solid**	**GC 5**	**06/23/09**	**06/23/09**	**090623B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	91	89	70-124	3	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.	Date Received:	N/A
312 Piercy RD.	Work Order No:	09-06-1861
San Jose, CA 95138-1401	Preparation:	EPA 7471A Total
	Method:	EPA 7471A

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-007-6,374	**Solid**	**Mercury**	**06/24/09**	**06/24/09**	**090624L03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	108	109	85-121	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.	Date Received:	N/A
312 Piercy RD.	Work Order No:	09-06-1861
San Jose, CA 95138-1401	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-1,677	**Solid**	**GC/MS EE**	**06/24/09**	**06/24/09**	**090624L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	100	84-114	79-119	2	0-7	
Carbon Tetrachloride	107	102	66-132	55-143	5	0-12	
Chlorobenzene	101	99	87-111	83-115	2	0-7	
1,2-Dibromoethane	99	101	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	97	96	79-115	73-121	1	0-8	
1,1-Dichloroethene	97	94	73-121	65-129	4	0-12	
Ethylbenzene	103	101	80-120	73-127	2	0-20	
Toluene	107	105	78-114	72-120	2	0-7	
Trichloroethene	101	99	84-114	79-119	2	0-8	
Vinyl Chloride	101	95	63-129	52-140	6	0-15	
Methyl-t-Butyl Ether (MTBE)	96	96	77-125	69-133	1	0-11	
Tert-Butyl Alcohol (TBA)	95	94	47-137	32-152	2	0-27	
Diisopropyl Ether (DIPE)	100	90	76-130	67-139	11	0-8	X
Ethyl-t-Butyl Ether (ETBE)	94	95	76-124	68-132	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	96	97	82-118	76-124	1	0-11	
Ethanol	80	76	59-131	47-143	5	0-21	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.
312 Piercy RD.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 09-06-1861
Preparation: EPA 5030B
Method: EPA 8260B

Project: 5251 Hopyard Rd, Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-1,685	**Solid**	**GC/MS JJ**	**06/26/09**	**06/26/09**	**090626L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	98	98	84-114	79-119	0	0-7	
Carbon Tetrachloride	113	112	66-132	55-143	1	0-12	
Chlorobenzene	105	103	87-111	83-115	1	0-7	
1,2-Dibromoethane	103	103	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	102	102	79-115	73-121	0	0-8	
1,1-Dichloroethene	106	105	73-121	65-129	1	0-12	
Ethylbenzene	106	105	80-120	73-127	1	0-20	
Toluene	104	104	78-114	72-120	0	0-7	
Trichloroethene	104	106	84-114	79-119	2	0-8	
Vinyl Chloride	110	110	63-129	52-140	1	0-15	
Methyl-t-Butyl Ether (MTBE)	98	98	77-125	69-133	1	0-11	
Tert-Butyl Alcohol (TBA)	96	97	47-137	32-152	1	0-27	
Diisopropyl Ether (DIPE)	101	100	76-130	67-139	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	101	101	76-124	68-132	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	100	99	82-118	76-124	1	0-11	
Ethanol	90	93	59-131	47-143	4	0-21	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-06-1861

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

Please Check Appropriate Box:
☐ ENV. SERVICES | ☐ MOTIVA RETAIL | ☐ SHELL RETAIL
☐ MOTIVA SD&CM | ☑ CONSULTANT | ☐ LUBES
☐ SHELL PIPELINE | ☐ OTHER _____

Print Bill To Contact Name: Suzanne McClurkin-Nelson
INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 3 | ☐ CHECK IF NO INCIDENT # APPLIES
DATE: 6/19/09
PO #:
SAP #: 1 3 5 7 8 5
PAGE: 2 of 2

SAMPLING COMPANY: Delta Consultants | LOG CODE:
ADDRESS: 312 Piercy Road, San Jose, CA 95138
PROJECT CONTACT (Hardcopy or PDF Report to): Suzanne McClurkin- Nelson
TELEPHONE: 408-826-1875 | FAX: 408-225-8506 | E-MAIL: SMcClurkin-Nelson@deltaenv.com

SITE ADDRESS: Street and City: 5251 Hopyard Rd.; Pleasanton | State: CA | GLOBAL ID NO.: T0600101267
EDF DELIVERABLE TO (Name, Company, Office Location): Angela Pico | PHONE NO.: 408-826-1862 | E-MAIL: Apico@deltaenv.com | CONSULTANT PROJECT NO.: SCA5251H1A
Sampled By: Cora Olson
LAB USE ONLY: 09-06-1861

TURNAROUND TIME (CALENDAR DAYS):
☐ STANDARD (14 DAY) ☑ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES :
☐ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	All sites: TPH-Gasoline (8015M)	BTEX (8260B)	5 Shell Oxygenates (8260B)	EDB (8260B)	EDC (8260B)	Ethanol (8260B)	+ diesel: TPH-Diesel (8015M)		+ waste oil tank: full suite VOCs (8260B)	1,2-DCA and EDB (8260B)	CAM 5 Metals (6010)	PNA and cresote (8270)	PCBs (8082)	TPH-D Extractable (8015M)	Oil and grease (8015M)	Waste Characterization: CAM 17 Metals (6010)	Run STLC/TCLP Metals/Org Pb if needed	Run Bioassay if TRPH >5000 ppm,	TEMPERATURE ON RECEIPT C°	Container PID Readings or Laboratory Notes
13	Composite (Waste A, B, C)			Solid					ice	3	X	X					X									X	X	X		Take Composite of 3 waste Samples
10	Waste A	6/18/09	10:30	Soil					ice	1																				
11	Waste B	6/18/09	14:15	Soil					ice	1																				
12	Waste C	6/19/09	9:50	Soil					ice	1																				

Relinquished by: (Signature) Cora Olson	Received by: (Signature)	Date: 6/19/09	Time:
Relinquished by: (Signature) GSO 1057723782	Received by: (Signature)	Date: 6/20/09	Time: 1000
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

05/2/06 Revision

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- [x] CALSCIENCE (_____)
- [ ] SPL (_____)
- [ ] XENCO (_____)
- [ ] TEST AMERICA (_____)
- [ ] OTHER (_____)

Please Check Appropriate Box:
- [ ] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&CM
- [x] CONSULTANT
- [ ] LUBES
- [ ] SHELL PIPELINE
- [ ] OTHER _____

Print Bill To Contact Name: Suzanne McClurkin-Nelson

INCIDENT # (ENV SERVICES): 98994583 [ ] CHECK IF NO INCIDENT # APPLIES

PO #:

SAP #: 113585

DATE: 6/19/09

PAGE: 1 of 2

SAMPLING COMPANY:	Delta Consultants
LOG CODE:	
SITE ADDRESS: Street and City	5251 Hopyard Rd.; Pleasanton
State	CA
GLOBAL ID NO.:	T0600101267
ADDRESS:	312 Piercy Road, San Jose, CA 95138
EDF DELIVERABLE TO (Name, Company, Office Location):	Angela Pico
PHONE NO.:	408-826-1862
E-MAIL:	Apico@deltaenv.com
CONSULTANT PROJECT NO.:	SCA5251H1A
PROJECT CONTACT (Hardcopy or PDF Report to):	Suzanne McClurkin- Nelson
TELEPHONE:	408-826-1875
FAX:	408-225-8506
E-MAIL:	SMcClurkin-Nelson@deltaenv.com
Sampled By	Cora Olson
LAB USE ONLY	09-06-1861

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (14 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

- [ ] LA - RWQCB REPORT FORMAT
- [ ] UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES :
- [ ] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [ ] RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	All sites: TPH-Gasoline (8015M)	BTEX (8260B)	5 Shell Oxygenates (8260B)	EDB (8260B)	EDC (8260B)	Ethanol (8260B)	+ diesel: TPH-Diesel (8015M)		+ waste oil tank: full suite VOCs (8260B)	1,2-DCA and EDB (8260B)	CAM 5 Metals (6010)	PNA and cresote (8270)	PCBs (8082)	TPH-D Extractable (8015M)	Oil and grease (8015M)	Waste Characterization: CAM 17 Metals (6010)	Run STLC/TCLP Metals/Org Pb if needed	Run Bioassay if TRPH >5000 ppm,	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	S-11 @ 10'	6/18/09	9:05a	Soil					ice	1	X	X	X																
2	S-11@ 15'	6/18/09	9:10a	Soil					ice	1	X	X	X																HOLD
3	S-11@ 20'	6/18/09	9:15a	Soil					ice	1	X	X	X																HOLD
4	S-12@ 10'	6/18/09	13:35	Soil					ice	1	X	X	X																
5	S-12@ 15'	6/18/09	13:45	Soil					ice	1	X	X	X																HOLD
6	S-12@ 20'	6/18/09	13:50	Soil					ice	1	X	X	X																HOLD
7	S-10@ 10'	6/19/09	8:05	Soil					ice	1	X	X	X																
8	S-10 @ 15'	6/19/09	8:15	Soil					ice	1	X	X	X																HOLD
9	S-10@ 20'	6/19/09	8:25	Soil					ice	1	X	X	X																HOLD

Relinquished by: (Signature)	(Cora Olson)	Received by: (Signature)	Date: 6/19/09 Time:
Relinquished by: (Signature)	(GSO) 105723782	Received by: (Signature)	Date: 6/20/09 Time: 1000
Relinquished by: (Signature)		Received by: (Signature)	Date: Time:

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-06-1861

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Delta

DATE: 06/20/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C - 0.2 °C (CF) = 2.9 °C ☑ **Blank** ☐ **Sample**

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** _____

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** _____

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** _____

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☐	☑	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☑ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☐

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☑Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PJ ☐125PJ**znna** ☐100PB ☐100PB**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** _____

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar (Wide-mouth) **B:** Bottle (Narrow-mouth) **Reviewed by:** YL

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** YL

Calscience Environmental Laboratories, Inc.

July 21, 2009

Michael Ninokata
Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject: **Calscience Work Order No.: 09-07-0657**
Client Reference: 5251 Hopyard Rd., Pleasanton, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/9/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Jessie Lee
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc.		Date Received:	07/09/09
1680 Rogers Avenue		Work Order No:	09-07-0657
San Jose, CA 95112-1105		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B
		Units:	ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-1	**09-07-0657-1-A**	**07/06/09 14:10**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 17:55**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	25	2.5	5		Tert-Butyl Alcohol (TBA)	180	50	5	
Ethylbenzene	370	5.0	5		Diisopropyl Ether (DIPE)	ND	10	5	
Toluene	34	5.0	5		Ethyl-t-Butyl Ether (ETBE)	ND	10	5	
Xylenes (total)	44	5.0	5		Tert-Amyl-Methyl Ether (TAME)	ND	10	5	
Methyl-t-Butyl Ether (MTBE)	22	5.0	5		TPPH	5800	250	5	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	106	74-140			1,2-Dichloroethane-d4	102	74-146		
Toluene-d8	103	88-112			Toluene-d8-TPPH	109	88-112		
1,4-Bromofluorobenzene	100	74-110							

S-2	**09-07-0657-2-A**	**07/06/09 13:55**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 16:08**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	59	1.0	1		TPPH	110	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	108	74-140			1,2-Dichloroethane-d4	113	74-146		
Toluene-d8	104	88-112			Toluene-d8-TPPH	110	88-112		
1,4-Bromofluorobenzene	88	74-110							

S-3	**09-07-0657-3-A**	**07/06/09 13:00**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 18:22**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	500	2.5	5		Tert-Butyl Alcohol (TBA)	ND	50	5	
Ethylbenzene	30	5.0	5		Diisopropyl Ether (DIPE)	ND	10	5	
Toluene	10	5.0	5		Ethyl-t-Butyl Ether (ETBE)	ND	10	5	
Xylenes (total)	13	5.0	5		Tert-Amyl-Methyl Ether (TAME)	ND	10	5	
Methyl-t-Butyl Ether (MTBE)	21	5.0	5		TPPH	2300	250	5	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	100	74-140			1,2-Dichloroethane-d4	99	74-146		
Toluene-d8	99	88-112			Toluene-d8-TPPH	104	88-112		
1,4-Bromofluorobenzene	97	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc.		Date Received:	07/09/09
1680 Rogers Avenue		Work Order No:	09-07-0657
San Jose, CA 95112-1105		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B
		Units:	ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4	**09-07-0657-4-A**	**07/06/09 12:30**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 18:49**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	98	74-140			1,2-Dichloroethane-d4	108	74-146		
Toluene-d8	102	88-112			Toluene-d8-TPPH	107	88-112		
1,4-Bromofluorobenzene	87	74-110							

S-5	**09-07-0657-5-A**	**07/06/09 11:50**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 19:16**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	11	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	2.5	1.0	1		TPPH	62	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	109	74-140			1,2-Dichloroethane-d4	110	74-146		
Toluene-d8	101	88-112			Toluene-d8-TPPH	107	88-112		
1,4-Bromofluorobenzene	91	74-110							

S-6	**09-07-0657-6-A**	**07/06/09 09:31**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 19:42**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	106	74-140			1,2-Dichloroethane-d4	110	74-146		
Toluene-d8	97	88-112			Toluene-d8-TPPH	103	88-112		
1,4-Bromofluorobenzene	99	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc.		Date Received:	07/09/09
1680 Rogers Avenue		Work Order No:	09-07-0657
San Jose, CA 95112-1105		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B
		Units:	ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-7	**09-07-0657-7-A**	**07/06/09 09:46**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 20:09**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	4.3	1.0	1		TPPH	58	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	103	74-140			1,2-Dichloroethane-d4	98	74-146		
Toluene-d8	101	88-112			Toluene-d8-TPPH	106	88-112		
1,4-Bromofluorobenzene	97	74-110							

S-8	**09-07-0657-8-A**	**07/06/09 10:16**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 20:36**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	111	74-140			1,2-Dichloroethane-d4	115	74-146		
Toluene-d8	99	88-112			Toluene-d8-TPPH	104	88-112		
1,4-Bromofluorobenzene	93	74-110							

S-9	**09-07-0657-9-A**	**07/06/09 11:05**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 21:03**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	101	74-140			1,2-Dichloroethane-d4	114	74-146		
Toluene-d8	105	88-112			Toluene-d8-TPPH	110	88-112		
1,4-Bromofluorobenzene	93	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc.		Date Received:	07/09/09
1680 Rogers Avenue		Work Order No:	09-07-0657
San Jose, CA 95112-1105		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B
		Units:	ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-10	**09-07-0657-10-C**	**07/06/09 11:35**	**Aqueous**	**GC/MS W**	**07/18/09**	**07/18/09 15:46**	**090718L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Tert-Butyl Alcohol (TBA)	5100	100	10	
Ethylbenzene	ND	2.0	2		Diisopropyl Ether (DIPE)	ND	4.0	2	
Toluene	ND	2.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2	
Xylenes (total)	ND	2.0	2		Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	2		TPPH	340	100	2	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	110	74-140			1,2-Dichloroethane-d4	121	74-146		
Toluene-d8	104	88-112			Toluene-d8-TPPH	104	88-112		
1,4-Bromofluorobenzene	90	74-110							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-11	**09-07-0657-11-A**	**07/06/09 10:40**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 21:56**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	101	74-140			1,2-Dichloroethane-d4	106	74-146		
Toluene-d8	92	88-112			Toluene-d8-TPPH	97	88-112		
1,4-Bromofluorobenzene	100	74-110							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-12	**09-07-0657-12-A**	**07/06/09 12:10**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 22:23**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	37	1.0	1		TPPH	83	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	105	74-140			1,2-Dichloroethane-d4	101	74-146		
Toluene-d8	93	88-112			Toluene-d8-TPPH	98	88-112		
1,4-Bromofluorobenzene	94	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc.		Date Received:	07/09/09
1680 Rogers Avenue		Work Order No:	09-07-0657
San Jose, CA 95112-1105		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B
		Units:	ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EW-1	**09-07-0657-13-A**	**07/06/09 13:20**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 22:49**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	18	5.0	10		Tert-Butyl Alcohol (TBA)	ND	100	10	
Ethylbenzene	750	10	10		Diisopropyl Ether (DIPE)	ND	20	10	
Toluene	82	10	10		Ethyl-t-Butyl Ether (ETBE)	ND	20	10	
Xylenes (total)	140	10	10		Tert-Amyl-Methyl Ether (TAME)	ND	20	10	
Methyl-t-Butyl Ether (MTBE)	ND	10	10		TPPH	17000	500	10	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	100	74-140			1,2-Dichloroethane-d4	104	74-146		
Toluene-d8	106	88-112			Toluene-d8-TPPH	112	88-112		
1,4-Bromofluorobenzene	96	74-110							

Method Blank	**099-12-767-2,200**	**N/A**	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09 15:13**	**090714L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	97	74-140			1,2-Dichloroethane-d4	118	74-146		
Toluene-d8	99	88-112			Toluene-d8-TPPH	104	88-112		
1,4-Bromofluorobenzene	100	74-110							

Method Blank	**099-12-767-2,207**	**N/A**	**Aqueous**	**GC/MS RR**	**07/17/09**	**07/17/09 15:36**	**090717L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	94	74-140			1,2-Dichloroethane-d4	93	74-146		
Toluene-d8	98	88-112			Toluene-d8-TPPH	96	88-112		
1,4-Bromofluorobenzene	97	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc.		Date Received:	07/09/09
1680 Rogers Avenue		Work Order No:	09-07-0657
San Jose, CA 95112-1105		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B
		Units:	ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-767-2,219**	**N/A**	**Aqueous**	**GC/MS W**	**07/18/09**	**07/18/09 13:49**	**090718L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	113	74-140			1,2-Dichloroethane-d4	122	74-146		
Toluene-d8	100	88-112			Toluene-d8-TPPH	100	88-112		
1,4-Bromofluorobenzene	85	74-110							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 07/09/09
Work Order No: 09-07-0657
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
S-2	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09**	**090714S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	105	88-118	7	0-7	
Carbon Tetrachloride	103	108	67-145	4	0-11	
Chlorobenzene	97	98	88-118	1	0-7	
1,2-Dibromoethane	92	101	70-130	10	0-30	
1,2-Dichlorobenzene	100	100	86-116	0	0-8	
1,1-Dichloroethene	93	99	70-130	6	0-25	
Ethylbenzene	95	101	70-130	5	0-30	
Toluene	94	101	87-123	7	0-8	
Trichloroethene	92	90	79-127	2	0-10	
Vinyl Chloride	90	96	69-129	6	0-13	
Methyl-t-Butyl Ether (MTBE)	78	87	71-131	4	0-13	
Tert-Butyl Alcohol (TBA)	102	97	36-168	5	0-45	
Diisopropyl Ether (DIPE)	88	93	81-123	6	0-9	
Ethyl-t-Butyl Ether (ETBE)	107	108	72-126	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	103	106	72-126	3	0-12	
Ethanol	97	95	53-149	2	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 07/09/09
Work Order No: 09-07-0657
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-07-1235-2	**Aqueous**	**GC/MS RR**	**07/17/09**	**07/17/09**	**090717S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	107	88-118	0	0-7	
Carbon Tetrachloride	107	106	67-145	1	0-11	
Chlorobenzene	106	106	88-118	0	0-7	
1,2-Dibromoethane	108	105	70-130	2	0-30	
1,2-Dichlorobenzene	103	103	86-116	0	0-8	
1,1-Dichloroethene	108	108	70-130	1	0-25	
Ethylbenzene	107	107	70-130	0	0-30	
Toluene	106	106	87-123	0	0-8	
Trichloroethene	104	105	79-127	0	0-10	
Vinyl Chloride	93	91	69-129	2	0-13	
Methyl-t-Butyl Ether (MTBE)	105	104	71-131	0	0-13	
Tert-Butyl Alcohol (TBA)	107	98	36-168	8	0-45	
Diisopropyl Ether (DIPE)	100	100	81-123	0	0-9	
Ethyl-t-Butyl Ether (ETBE)	103	103	72-126	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	104	104	72-126	0	0-12	
Ethanol	109	98	53-149	11	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 07/09/09
Work Order No: 09-07-0657
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-07-1396-20	**Aqueous**	**GC/MS W**	**07/18/09**	**07/18/09**	**090718S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	102	88-118	3	0-7	
Carbon Tetrachloride	101	105	67-145	3	0-11	
Chlorobenzene	100	104	88-118	4	0-7	
1,2-Dibromoethane	102	109	70-130	7	0-30	
1,2-Dichlorobenzene	101	102	86-116	1	0-8	
1,1-Dichloroethene	99	101	70-130	2	0-25	
Ethylbenzene	108	112	70-130	4	0-30	
Toluene	108	107	87-123	1	0-8	
Trichloroethene	99	99	79-127	0	0-10	
Vinyl Chloride	80	83	69-129	3	0-13	
Methyl-t-Butyl Ether (MTBE)	103	108	71-131	4	0-13	
Tert-Butyl Alcohol (TBA)	92	99	36-168	7	0-45	
Diisopropyl Ether (DIPE)	104	107	81-123	2	0-9	
Ethyl-t-Butyl Ether (ETBE)	102	111	72-126	8	0-12	
Tert-Amyl-Methyl Ether (TAME)	113	117	72-126	4	0-12	
Ethanol	83	83	53-149	0	0-31	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 09-07-0657
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-767-2,200	**Aqueous**	**GC/MS OO**	**07/14/09**	**07/14/09**	**090714L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	96	101	84-120	78-126	5	0-8	
Carbon Tetrachloride	104	100	63-147	49-161	4	0-10	
Chlorobenzene	99	97	89-119	84-124	2	0-7	
1,2-Dibromoethane	106	96	80-120	73-127	10	0-20	
1,2-Dichlorobenzene	104	94	89-119	84-124	10	0-9	X
1,1-Dichloroethene	93	92	77-125	69-133	0	0-16	
Ethylbenzene	103	98	80-120	73-127	5	0-20	
Toluene	90	96	83-125	76-132	7	0-9	
Trichloroethene	90	94	89-119	84-124	5	0-8	
Vinyl Chloride	90	90	63-135	51-147	0	0-13	
Methyl-t-Butyl Ether (MTBE)	98	95	82-118	76-124	2	0-13	
Tert-Butyl Alcohol (TBA)	100	98	46-154	28-172	1	0-32	
Diisopropyl Ether (DIPE)	89	85	81-123	74-130	4	0-11	
Ethyl-t-Butyl Ether (ETBE)	103	98	74-122	66-130	5	0-12	
Tert-Amyl-Methyl Ether (TAME)	105	106	76-124	68-132	0	0-10	
Ethanol	92	95	60-138	47-151	3	0-32	
TPPH	86	79	65-135	53-147	8	0-30	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 09-07-0657
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-767-2,207	**Aqueous**	**GC/MS RR**	**07/17/09**	**07/17/09**	**090717L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	107	106	84-120	78-126	1	0-8	
Carbon Tetrachloride	103	106	63-147	49-161	3	0-10	
Chlorobenzene	105	106	89-119	84-124	0	0-7	
1,2-Dibromoethane	109	106	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	105	103	89-119	84-124	2	0-9	
1,1-Dichloroethene	102	105	77-125	69-133	2	0-16	
Ethylbenzene	104	105	80-120	73-127	1	0-20	
Toluene	105	105	83-125	76-132	0	0-9	
Trichloroethene	107	105	89-119	84-124	2	0-8	
Vinyl Chloride	94	96	63-135	51-147	3	0-13	
Methyl-t-Butyl Ether (MTBE)	104	106	82-118	76-124	1	0-13	
Tert-Butyl Alcohol (TBA)	99	98	46-154	28-172	1	0-32	
Diisopropyl Ether (DIPE)	100	101	81-123	74-130	2	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	104	74-122	66-130	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	105	103	76-124	68-132	1	0-10	
Ethanol	96	99	60-138	47-151	4	0-32	
TPPH	91	90	65-135	53-147	1	0-30	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 09-07-0657
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-767-2,219	**Aqueous**	**GC/MS W**	**07/18/09**	**07/18/09**	**090718L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	103	103	84-120	78-126	1	0-8	
Carbon Tetrachloride	104	101	63-147	49-161	3	0-10	
Chlorobenzene	103	99	89-119	84-124	4	0-7	
1,2-Dibromoethane	108	97	80-120	73-127	11	0-20	
1,2-Dichlorobenzene	105	102	89-119	84-124	2	0-9	
1,1-Dichloroethene	104	101	77-125	69-133	3	0-16	
Ethylbenzene	113	108	80-120	73-127	4	0-20	
Toluene	109	110	83-125	76-132	1	0-9	
Trichloroethene	106	103	89-119	84-124	3	0-8	
Vinyl Chloride	84	88	63-135	51-147	5	0-13	
Methyl-t-Butyl Ether (MTBE)	107	105	82-118	76-124	3	0-13	
Tert-Butyl Alcohol (TBA)	85	97	46-154	28-172	13	0-32	
Diisopropyl Ether (DIPE)	105	101	81-123	74-130	4	0-11	
Ethyl-t-Butyl Ether (ETBE)	107	106	74-122	66-130	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	117	112	76-124	68-132	4	0-10	
Ethanol	83	89	60-138	47-151	8	0-32	
TPPH	102	104	65-135	53-147	2	0-30	

Total number of LCS compounds : 17
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-07-0657

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

Please Check Appropriate Box: ☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL ☐ MOTIVA SD&CM ☒ CONSULTANT ☐ LUBES ☐ SHELL PIPELINE ☐ OTHER

Print Bill To Contact Name: Denis Brown

INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 3 ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/6/09

PO # | SAP #

PAGE: 1 of 2

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS: Street and City: 5251 Hopyard Rd., Pleasanton	State: CA
ADDRESS: 1680 Rogers Ave, San Jose, CA 95112		EDF DELIVERABLE TO (Name, Company, Office Location): Angela Pico, Delta, San Jose Office	PHONE NO: 408.826.1862
PROJECT CONTACT (Hardcopy or PDF Report to): Michael Ninokata		E-MAIL: apico@deltaenv.com	CONSULTANT PROJECT NO: 090706-RM1
TELEPHONE: (408)573-0555	FAX: (408)573-7771	E-MAIL: mninokata@blainetech.com	BTS#
SAMPLER NAME(S) (Print): R. McCarthy			LAB USE ONLY: 09-07-0657

GLOBAL ID NO: T0600101267

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES :

CC Suzanne McClurkin-Nelson w/final report
smcclurkin-nelson@deltaenv.com

☐ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	S-1	7/6/09	1410	W	3					3	X		X	X										
2	S-2		1355								X		X	X										
3	S-3		1300								X		X	X										
4	S-4		1230								X		X	X										
5	S-5		1150								X		X	X										
6	S-6		0931								X		X	X										
7	S-7		0946								X		X	X										
8	S-8		1016								X		X	X										
9	S-9		1105								X		X	X										
10	S-10	↓	1135	↓	↓					↓	X		X	X										

Relinquished by: (Signature)	Received by: (Signature) (Sample Custodian)	Date: 7/6/09	Time: 1625
Relinquished by: (Signature) Sample Custodian	Received by: (Signature) Tom O'Malley CEL	Date: 7/8/09	Time: 1005
Relinquished by: (Signature) GBD 7809 1730 GBD 5122/957	Received by: (Signature) CEL	Date: 7/9/09	Time: 1030

05/2/06 Revision

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

Please Check Appropriate Box:
☑ ~~ENV. SERVICES~~ | ☐ MOTIVA RETAIL | ☐ SHELL RETAIL
☐ MOTIVA SD&CM | ☒ CONSULTANT | ☐ LUBES
☐ SHELL PIPELINE | ☐ OTHER _____

Print Bill To Contact Name: Denis Brown
PO #:
INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 3
SAP #:
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 7/6/09
PAGE: 2 of 2

SAMPLING COMPANY: Blaine Tech Services
LOG CODE: BTSS
ADDRESS: 1680 Rogers Ave, San Jose, CA 95112
PROJECT CONTACT (Hardcopy or PDF Report to): Michael Ninokata
TELEPHONE: (408)573-0555
FAX: (408)573-7771
E-MAIL: mninokata@blainetech.com

SITE ADDRESS: Street and City: 5251 Hopyard Rd., Pleasanton
State: CA
GLOBAL ID NO: T0600101267
EDF DELIVERABLE TO (Name, Company, Office Location): Angela Pico, Delta, San Jose Office
PHONE NO.: 408.826.1862
E-MAIL: apico@deltaenv.com
CONSULTANT PROJECT NO: 090706-RM1
BTS#
SAMPLER NAME(S) (Print): R McCarthy
LAB USE ONLY: 09-07-0657

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES :

CC Suzanne McClurkin-Nelson w/final report
smcclurkin-nelson@deltaenv.com

☐ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
11	S-11	7/6/09	1040	W	3					3	X		X	X										
12	S-12	↓	1210	↓	3					3	X		X	X										
13	EW-1	↓	1320	↓	3					3	X		X	X										

Relinquished by: (Signature) R McCarthy	Received by: (Signature) R McCarthy (Sample Custodian)	Date: 7/6/09	Time: 1625
Relinquished by: (Signature) Sample custodian 7-8-09	Received by: (Signature) Ron Donally CEL	Date: 7/8/09	Time: 1005
Relinquished by: (Signature) GSO 1730	Received by: (Signature) CEL	Date: 7/9/09	Time: 1030

GSO 5/22/2957

05/2/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-07-0657

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Blaine Tech

DATE: 07/09/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.2 °C - 0.2 °C (CF) = 2.0 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** YL

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** YL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** T.N

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** T.N

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar (Wide-mouth) B: Bottle (Narrow-mouth) **Reviewed by:** AM

Preservative: h: HCL n: HNO3 na$_2$:$Na_2S_2O_3$ Na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** TN

APPENDIX D

BLAINE TECH SERVICES, INC.
FIELD DATA SHEETS

SHELL SITE INSPECTION CHECKLIST

Client Shell Date 6/23/09

Site Address 5251 Hopyard Rd Pleasanton

Job Number 090623-MS2 Technician MS

Site Status Shell ~~Branded Station~~ Vacant Lot Other

Inspected / Labeled / Cleaned - all wells on Scope Of Work	☑	
Inspected / Cleaned Components - all other identifiable wells	☑	N/A
Inspected site for site investigation & site remediation related trip hazards	☑	
Completed all outstanding *BLAINE Wellhead Repair Order(s)*	☑	N/A
Completed *Shell Wellhead Repair Form(s)*	☑	N/A
Inspected treatment / remediation system compound for security, cleanliness and appearance	☐	~~N/A~~
Inspected vacant lot for signs of habitation, hazardous materials or terrain, overgrown vegetation and security	☐	~~N/A~~
Visually inspected site drums for condition and proper labeling	☐	~~N/A~~
Unresolved deficiencies identified - *"Notice of Deficient Condition"* form(s) completed	☐	N/A

Notes

PROJECT MANAGER ONLY

Checklist Reviewed mod 7/1 Initial/Date Notes

SHELL WELLHEAD INSPECTION FORM

(FOR SAMPLE TECHNICIAN)

Site Address 5251 HOPYARD RD Date 6/30/09

Job Number 090630-JP1 Technician JP Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Well Box Meets Compliance Requirements *See Below	Water Bailed From Wellbox	Cap Replaced	Lock Replaced	Well Not Inspected (explain in notes)	New Deficiency Identified	Previously Identified Deficiency Persists	Notes
S-10				X	X		X		NO TAG
S-11					X		X		NO TAG
S-12	X				X		X		NO TAG

*Well box must meet all three criteria to be compliant: 1) WELL IS SECURABLE BY DESIGN (12"or less) 2) WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12"or less) 3) WELL TAG IS PRESENT, SECURE, AND CORRECT

Notes:

WELL GAUGING DATA

Project # ~~5251~~ 090630-JP1 Date 6/30/09 Client SHELL

Site 5251 HOPYARD RD.

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
S-10	0755	4					8.04	18.87		
S-11	0800	4					7.97	19.85		
S-12	0750	4					8.49	20.20		

W[illegible] DEVELOPMENT DATA S[illegible] ET

Project #: 090630-JP	Client: SHELL
Developer: JP	Date Developed: 6/30/09
Well I.D. S-10	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 18.87 After	Depth to Water: Before 8.04 After
Reason not developed:	If Free Product, thickness:
Additional Notations: SWABBED & SURGED FOR 15 MINS	

Volume Conversion Factor (VCF):
{12 x (d^2/4) x π} /231
where
12 = in / foot
d = diameter (in.)
π = 3.1416
231 = in 3/gal

Well dia.		VCF
2"	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	6.87

7.0	X	10	=	70
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☐ Electric Submersible
- ☒ Positive Air Displacement

Type of Installed Pump NONE
Other equipment used 4" SURGE BLOCK

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0905	69.3	7.63	2559	>1000	7.0	BROWN, SANDY
0914	68.4	7.95	2298	>1000	14.0	" "
0921	68.3	7.99	2001	>1000	21.0	" " SAND CLOGGED PUMP
1102	72.0	7.97	2002	>1000	28.0	" "
1112	72.6	7.95	1903	>1000	35.0	LIGHTENING SAND CLOGGED PUMP
1126	72.3	7.91	1840	>1000	42.0	" " " "
						PLAYGROUND - TYPE
						SAND IN WELL, DTB 19.22
						POST PUMP: BOTTOM STILL SANDY.

Did Well Dewater? NO | If yes, note above. | Gallons Actually Evacuated: 42

WELL DEVELOPMENT DATA SHEET

Project #: 090630-JP	Client: SHELL
Developer: JP	Date Developed: 6/30/09
Well I.D. S-11	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 19.85 After 19.86	Depth to Water: Before 7.87 After 15.18
Reason not developed:	If Free Product, thickness:
Additional Notations: SWABBED & SURGED FOR 15 MIN	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

7.8	X	10	=	78
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☒ Electric Submersible
- ☒ Positive Air Displacement

Type of Installed Pump NONE
Other equipment used 4" SURGE BLOCK

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1335	75.5	7.63	11.75	>1000	7.8	DK BRN, SILTY
1345	75.5	7.50	9929 µS	>1000	15.6	LT BRN, SILTY
1356	73.9	7.44	8725	>1000	23.4	" "
1407	73.7	7.49	8510	>1000	31.2	" "
1417	72.2	7.41	8169	>1000	39.0	" "
1427	~~72.9~~	7.37	7774	>1000	46.8	" "
1438	~~73~~ 73.9	7.40	7505	>1000	54.6	HARD BRN, NO SILT, SWITCHED TO 6S.
1440	70.6	7.36	~~8003~~ 8403	>1000	62.4	LT BRN CLOUDY
1442	69.7	7.39	~~9473~~ 7977	>1000	70.2	" " "
1444	69.6	7.35	7660	>1000	78.0	" " "
1446	69.4	7.37	7022	>1000	85.8	" " "
1448	69.1	7.35	6848	>1000	93.6	" " "

Did Well Dewater? NO	If yes, note above.	Gallons Actually Evacuated:	93.6

W[illegible] DEVELOPMENT DATA S[illegible] ET

Project #: 090630-JP	Client: SHELL
Developer: JP	Date Developed: 6/30/09
Well I.D. S-12	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 20.20 After	Depth to Water: Before 8.49 After
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged & Surged for 15' min	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

7.6	X	3 10	=	76
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☐ Electric Submersible
- ☒ Positive Air Displacement

Type of Installed Pump: NONE
Other equipment used: 4" SURGE BLOCK

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
15:07	72.6	7.59	2367	>1000	7.6	Brown silty
15:12	71.9	7.83	2427	>1000	15.2	Brown Silty Semi Hard Bott
15:17	68.6	8.05	2341	>1000	22.8	Brown silty Semi Hard Bottom
15:23	68.5	8.15	2284	>1000	30.4	" "
15:29	68.9	8.00	2206	>1000	38.0	Hard Bottom
15:35	68.9	8.00	2179	>1000	45.6	Hard Bottom Silty
15:41	73.2	8.00	2117	>1000	53.2	Switched to ES
15:47	67.5	8.04	1889	>1000	60.8	Hard Bottom Brown
~~15:53~~ 550	68.2	7.91	2314	>1000	68.4	Hard Bottom
~~15:59~~ 553	68.1	7.93	2218	>1000	76	Hard Bottom

Did Well Dewater?	If yes, note above.	Gallons Actually Evacuated:	

SHELL WELLHEAD INSPECTION FORM

(FOR SAMPLE TECHNICIAN)

Site Address 5251 HOPYARD Rd. Date 7/6/09

Job Number 090706-RM1 Technician R McCarty Page 1 of 1

Well ID	Well Inspected - No Corrective Action Required	Well Box Meets Compliance Requirements *See Below	Water Bailed From Wellbox	Cap Replaced	Lock Replaced	Well Not Inspected (explain in notes)	New Deficiency Identified	Previously Identified Deficiency Persists	Notes
S-1	X								NO TAG
S-2	X								NO TAG
S-3	X								NO TAG
S-4	X								NO TAG
S-5	X	X							NO TAG
S-6	X								NO TAG
S-7	X								NO TAG
S-8									CHRISTY BOX
S-9	X	X							NO TAG
S-10	X								NO TAG
S-11	X	X							NO TAG
S-12	X								NO TAG
EW-1	X	X							NO TAG (EW)

*Well box must meet all three criteria to be compliant: 1) WELL IS SECURABLE BY DESIGN (12"or less) 2) WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12"or less) 3) WELL TAG IS PRESENT, SECURE, AND CORRECT

Notes:

WELL GAUGING DATA

Project # 090704-RM1 Date 7/6/09 Client SHELL

Site 5251 HOPYARD Rd. Pleasanton

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
S-1	0844	3					8.42	28.59		10
S-2	0848	3					8.53	24.05		7
S-3	0839	3					8.80	24.10		9
S-4	0832	3					8.79	24.18		1
S-5	0828	3					9.18	24.02		00
S-6	0920	3					8.32	25.42		TR
S-7	0915	3					8.63	25.01		TR
S-8	1004	3					7.83	24.53		TR
S-9	0805	2					8.06	19.74		1
S-10	0825	4					8.11	19.14		1
S-11	0811	4					7.98	19.63		1
S-12	0836	4					8.89	20.19		1
EW-1	0842	4					8.21	19.70	✓	1

SHELL WELL MONITORING DATA SHEET

BTS #: 090706-RM1	Site: 5251 Hopyard Rd. Pleasanton
Sampler: RM	Date: 7/6/09
Well I.D.: S-10	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 19.14	Depth to Water (DTW): 8.11 11.03
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.31	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, ✓Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other______

Sampling Method: ✓Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ______

7.2 (Gals.) X 3 = 21.6 Gals.
1 Case Volume, Specified Volumes, Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	$radius^2 * 0.163$

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1119	69.3	8.53	2438	>1000	7.2	
1121	68.2	8.14	2881	>1000	14.4	
1123	68.1	8.12	2779	>1000	21.6	

Did well dewater? Yes (No) Gallons actually evacuated: 21.6

Sampling Date: 7/6/09 Sampling Time: 1135 Depth to Water: 10.30 (limited)

Sample I.D.: S-10 Laboratory: (CalScience) Columbia Other______

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 090706-EM1	Site: 5251 HOPYARD Rd. Pleasanton
Sampler: R.M.	Date: 7/6/09
Well I.D.: S-11	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 19.63	Depth to Water (DTW): 7.98
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.31	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; ~~Electric~~ Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: ~~Bailer~~; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

7.6 (Gals.) X	3	=	22.8 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1025	66.7	7.77	7619	>1000	7.6	
1027	66.8	7.70	8341	>1000	15.2	
1029	66.8	7.48	8423	>1000	22.8	
1031	67.1	7.43	8436	>1000	30.4	

Did well dewater? Yes (No) Gallons actually evacuated: 30.4

Sampling Date: 7/6/09 Sampling Time: 1040 Depth to Water: 10.27

Sample I.D.: S-4 Laboratory: (CalScience) Columbia Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 090706-RM1	Site: 5251 HOPYARD Rd. Pleasanton
Sampler: RM	Date: 7/6/09
Well I.D.: S-12	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 20.19	Depth to Water (DTW): 8.89
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.15	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; ~~Electric~~ Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: ~~Bailer~~; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

7.4 (Gals.) X 3 = 22.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1201	67.0	7.92	1604	231	7.4	
1203	66.3	7.78	1741	952	14.8	
1205	66.1	7.78	1761	>1000	22.2	

Did well dewater? Yes (No) Gallons actually evacuated: 22.2

Sampling Date: 7/6/09 Sampling Time: 1210 Depth to Water: 11.12

Sample I.D.: S-12 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: ~~SVOC~~ VOC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

APPENDIX E

SURVEY REPORT

Mid Coast Engineers
Civil Engineers and Land Surveyors
70 Penny Lane, Suite A - Watsonville, CA 95076
phone: (831) 724-2580
fax: (831) 724-8025
e-mail: lee@midcoastengineers.com

Richard A. Wadsworth
Civil Engineer
Stanley O. Nielsen
Land Surveyor
Lee D. Vaage
Land Surveyor
Jeff S. Nielsen
Land Surveyor

June 26, 2009

Cora Olson
DELTA Consultants
312 Piercy Road
San Jose, CA 95138

Re: **Shell-branded Service Station, 5251 Hopyard Road, Pleasanton, California;** DELTA Project SCA5251H1, MCE Job No. 06251X2

Dear Ms. Olson,

As you requested, on June 25 we surveyed four additional monitoring wells located at the referenced site. Our findings are listed on the attached sheets, expressed in State Plane Coordinates and Latitude/Longitude, and are consistent with our previous surveys of November 21, 2006 and December 14, 2007.

A notch was cut in the north rim of the PVC casing (TOC) and a cross chiseled in the north rim of the box (TOB).

Measurements were obtained from conventional survey techniques in combination with GPS techniques (Code CGPS), using control points HS5408 (HPGN CA 04 07) and DE8479 (C226), as published by NGS/NOAA and listed on their web site. Latitude and Longitude as shown were determined from the California Coordinate System, Zone 3, NAD 83 Datum. The accuracy range of the reported information is +/- 1cm. GPS equipment is the Trimble 5700/5800 system (Code T57).

The benchmark used for this survey is DE8479, a survey disk set in concrete in the median strip between the eastbound and westbound lanes of Alcosta Boulevard approximately 265 feet west of Interstate Highway 680. Elevation = 419.00 feet, NGVD 29, converted by CORPSCON/VERTCON (421.72, NAVD88 datum).

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

Yours truly,

Lee D. Vaage

SHELL OIL PRODUCTS US
SHELL BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

DELTA Project Number SCA5251H1

Project : 06251X2
User name MCE Date & Time 9:49:36 AM 6/26/2009
Coordinate System US State Plane 1983 Zone California Zone 3 0403
Project Datum NAD 1983 (Conus)
Vertical Datum NGVD 29
Coordinate Units US survey feet
Distance Units US survey feet
Elevation Units US survey feet

Point Number	Northing	Easting	Elevation	Description
15	2079800.09	6155556.61	326.98	EW-1toc
16	2079800.51	6155556.78	327.21	EW-1tob
17	2079895.70	6155550.11	326.24	S-10toc
18	2079896.04	6155550.28	326.86	S-10tob
36	2079943.18	6155669.79	326.12	S-11toc
37	2079943.55	6155669.77	326.80	S-11tob
40	2079736.38	6155664.30	326.91	S-12toc
41	2079736.68	6155664.39	327.26	S-12tob

SHELL OIL PRODUCTS US
SHELL BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

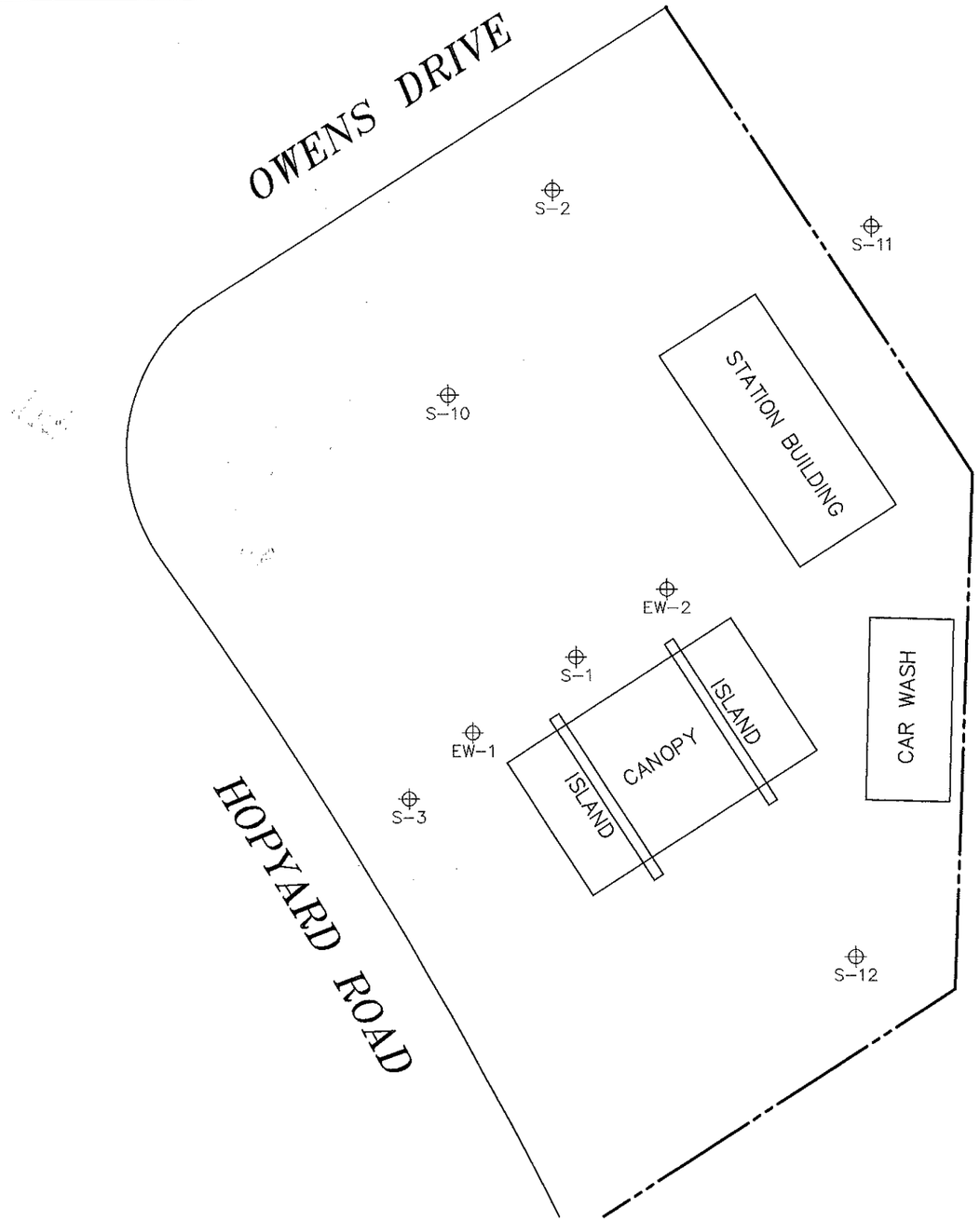
DELTA Project Number SCA5251H1

Project : 06251X2
User name MCE Date & Time 9:49:36 AM 6/26/2009
Coordinate System US State Plane 1983 Zone California Zone 3 040
Project Datum NAD 1983 (Conus)
Vertical Datum NGVD 29
Coordinate Units US survey feet
Distance Units US survey feet
Elevation Units US survey feet

Point Number	Latitude	Longitude	Elevation	Description
15	37.698369474°N	121.903725580°W	326.98	EW-1toc
16	37.698370647°N	121.903725024°W	327.21	EW-1tob
17	37.698631771°N	121.903753004°W	326.24	S-10toc
18	37.698632690°N	121.903752444°W	326.86	S-10tob
36	37.698767086°N	121.903341851°W	326.12	S-11toc
37	37.698768089°N	121.903341931°W	326.80	S-11tob
40	37.698198965°N	121.903350093°W	326.91	S-12toc
41	37.698199785°N	121.903349798°W	327.26	S-12tob

	A	B	C	D	E	F	G	H	I	J	K	L
1	**SHELL OIL PRODUCTS US**											
2	**SHELL BRANDED SERVICE STATION**											
3	**5251 Hopyard Road**											
4	**Pleasanton, California**											
5												
6	**DELTA Project Number SCA5251H1**											
7												
8	Project : 06251X2											
9	User name MCE			Date & Time	9:49:36 AM 6/26/2009							
10	Coordinate System	US State Plane 1983		Zone	California Zone 3 0403							
11	Project Datum	NAD 1983 (Conus)										
12	Vertical Datum	NGVD 29										
13	Coordinate Units	US survey feet										
14	Distance Units	US survey feet										
15	Elevation Units	US survey feet										
16												
17		EW-1	MW	06/25/2009	37.6983695	-121.9037256	CGPS	NAD83	1	Mid Coast Engineers	T57	top of casing
18												
19		S-10	MW	06/25/2009	37.6986318	-121.9037530	CGPS	NAD83	1	Mid Coast Engineers	T57	top of casing
20		S-11	MW	06/25/2009	37.6987671	-121.9033419	CGPS	NAD83	1	Mid Coast Engineers	T57	top of casing
21		S-12	MW	06/25/2009	37.6981990	-121.9033501	CGPS	NAD83	1	Mid Coast Engineers	T57	top of casing

	A	B	C	D	E	F	G	H	I
1	**SHELL OIL PRODUCTS US**								
2	**SHELL BRANDED SERVICE STATION**								
3	**5251 Hopyard Road**								
4	**Pleasanton, California**								
5									
6	**DELTA Project Number SCA5251H1**								
7									
8	Project : 06251X2								
9	User name MCE Date & Time 9:49:36 AM 6/26/2009								
10	Coordinate System US State Plane 1983 Zone California Zone 3 0403								
11	Project Datum NAD 1983 (Conus)								
12	Vertical Datum NGVD 29								
13	Coordinate Units US survey feet								
14	Distance Units US survey feet								
15	Elevation Units US survey feet								
16									
17		EW-1	06/25/2009	326.98	CGPS	29	0.5	Mid Coast Engineers	-0.23
18									
19		S-10	06/25/2009	326.24	CGPS	29	0.5	Mid Coast Engineers	-0.62
20		S-11	06/25/2009	326.12	CGPS	29	0.5	Mid Coast Engineers	-0.68
21		S-12	06/25/2009	326.91	CGPS	29	0.5	Mid Coast Engineers	-0.35



NOTES:

1. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
2. BENCHMARK IS DE8479, DISK SET IN CONCRETE IN MEDIAN STRIP ALCOSTA BOULEVARD 265' WEST OF INTERSTATE 680.
ELEVATION = 419.00, NGVD '29.
3. SURVEYED AT THE REQUEST OF DELTA CONSULTANTS IN NOVEMBER 2006, DECEMBER 2007 AND JUNE 2009, PROJECT NUMBER SCA5251H1.

MONITORING WELL LOCATION MAP FOR
SHELL OIL PRODUCTS US
SHELL BRANDED SERVICE STATION

5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

MCE
MID COAST ENGINEERS
CIVIL ENGINEERS AND LAND SURVEYORS
70 PENNY LANE SUITE A WATSONVILLE, CA 95076
(831) 724-2580

SCALE IN FEET
0 40 80

SCALE:	1"=40'
JOB NO.	06251X2
DATE:	JUNE 26, 2009
SHEET:	1 OF 1