R0288Z

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408.224.4724 800.477.7411
Fax 408.225.8506

Alameda County Environmental Health
OCT 10 2005

Letter of Transmittal

To:	Alameda County Health Care Services Agenecy	Date: 10/5/2005
	Environmental Health Service - Environmental Protection	
	1131 Harbor Bay Parkway, Suite 250	Job No: SJ98-01S-G
	Alameda, California 94502-6577	
Attn:	Jerry Wickham	

We are sending the following items:

Date	Copies	Description
14-Feb-03	1	**Site Assessment Report**
		Shell Service Station
		1801 Santa Rita Road
		Pleasanton, CA

These are transmitted:

☐ For your Information ☐ For action specified below ☐ For review and comment ☐ For your use ☑ As requested

Remarks

Per your request.

Copies to:

By: Debbie Arnold

Title: Project Geologist

ENVIRONMENTAL MANAGEMENT, INC.

FILE

Alameda County
OCT 10 2005
Environmental Health

February 14, 2003
KHM Project C81-1801 Santa Rita

Ms. Danielle Stefani
Hazardous Materials Coordinator
Livermore-Pleasanton Fire Department
3560 Nevada Street
Pleasanton, CA 94566

Re: Site Assessment Report
Shell Service Station
1801 Santa Rita Road
Pleasanton, California

Dear Ms. Stefani

KHM Environmental Management, Inc. (KHM) on behalf of Equilon Enterprises LLC dba Shell Oil Products US (SHELL) has prepared this Site Assessment Report for the above referenced site (Figure 1). The Groundwater Assessment Program (GRASP) activities initiated at the above referenced site on October 10, 2002, revealed detectable concentrations of petroleum hydrocarbons in the subsurface soil and groundwater.

BACKGROUND

GRASP is a voluntary initiative by SHELL to install groundwater monitoring wells at numerous retail service stations nationwide that do not have any active release cases but have been identified to be in close proximity to one or more public water supply wells. The purpose of this program is to proactively monitor the groundwater beneath these sites and, in the event of a subsurface release, to respond quickly to protect public wells from this impact.

GRASP WELL INSTALLATION

On October 10 - 15, 2002, KHM Environmental (KHM) supervised the drilling and installation of four groundwater monitoring wells (MW-1 through MW-4). Well locations are shown on Figure 2. KHM obtained a well permit from the Zone 7 Water Agency to install these wells (Appendix A). Well construction details are displayed in the boring logs presented in Appendix B. Well development sheets are included in Appendix C. Site survey data is included as Appendix D.

6284 SAN IGNACIO AVENUE, SUITE E • SAN JOSE, CALIFORNIA • 95119 • PHONE: (408) 224-4724 • FAX: (408) 224-4518
REDMOND, WASHINGTON (425) 558-0134 • PORTLAND, OREGON (503) 233-4068 • CROCKETT, CALIFORNIA (510) 787-6756 • MONROVIA, CALIFORNIA (626) 256-6662

ANALYTICAL FINDINGS

Soil samples were taken during the drilling of site wells. Soil samples with a photoionization detector (PID) reading greater than 10 parts per million were analyzed for the presence of petroleum hydrocarbons and fuel oxygenates. Soil analytical results are summarized in Table 1, and displayed within Figure 3. Certified analytical results and chain-of-custody documentation for soil are presented as Appendix E. After well development, on December 12, 2002, the monitoring wells were sampled and analyzed for chemical impacts. Groundwater analytical data is summarized in Table 2 and presented in Figure 4. A groundwater elevation contour map is presented as Figure 2. Well gauging data sheets are included in Appendix F. Certified analytical results and chain-of-custody documentation for groundwater are presented in Appendix G.

UNAUTHORIZED RELEASE REPORT

The previously submitted Unauthorized Release Report dated October 31, 2002 is included as Appendix H for your reference.

If you have any questions regarding this site, please contact Lee Dooley (KHM) at (408) 224-4724 or Lynn Walker (SHELL) at (925) 706-1559.

Sincerely,
KHM Environmental Management, Inc.

D. Arnold

Debbie Arnold
Project Geologist

R. Lee Dooley, CHG 183
Senior Hydrogeologist

REGISTERED GEOLOGIST
R. LEE DOOLEY
No. 0183
CERTIFIED
HYDROGEOLOGIST
EXP 6/30/05
STATE OF CALIFORNIA

CC: Lynn Walker, Shell Oil Products US (PDF by email)
Karen Petryna, Shell Oil Products US (PDF by email)
Isabel Mejia, Shell Oil Products US
Chuck Headlee, RWQCB San Francisco Region

ATTACHMENTS:

- Table 1 – Soil Analytical Data
- Table 2 – Groundwater Gauging and Analytical Data
- Figure 1 – Site Location Map
- Figure 2 – Groundwater Elevation Contour Map
- Figure 3 – Hydrocarbon Distribution in Soil Map
- Figure 4 – Hydrocarbon Distribution in Groundwater Map
- Appendix A - Well Permit
- Appendix B – Boring Logs
- Appendix C – Well Development Field Data Sheets
- Appendix D – Site Survey Data
- Appendix E – Soil Laboratory Report and Chain-of-Custody Documentation
- Appendix F – Well Gauging Data
- Appendix G – Groundwater Laboratory Report and Chain-of-Custody Documentation
- Appendix H – Unauthorized Release Report

TABLE 1
SUMMARY OF SOIL ANALYTICAL DATA
1801 Santa Rita Road
Pleasanton, California

Sample I.D.	Sample Collection Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
MW-1 28.5'	10/15/02	**420**	<0.05	**1.5**	**5.1**	**37**	<0.5	<0.5	<0.5	<0.5	<0.5
MW-1 30'	10/15/02	**3.2**	**0.023**	**0.13**	**0.094**	**0.59**	<0.5	<0.5	<0.5	<0.5	<0.5
MW-1 35'	10/16/02	<1.0	<0.005	<0.005	<0.005	**0.014**	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4 24.5'	10/10/02	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4 29.5'	10/10/02	**57**	**0.77**	**3.7**	**0.25**	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4 34.5'	10/10/02	**8.2**	**2.0**	**0.61**	**0.26**	**0.41**	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4 40'	10/10/02	**170**	**1.7**	**0.39**	**2.3**	**9.6**	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4 45'	10/10/02	<1.0	**0.0069**	<0.005	<0.005	<0.005	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4 50'	10/10/02	<1.0	<0.005	<0.005	<0.005	<0.010	<0.5	<0.5	<0.5	<0.5	<0.5

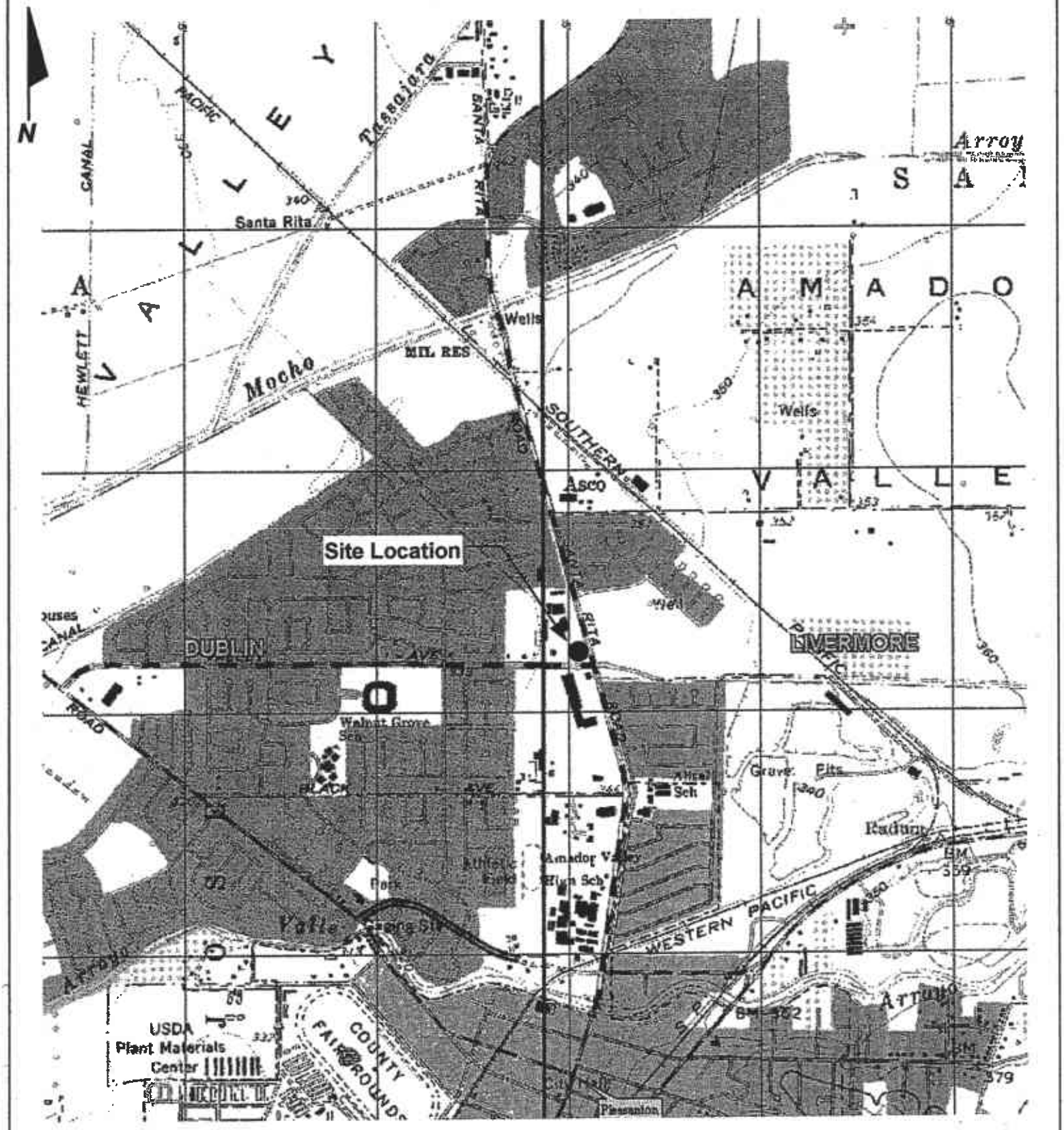
Notes:

All data reported in milligrams per kilogram (mg/kg)
TPH-g - Total Petroleum Hydrocarbons as gasoline
MTBE - Methyl tert-butyl ether
DIPE - Di-isopropyl ether
ETBE - Ethyl tert-butyl ether
TAME - Tert-amyl methyl ether
TBA - Tert-Butanol
<n = Below the detection limit
TPH-g quantified using EPA Method 8260B
BTEX Compounds, MTBE, DIPE, ETBE, TAME, and TBA analyzed using EPA Method 8260B

TABLE 2
GROUNDWATER GAUGING AND ANALYTICAL DATA
1801 Santa Rita Road
Pleasanton, California

Sample I.D.	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	DIPE	ETBE	TAME	TBA	TOC Elevation[1] (feet)	Depth to GW (feet)	SPH Thickn. (feet)	GW Elev.[1] (feet)
MW-1	12/20/02	<50	<50	<0.50	<0.50	<0.50	**0.71**	<0.50	<2.0	<2.0	<2.0	<50	342.10	85.60	0.00	256.50
MW-2	12/20/02	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	341.57	85.00	0.00	256.57
MW-3	12/20/02	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	341.65	85.25	0.00	256.40
MW-4	12/20/02	<50	**69**	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	340.68	84.15	0.00	256.53

Notes:
All data reported in micrograms per liter (µg/l)
TOC = Top of well casing
SPH = Separate-phase hydrocarbons
TPH-G = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TAME = Tert-amyl methyl ether
TBA = Tert-Butanol
<n = Below the detection limit
TPH-G quantified using EPA Method 8260B
BTEX Compounds, MTBE, DIPE, ETBE, TAME, and TBA analyzed using EPA Method 8260B
[1]TOC elevation and groundwater elevation relative to Mean Sea Level



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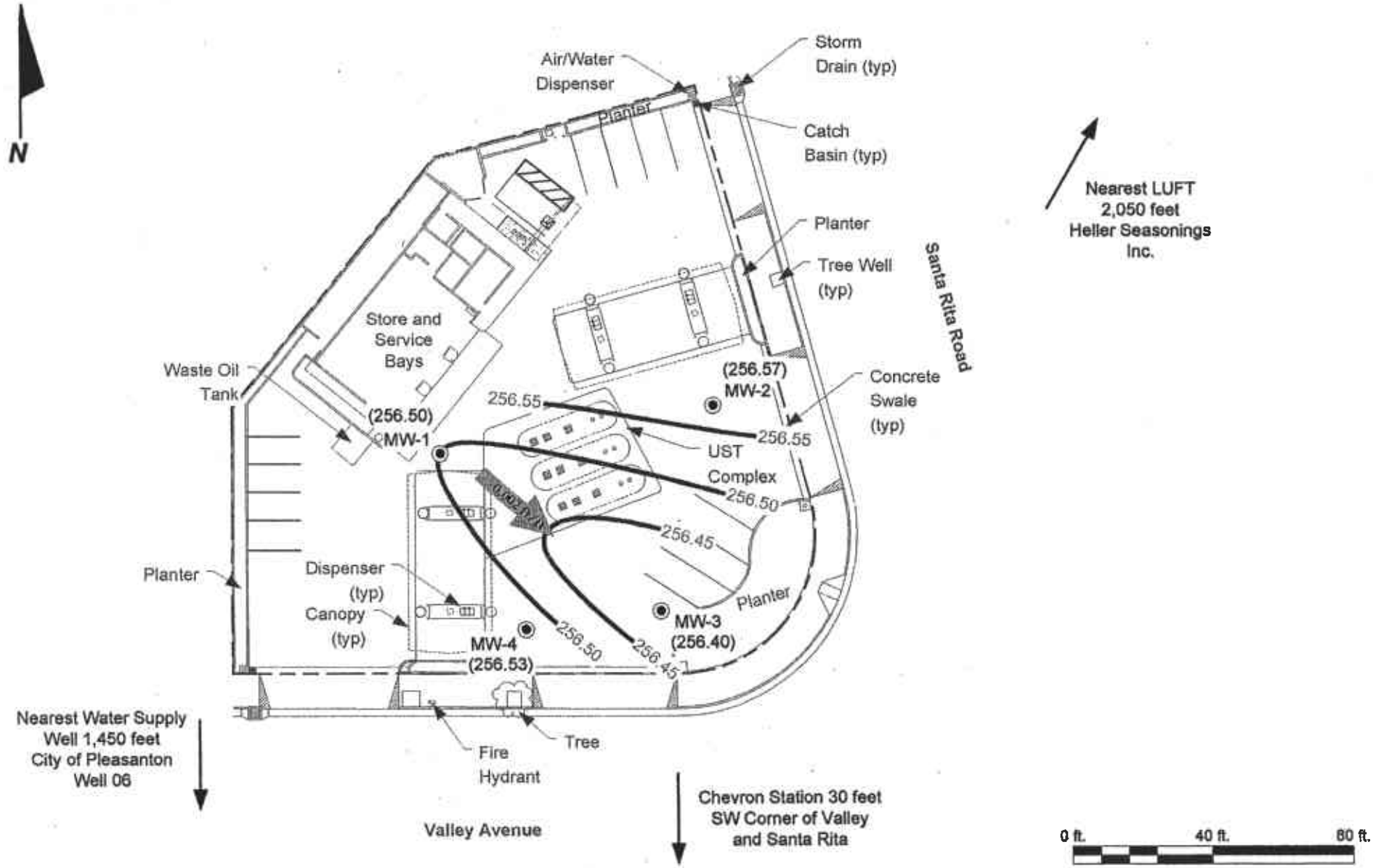
SITE LOCATION MAP

Shell Service Station
1801 Santa Rita Road
Pleasanton, California

DATE	PROJECT	FIGURE
11/25/02	C81-1801 Santa Rita	1

Map Source: DeLorme, Yarmouth, ME 04096, USGA Topo Map



LEGEND

MW-3 ◉ **GROUNDWATER MONITORING WELL**

(256.53) **GROUNDWATER ELEVATION (FEET - MSL), 12/20/02**

256.50 **GROUNDWATER ELEVATION CONTOUR**

0.002 ft/ft **APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT**

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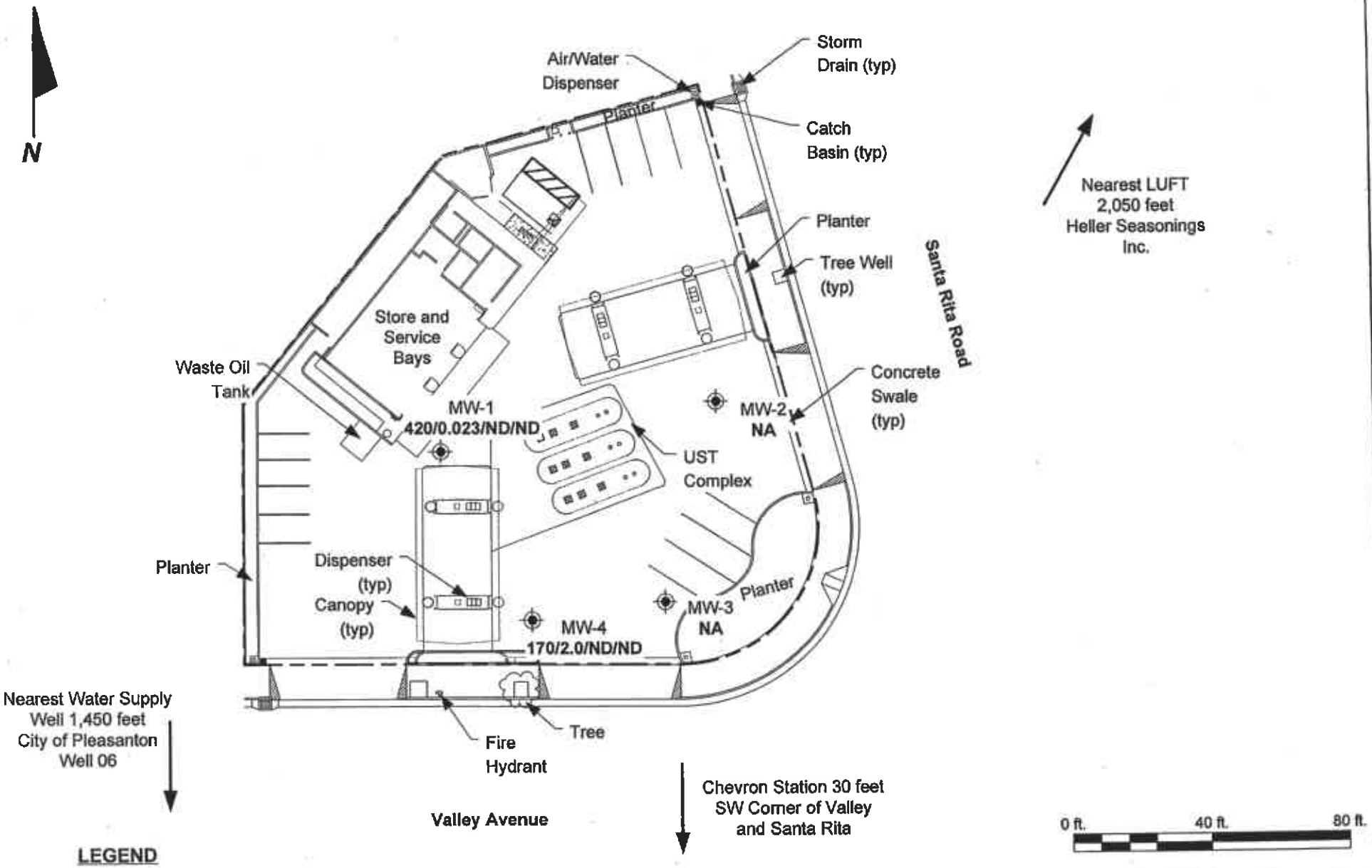
GROUNDWATER ELEVATION CONTOUR MAP DECEMBER 20, 2002

Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, California

DATE	PROJECT	FIGURE
02/10/03	C81-1801 Santa Rita	2



LEGEND

MW-1 ⊕	GROUNDWATER MONITORING WELL
ND/ND/1.9/0.5	MAXIMUM CONCENTRATIONS OF TPH-G/BENZENE/MTBE/TBA IN SOIL SAMPLED ON DECEMBER 10, 15 & 16, 2002 (mg/kg)
ND	NOT DETECTED AT LABORATORY LIMITS
NA	NO SOIL SAMPLE ANALYZED

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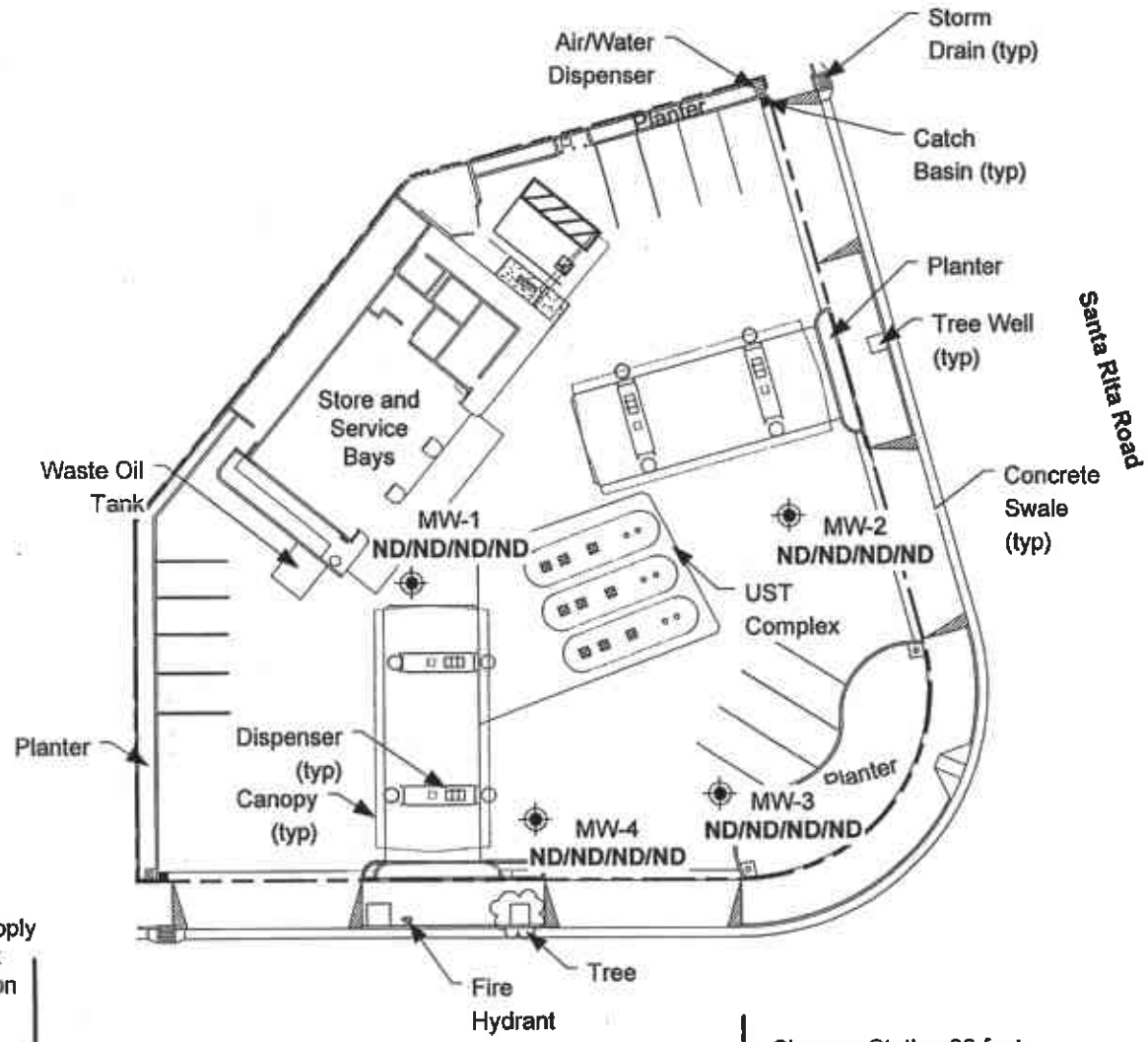
MAXIMUM HYDROCARBON CONCENTRATION DISTRIBUTION IN SOIL MAP

Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, California

DATE	PROJECT	FIGURE
02/06/03	C81-1801 Santa Rita	3



Nearest LUFT
2,050 feet
Heller Seasonings Inc.

Nearest Water Supply
Well 1,450 feet
City of Pleasanton
Well 06

Chevron Station 30 feet
SW Corner of Valley and Santa Rita

0 ft. 40 ft. 80 ft.

LEGEND

MW-1 ⊕	GROUNDWATER MONITORING WELL
ND/ND/0.59/ND	CONCENTRATIONS OF TPH-G/BENZENE/MTBE/TBA IN GROUNDWATER, SAMPLED ON DECEMBER 20, 2002 (µg/l)
ND	NOT DETECTED AT LABORATORY LIMITS

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HYDROCARBON DISTRBUTION IN GROUNDWATER MAP

Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, California

DATE	PROJECT	FIGURE
01/23/03	C81-1801 Santa Rita	4

APPENDIX A

WELL PERMIT

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588-5127 VOICE (925) 484-2600 X235 FAX (925) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1501 Santa Rita Rd, Pleasanton, CA

California Coordinates Source _____ Accuracy: _____ ft.
CCN _____ ft. CCE _____ ft.
APN 946-3295-3-6

CLIENT
Name Shell Oil Products U.S.
Address P.O. Box _____ Phone _____
City Burbank _____ Zip _____

APPLICANT
Name KHM Environmental Management Inc.
Fax 408-224-4518
Address 6359 San Ignacio Ave, E Phone 408-224-4724
City San Jose _____ Zip 95119

TYPE OF PROJECT:

Well Construction	☒	Geotechnical Investigation	☐
Well Destruction	☐	Contamination Investigation	☐
Cathodic Protection	☐	Other _____	☐

PROPOSED WELL USE:

Domestic	☐	Irrigation	☐
Municipal	☐	Remediation	☐
Industrial	☐	Groundwater Monitoring	☒
Dewatering	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Hollow Stem Auger	☒
Cable Tool	☐	Direct Push	☐	Other _____	☐

DRILLING COMPANY Gregg Drilling
DRILLER'S LICENSE NO. C57-485165

WELL SPECIFICATIONS:
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 50 ft.
Surface Seal Depth 35 ft. Number MW-1 TO MW-4

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

ESTIMATED STARTING DATE 10/7/02
ESTIMATED COMPLETION DATE 10/14/02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.
APPLICANT'S SIGNATURE Paul Fischer Date 9/23/02

ATTACH SITE PLAN OR SKETCH

FOR OFFICE USE

PERMIT NUMBER 22138
WELL NUMBER 3S/1E 16D25 to 16D29
APN _____

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 proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

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 10/1/02
Wyman Hong

APPENDIX B

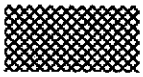
BORING LOGS

Boring Log Symbol Key

First Encounter of Groundwater

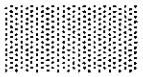
Stabilized Depth to Groundwater

Asphalt



Cement Grout

Bentonite



Sand

Blank Casing

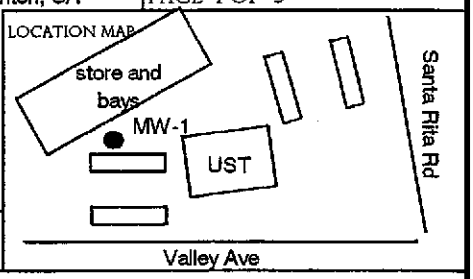
Screened Casing

KHM
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/15/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	92.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	92'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-1
PAGE 1 OF 5

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
									AF	Asphalt ~3" thick Air knifed to 7' on 10/3/02
			damp			1			ML	**Gravelly SILT**; medium to grey brown, 65% silt, 35%
			damp						CH	gravel ~2" diameter
						2				**Fat CLAY**; dark grey, medium stiff
			damp						ML	**SILT**; dark grey, trace gravel and cobbles
						3				
						4				
			damp	2.5	Air Knifed				CL	**Lean CLAY**; grey brown
						5				
						6				
			damp			7				
						8				
			damp	1.4	3	9			ML	**SILT**; light olive brown, medium stiff
					4	10				
						11				
						12				
						13				
			dry/	1.4	3	14				
			damp		5					(trace of gravel 1/4" diameter)
					8	15				
						16				
						17				
						18				
					3	19				
			damp	2.0	4				CL	**Lean CLAY**; medium brown, medium stiff
					6	20				
						21				
						22				

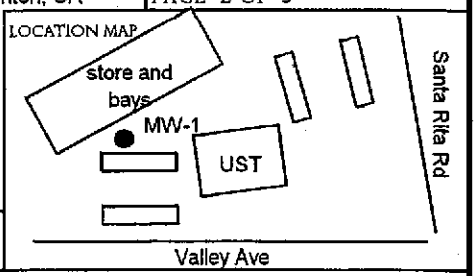
Bentonite Grout

KHM
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/15/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	92.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	92'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-1
PAGE 2 OF 5

LOCATION MAP

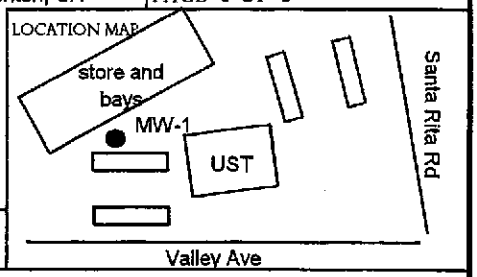


Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
						23				
					4	24			CL	continued
			damp	6.2	7					
					9	25				
						26				
						27				
						28				
			damp	1523	4	29			SP	**Poorly Graded SAND**; brown, fine-grained
					7				CL	**Lean CLAY**;medium brown, stiff
			damp	31.4	7	30				
						31				
						32				
						33				
					4	34				(trace olive mottling)
			damp	11.1	5					
					6	35				
						36				
						37				
						38				
					3	39				
			damp	4.5	5					
					7	40				
						41				
						42				
						43				
			damp	5.9	3	44				
					5					

KHM
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO:	MW-1
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA	PAGE	3 OF 5
DRILLER:	Gregg	DATE DRILLED:	10/15/02		
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"		
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	92.5'		
CASING TYPE:	PVC	WELL DIAMETER:	4"		
SLOT SIZE:	0.010"	WELL DEPTH:	92'		
GRAVEL PACK:	2-12	CASING STICKUP:	N/A		
ELEVATION		NORTHING		EASTING	

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
					6	45			CL	continued
						46				
						47				
						48				
					7	49				(very stiff)
			damp	2.9	8					
					9	50				
						51				
						52				
						53				
					4	54				
			damp	3.9	7					
					13	55			SW-SC	**Well Graded SAND with Clay**; medium to grey brown, fine to medium grained sand, 10% clay, very dense
						56				
						57				
						58				
					19	59				(10% gravel)
			moist	3.9	27					
					32	60				
						61				
						62				
						63				
					21	64				(gravel up to 3/4" diameter)
			moist	3.3	26					
					30	65				
						66				

KHM
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO:	MW-1
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA	PAGE	4 OF 5
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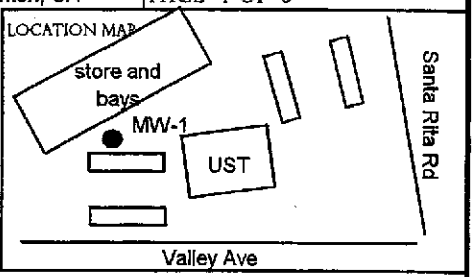
ELEVATION		NORTHING		EASTING	

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Grout	Blank PVC					67			SW-SC	continued
						68				
					24	69				
			moist	1.9	36					(5% gravel 1/4-1/2")
					39	70				
						71				
						72				
						73				
			moist	3.0	22	74				(10% gravel)
					50/5					
						75				
						76				
						77				
						78				
					28	79			SW	**Well Graded SAND**; 60% coarse grained sand, 10% gravel
			moist	2.3	22					1/4" diameter, trace of clay, dense
					24	80				
Sand						81				
						82				
						83				
					12	84				
			moist	2.1	18					
					26	85				
		▽	wet			86				
						87				
						88				

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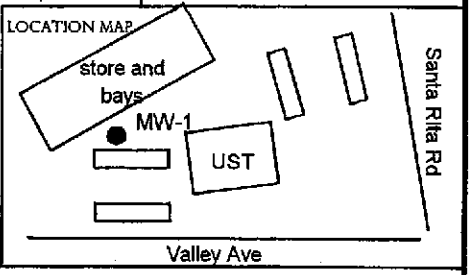
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/15/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	92.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	92'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-1

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Sand			wet		6 10 13	89			GP	**Poorly Graded GRAVEL with Sand**; medium to grey brown, 1/4" diameter gravel
			damp		9 14 19	90 91 92			CL	**Lean CLAY**; medium brown, FeO_3 mottling, hard
						93				**BOTTOM OF BORING @ 92.5 ft**
						94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110				

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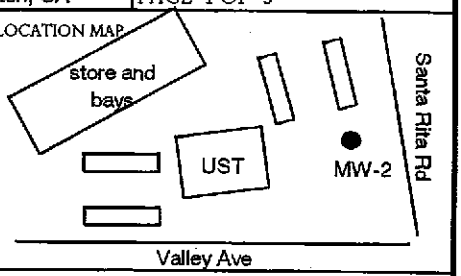
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/14/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	93.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	93'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-2
PAGE 1 OF 5

LOCATION MAP



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
								AF	Asphalt ~6" thick (airknifed to 7 ft on 10/3/02)
		dry to damp		Air Knifed	1			GC	**Gravelly CLAY**;brown, fine to coarse gravel
								CL	**Lean CLAY with Gravel**; ~35% gravel, 15-20% fine to coarse sand, medium plasticity
		damp			2				
					3				(<5% sand, low plasticity)
					4				
					5				
					6				
					7				
					8				
				2	9			ML	**SILT**; medium to olive brown, medium stiff
		damp	6.2	3					
				5	10				
					11				
					12				
					13				
				3	14				(clay content increasing with depth)
		damp	2.5	4					
				8	15			CL	**Lean CLAY**; medium brown with trace olive mottling,
					16				
					17				
					18				
				3	19				(stiff)
		damp	1.9	3					
				5	20				
					21				
					22				

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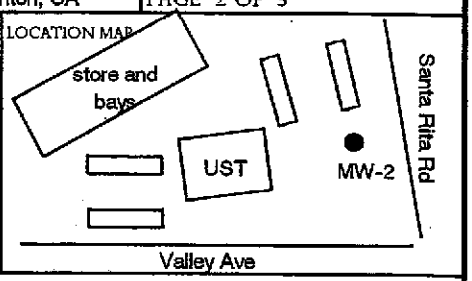
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/14/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	93.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	93'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-2
PAGE 2 OF 5

LOCATION MAP



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					23				
				3	24			CL	Continued
		damp	2.2	4					
				5	25				
					26				
					27				
					28				
				2	29			SC	(4" layer of clayey sand)
		moist	4.3	4					
				6	30			CL	**Lean CLAY**; as above
					31				
					32				
					33				
				3	34				
		damp	2.5	3					
				6	35				
					36				
					37				
					38				
				3	39				(medium brown)
		moist	2.1	5					
				6	40				
					41				
					42				
					43				
		damp	1.2	5	44				
				7					

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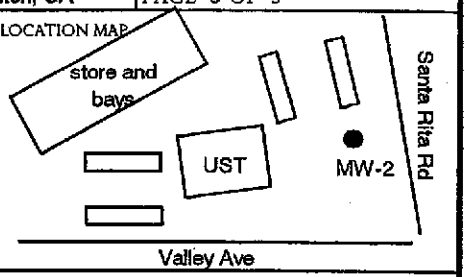
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO: MW-2	
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA	PAGE 3 OF 5	
DRILLER:	Gregg	DATE DRILLED:	10/14/02		
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"		
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	93.5'		
CASING TYPE:	PVC	WELL DIAMETER:	4"		
SLOT SIZE:	0.010"	WELL DEPTH:	93'		
GRAVEL PACK:	2-12	CASING STICKUP:	N/A		
ELEVATION		NORTHING		EASTING	

LOCATION MAP



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
				10	45			CL	Continued
					46				
					47				
					48				
				5	49				(olive and orange brown, very stiff)
		damp	1.6	6					
				11	50				
					51				
					52				
					53				
				14	54			SC	**Clayey SAND**; brown, 75% fine sand, 25% clay
		damp	1.9	27					trace gravel (1/4" diameter), very dense
				46	55				
					56				
					57				
					58				
				18	59			GP	**Poorly Graded GRAVEL with Sand**; grey, 65%
		damp	1.3	27					gravel (1/4" diameter), 35% fine grained sand, very dense
				34	60				
					61				
					62				
					63				
				13	64			SW	**Well Graded SAND with Gravel**; grey, dense
		damp	2.2	16					
				22	65				
					66				

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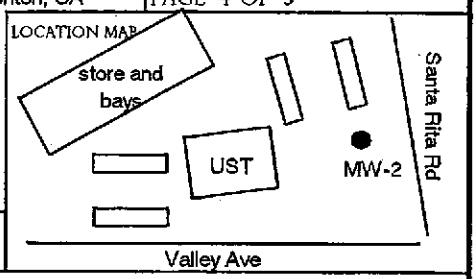
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/14/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	93.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	93'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-2
PAGE 4 OF 5



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Chips					67			SW	Continued
					68				
				15					
		damp	2.6	21	69				
				37					
					70				
					71				
					72				
					73				
				20					
		damp	0.9	50	74				(trace FeO mottling)
				29	75				
					76				
					77				
					78				
				18					(grades coarser, medium to coarse grained,
		moist	0.8	30	79				40% gravel up to 1" diameter, trace clay)
				33	80				
					81				
					82				
					83				
				18					
		moist/	0.6	31	84				(40% 1/4" diameter gravel)
	▽	wet		34	85				
				22					
				31					(decrease in gravel content to 25%)
				34	86				
				45				SP	**Poorly Graded SAND**; medium brown, fine grained
Sand				50/3	87			SP	**Poorly Graded SAND with Gravel,**
									fine grained sand lens
				12	88				

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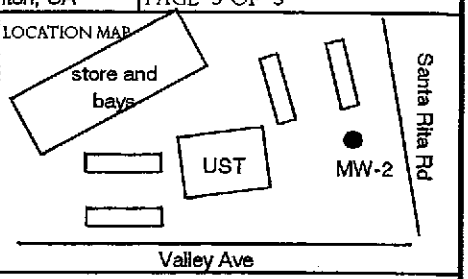
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO:	MW-2
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA	PAGE	5 OF 5
DRILLER:	Gregg	DATE DRILLED:	10/14/02		
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"		
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	93.5'		
CASING TYPE:	PVC	WELL DIAMETER:	4"		
SLOT SIZE:	0.010"	WELL DEPTH:	93'		
GRAVEL PACK:	2-12	CASING STICKUP:	N/A		
ELEVATION		NORTHING		EASTING	

LOCATION MAP



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Sand				13	89			SP	continued, (coarse grained)
		wet		15				CL	**Lean CLAY**; medium brown
				9	90				(occasional FeO_3 and greyish white mottling)
				11					
				16	91				
		wet		10					
				14	92				
				19					(olive green)
					93				
					94				**BOTTOM OF BORING @ 93.5 ft**
					95				
					96				
					97				
					98				
					99				
					100				
					101				
					102				
					103				
					104				
					105				
					106				
					107				
					108				
					109				
					110				

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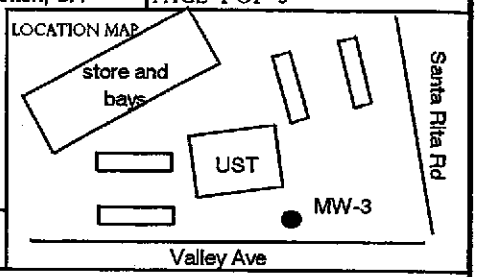
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO:	MW-3
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasanton, CA	PAGE	1 OF 5
DRILLER:	Gregg	DATE DRILLED:	10/11/02		
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"		
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	97.5'		
CASING TYPE:	PVC	WELL DIAMETER:	4"		
SLOT SIZE:	0.010"	WELL DEPTH:	97'		
GRAVEL PACK:	2-12	CASING STICKUP:	N/A		
ELEVATION		NORTHING		EASTING	



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
				Air Knifed				AF	Asphalt ~6" thick (airknifed to 7 ft on 10/3/02)
									Fill ~5" thick
		moist			1			CL	**Lean CLAY with Gravel**; tan brown, 25% gravel
					2				1/4-1/2" diameter, low plasticity
					3				(dark grey, fine to coarse sand, gravel 1/8"-1/4" diameter)
					4				
					5				(15% sand and gravel)
					6				
					7				
					8				
				3	9			SP	**Poorly Graded SAND**; medium brown, 85% fine grained
		damp	3.9	3					sand, 10% fines
				4	10				
					11			CL	**Lean CLAY with Sand**; orange brown, moderate plasticity
					12				
					13				
				4	14				
		damp	1.9	4					(stiff)
				5	15				
					16				
					17				
					18				
				4	19				
		damp	4.7	6					
				9	20				
					21				
					22				

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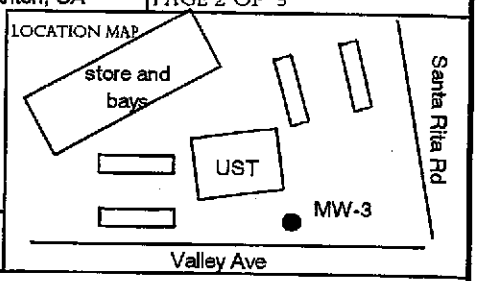
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasanton, CA
DRILLER:	Gregg	DATE DRILLED:	10/11/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	97.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	97'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-3

LOCATION MAP



Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					23			CL	Continued
		moist	3.9	3 4 5	24				
					25				
					26				
					27				
					28				
				5	29			SP	**Poorly Graded SAND**; medium brown, fine grained
		damp	3.0	5 8				CL	**Lean CLAY**; medium brown
					30				
					31				
					32				
					33				
				2	34				(stiff)
		damp	2.6	6 6					
					35				
					36				
					37				
					38				
				4	39				
		damp	3.6	5 8					
					40				
					41				
					42				
					43				
			1.9	4 6	44				(medium brown with FeO mottling)

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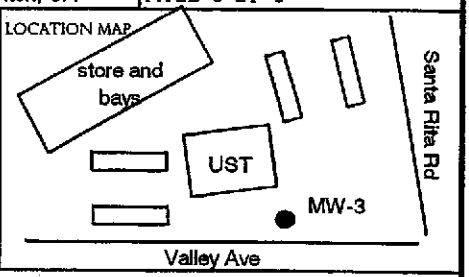
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO:	MW-3
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasanton, CA	PAGE	3 OF 5
DRILLER:	Gregg	DATE DRILLED:	10/11/02		
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"		
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	97.5'		
CASING TYPE:	PVC	WELL DIAMETER:	4"		
SLOT SIZE:	0.010"	WELL DEPTH:	97'		
GRAVEL PACK:	2-12	CASING STICKUP:	N/A		
ELEVATION		NORTHING		EASTING	

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
					7	45			CL	Continued
						46				
						47				
						48				
					6	49				(olive brown)
			damp	1.7	11					
					15	50				
						51				
						52				
						53				
					21	54			SP	**Poorly Graded SAND with Gravel**; 60% grey to orange
			damp	1.6	36					brown medium grained sand, 40% light to dark grey gravel
					45	55				1/4" to 1/2" diameter
						56				
						57				
						58				
					28	59			GP	**Poorly Graded GRAVEL with Sand**; 60% gravel, 40%
			damp	1.0	38					coarse sand, very dense
					45	60				
						61				
						62				
						63				
					22	64			SW	**Well Graded SAND**; grey brown,
			damp	3.0	29					orange and olive brown, 10% gravel
					38	65				
						66				

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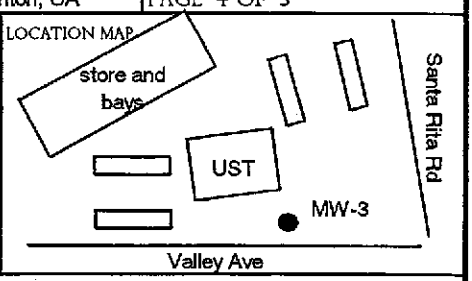
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasanton, CA
DRILLER:	Gregg	DATE DRILLED:	10/11/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	97.5'
CASING TYPE:	PVC	WELL DIAMETER:	4"
SLOT SIZE:	0.010"	WELL DEPTH:	97'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-3
PAGE 4 OF 5

LOCATION MAP



Well Completion: Backfill / Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Cement Grout					67		SW	continued
					68			
				20	69			
		damp	1.3	42				
				50/5	70			(trace clay @ 70')
					71			
					72			
					73			
		dry/		35	74		SP	**Poorly Graded SAND with Gravel**; orange to grey brown
		damp	1.0	41				fine grained sand, 15% gravel 1/4" diameter
				49	75			
					76			
					77			
					78			
Bentonite Chips				29	79		SP/	**Poorly Graded SAND and GRAVEL**; light grey to dark
		moist	1.3	34			GP	grey, and medium brown, 50% medium grained sand,
				42	80			50% gravel ~1/4" diameter
					81			
					82			
					83			
Sand				25	84		GW	**Well Graded GRAVEL**; grey to grey brown,
		moist	0.8	28				10% coarse sand, poorly sorted, gravel 1/8 - 1/2" diameter
				32	85			
					86			
	▽	wet			87			
					88			

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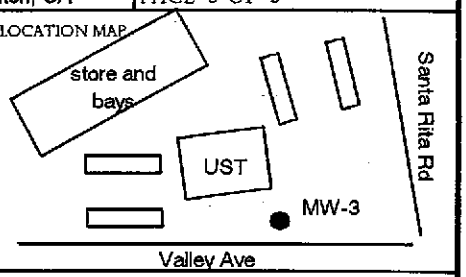
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS	BORING/WELL NO:	MW-3
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasanton, CA	PAGE	5 OF 5
DRILLER:	Gregg	DATE DRILLED:	10/11/02		
DRILLING METHOD:	HSA	HOLE DIAMETER:	10"		
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	97.5'		
CASING TYPE:	PVC	WELL DIAMETER:	4'		
SLOT SIZE:	0.010"	WELL DEPTH:	97'		
GRAVEL PACK:	2-12	CASING STICKUP:	N/A		
ELEVATION		NORTHING		EASTING	

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Sand					5	89			GW	continued
					8					
					12	90				
					6					
					6	91				
					10					
					6	92			GC	**Clayey GRAVEL**; medium brown, 60% gravel 1/4"
			wet		7					diameter, fairly angular, 40% clay
					9	93				
					6					
					9	94				
					13					
					8	95			ML	**SILT**; orange brown, olive staining, hard
			damp/ wet		12					
					17	96				
					24					
					28	97				
					33					
						98				**BOTTOM OF BORING @ 97.5 ft**
						99				
						100				
						101				
						102				
						103				
						104				
						105				
						106				
						107				
						108				
						109				
						110				

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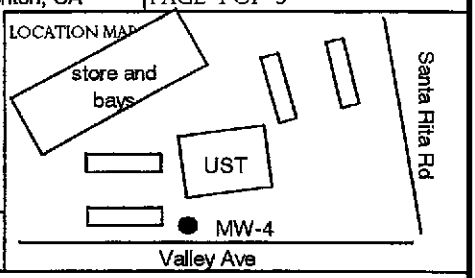
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/10/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	8"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	95.5'
CASING TYPE:	PVC	WELL DIAMETER:	2"
SLOT SIZE:	0.010"	WELL DEPTH:	95'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-4
PAGE 1 OF 5



Well Completion: Backfill / Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
							AF	Asphalt ~6" thick (air knifed to 7' on 10/3/02)
								Fill ~6" thick
		dry/ damp			1		SC	**Clayey SAND with Gravel**; tan brown, ~20%
					2			gravel, ~30% fines, fine to coarse grained sand
					3		CL	**Lean CLAY**; dark grey, <5% sand, low plasticity
		damp/ moist			4			
					5			
					6			
					7			
					8			(medium brown)
				2	9			
		damp	0.3	3			ML	**SILT**; olive green, medium stiff
				4	10			
					11			
					12			
					13			
				2	14			
		damp	5.3	4				
				6	15		CL	**Lean CLAY**; olive green, distinctive zones of orange
								brown medium grained sand
					16			
					17			
					18			
				2	19			
		damp	1.2	4				
				5	20			(FeO mottling)
					21			
					22			

Penetration: Air Knifed

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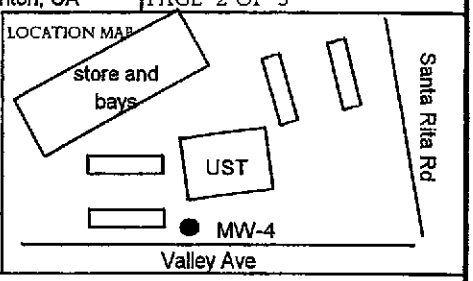
PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/10/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	8"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	95.5'
CASING TYPE:	PVC	WELL DIAMETER:	2"
SLOT SIZE:	0.010"	WELL DEPTH:	95'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-4
PAGE 2 OF 5

LOCATION MAP



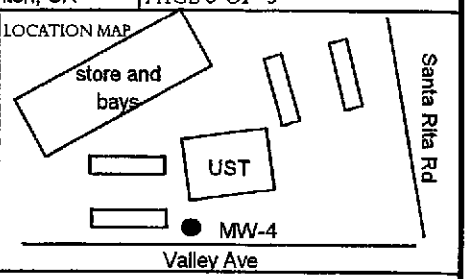
Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					23			CL	Continued
				3					
		damp	27.6	4	24				(olive green, stiff)
				7	25				
					26				
					27				
					28				(orange brown with occasional FeO mottling)
				3					
		damp	105	5	29				
				5	30				
					31				
					32				
					33				
				2					
		damp	73.5	4	34				
				6	35				
					36				
					37				
					38				
		damp	655		39				
					40				
					41				
					42				
					43				
			11.8	5	44				
				9					

KHM
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/10/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	8"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	95.5'
CASING TYPE:	PVC	WELL DIAMETER:	2"
SLOT SIZE:	0.010"	WELL DEPTH:	95'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-4
PAGE 3 OF 5

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
				11.8	11	45			CL	Continued
						46				
						47				
						48				
					4	49				(mottled, grey-green)
			damp	10.3	6					
					8	50				
						51				
						52				
						53				
					16	54				
			damp	1.8	19					
					25	55			SP	**Poorly Graded SAND with Gravel**; brown, 75% medium sand, 25% gravel up to 2" in diameter
						56				
						57				
						58				
			dry/		8	59				(10% gravel, poorly sorted sand, grey, trace of clay)
			damp	1.0	17					
					23	60				
						61				
						62				
						63				
			dry/	0.1	15	64				(70% sand, 30% gravel up to 1.5" diameter)
			damp		29					
					33	65				
						66				

Cement/Grout

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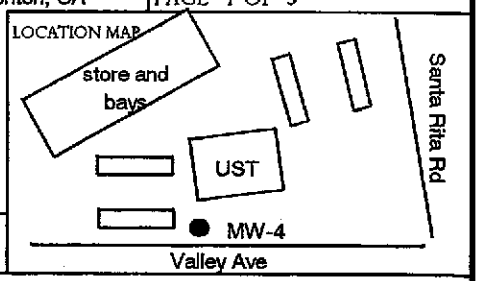
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/10/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	8"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	95.5'
CASING TYPE:	PVC	WELL DIAMETER:	2"
SLOT SIZE:	0.010"	WELL DEPTH:	95'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A

BORING/WELL NO: MW-4

LOCATION MAP



ELEVATION | NORTHING | EASTING

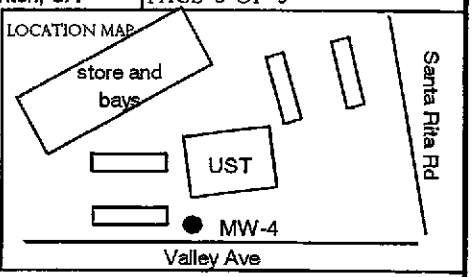
Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite Grout / Bentonite Chips					67			SP	Continued
					68				
		dry/		31	69				
		damp	0.1	48					
				50	70				
					71				
					72				
					73				
		dry/		21	74			SW	**Well Graded SAND**; medium brown,
		damp	0.1	34					90% fine to medium grained, very dense
				45	75				
					76				
					77				
					78				
				18	79			GP	**Poorly Graded GRAVEL**; medium brown,
		moist	0.1	29					90% gravel 1/8" to 1/4" diameter, 10% sand, trace clay,
				35	80				very dense
					81				
					82				
					83				
Sand		moist	0.1	15	84				
				37					
	▽	wet		46	85				
					86				
					87			SW	**Well Graded SAND with Gravel**; medium brown,
				23					
		wet		35	88				80% sand, 20% gravel,
				45					

KHM
ENVIRONMENTAL MANAGEMENT INCORPORATED

PROJECT NO:	C81-1801 Santa Rita	CLIENT:	Shell OPUS
LOGGED BY:	J. Pearson	LOCATION:	1801 Santa Rita Rd, Pleasonton, CA
DRILLER:	Gregg	DATE DRILLED:	10/10/02
DRILLING METHOD:	HSA	HOLE DIAMETER:	8"
SAMPLING METHOD:	Split Spoon	HOLE DEPTH:	95.5'
CASING TYPE:	PVC	WELL DIAMETER:	2"
SLOT SIZE:	0.010"	WELL DEPTH:	95'
GRAVEL PACK:	2-12	CASING STICKUP:	N/A
ELEVATION		NORTHING	EASTING

BORING/WELL NO: MW-4

LOCATION MAP



Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Sand					21	89			SP	**Poorly Graded SAND**; medium brown, fine grained
			wet		35				GP	**Poorly Graded GRAVEL;** greyish to reddish brown,
					45	90				~1/4" diameter, trace 2" diameter, coarse grained sand
					24				SP	**Poorly Graded SAND**; medium brown, medium grained
					35	91			GP	**Poorly Graded GRAVEL**
					37					
					21	92				
			wet		26					(gravel 1/8-1/4" diameter, occasionally up to 1/2")
					43	93				
					22					(olive, light brown, greyish to reddish,
					34	94				gravel fairly uniform 1/4" diameter)
					43				GC	**Clayey GRAVEL**; olive, light brown, greyish to reddish,
			wet		35	95				30% clay, gravel size coarsening with depth
					44					
						96				**BOTTOM OF BORING @ 95.5 ft**
						97				
						98				
						99				
						100				
						101				
						102				
						103				
						104				
						105				
						106				
						107				
						108				
						109				
						110				

APPENDIX C

WELL DEVELOPMENT
FIELD DATA SHEETS

WELL DEVELOPMENT DATA SHEET

Project #: 021212 -MW1	Client: Shell
Developer: MW	Date Developed: 12/12/02
Well I.D. MW-1	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth:	Depth to Water:
Before 90.40 After 91.97	Before 85.83 After 89.94
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 min prior to purge	

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

3.0	X	10		30.0
1 Case Volume		Specified Volumes	=	gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump N/A
Other equipment used 4" Swab

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1118	58.5	7.2	1384	>200	3.0	Brown, Silty (Fine Silt) Middleburg Pump @ .5 spm
1124	61.0	7.0	1320	>200	6.0	Brown Silty (Fine Silt) Thick
1130	62.2	7.1	1336	>200	9.0	Brown, Silty (Very Fine Silt) Thick Hard Bottom
1136	63.4	6.9	1455	>200	12.0	Brown Silty (Very Fine) Thinning out Slightly
1142	63.7	7.0	1447	>200	15.0	Brown, Silty (Very Fine)
1143	well	dewatered				DTW = 90.01
1345	restart purge @ .5 spm			Middleburg	pump	DTW = 86.02
1351	63.1	7.0	1479	>200	18.0	Brown, Silty (Fine) Slightly Thick
1357	63.4	6.9	1464	>200	21.0	Light Brown, Less Silty. Thinning out
1403	63.3	6.9	1389	>200	24.0	Light Brown, Very Cloudy. Clearing
1409	63.1	6.9	1391	>200	27.0	Light Brown, Very Cloudy. Clearing
1414	63.3	6.9	1402	>200	30.0	Light Brown, Cloudy

Did Well Dewater? Yes If yes, note above. Gallons Actually Evacuated: 30.0

WELL DEVELOPMENT DATA SHEET

Project #: 021212 -MW1	Client: Shell
Developer: MW	Date Developed: 12/12/02
Well I.D. MW-2	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 91.50 After 93.10	Depth to Water: Before 85.15 After 85.20
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 min prior to purge	

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

4.2	X	10	=	42.0
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐
Type of Installed Pump N/A
Other equipment used 4" Swab

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1206	64.1	7.1	1636	7700	4.2	Brown/Grey, Silty (Fine), Middleburg @ 5 gpm, Thick
1214	64.5	7.1	1662	7700	8.4	Brown/Grey, Silty (Fine), Thick
1222	64.3	6.9	1486	7700	12.6	Brown/Grey, Slightly Less Silty, Thinning Out.
1230	64.6	6.9	1407	7700	16.8	Light Brown, Cloudy, Hard Bottom
1235	64.6	6.8	1296	7700	21.0	Cloudy, No Silt DTW = 85.25 *
1239	64.5	6.8	1337	7200	25.2	Cloudy, Turbidity Stable
1243	64.6	6.8	1384	7700	29.4	Cloudy,
1247	64.6	6.8	1388	7700	33.6	Cloudy.
1251	64.8	6.8	1384	7700	37.8	Cloudy.
1255	64.7	6.8	1385	7700	42.0	Cloudy

Did Well Dewater? NO	If yes, note above.	Gallons Actually Evacuated:	42.0

* Increase pump rate to ~ 1 gpm.

WELL DEVELOPMENT DATA SHEET

Project #: 021212 -MW1	Client: Shell
Developer: MW	Date Developed: 12/12/02
Well I.D. MW-3	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth:	Depth to Water:
Before 97.00 After 97.07	Before 85.49 After 95.21
Reason not developed:	If Free Product, thickness: —
Additional Notations: Surged for 15 min prior to purge	

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

7.5	X	10	=	75.0
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump N/A
Other equipment used 4" Swab

TIME	TEMP (F)	pH	Cond. (mS or (uS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
857	61.0	6.4	1365	>200	7.5	Brown, Silty (Fine Sand) Middleburg pump (3 lgpm
905	61.4	6.6	1339	>200	15.0	Brown, Silty (Fine Sand)
913	61.2	6.6	1377	>200	22.5	Brown, Silty (Fine Sand)
921	61.6	6.7	1386	>200	30.0	Brown, Slightly less Silty (Fine Sand)
933	61.6	6.8	1370	>200	37.5	Brown, Less Silty, Cloudy Very Fine Sand, Very Hard Bottom *
948	61.7	6.9	1357	>200	45.0	Brown, Very Cloudy, Very Fine Sand;
1003	61.6	6.8	1383	>200	52.5	Light Brown, Cloudy, Clearing
1018	61.6	6.9	1371	>200	60.0	Light Brown, Cloudy, reduced pump rate Slightly
1039	61.4	6.9	1378	187	67.5	Cloudy, Clearing
1059	61.5	6.8	1374	171	75.0	Cloudy.

Did Well Dewater? NO	If yes, note above.	Gallons Actually Evacuated:	75.0

* Well starting to dewater DTW = 94.74
reduced pump rate to ~.5 gpm.

WELL DEVELOPMENT DATA SHEET

Project #: 021212-MW1	Client: Shell
Developer: MW	Date Developed: 12/12/02
Well I.D. MW-4	Well Diameter: (circle one) (2) 3 (4) 6
Total Well Depth:	Depth to Water:
Before 93.50 After 94.55	Before 84.36 After 84.61
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 min prior to purge	

Volume Conversion Factor (VCF):	Well dia.		VCF
$[12 \times (d^2/4) \times \pi] / 231$	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

1.5	X	10	=	15.0
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump _____
Other equipment used 4" Swab

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1319	62.1	7.1	1535	>200	1.5	Brown, Silty (Fine) Middleburg @ 5 rpm.
1322	64.0	6.9	1655	>200	3.0	Brown, Silty (Fine) DTW = 84.36
1324	64.2	6.9	1663	>200	4.5	Brown, Silty (Fine) Increased pump rate to 1 gpm
1326	64.8	6.9	1627	>200	6.0	Brown, Silty (Fine)
1327	64.9	6.8	1592	>200	7.5	Brown, slightly less Silty, Heavy Bottom
1329	64.5	6.8	1562	>200	9.0	Brown, less Silty, clearing slightly
1330	64.5	6.9	1536	>200	10.5	Light Brown, very Fine Silt, clearing slightly
1332	64.5	6.8	1528	>200	12.0	Light Brown, Cloudy, Slightly Silty.
1333	64.5	6.8	1522	>200	13.5	Light Brown, cloudy, clearing
1335	64.5	6.8	1509	>200	15.0	Light Brown, very cloudy.

Did Well Dewater? NO | If yes, note above. | Gallons Actually Evacuated: 15.0

APPENDIX D

SITE SURVEY DATA

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

January 15, 2003

Debbie Arnold
KHM Environmental Management, Inc.
6284 San Ignacio Avenue, Suite E
San Jose, CA 95119

Re: **Shell-branded Service Station, 1801 Santa Rita Road, Pleasanton, California;** KHM Project C81-1801 Santa Rita, MCE Job No.02250

Dear Ms. Arnold,

As you requested, on January 8 we surveyed four monitoring wells located at the referenced site. Our findings are listed on the attached sheets, expressed in State Plane Coordinates and Latitude/Longitude.

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).

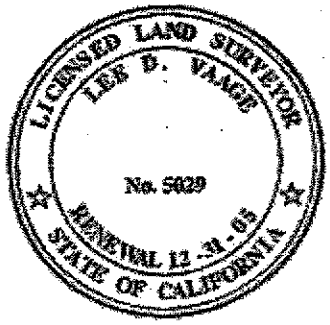
Measurements were obtained from conventional survey techniques in combination with GPS techniques (Code CGPS), using control points AA3813 (HPGN D CA 04 EK), AA3815 (HPGN D CA 04 FK) and HS5408 (HPGN CA 04 07), as published by NGS/NOAA and listed on their web site. Latitude and Longitude as shown were determined from the California Coordinate System, Zone 2, NAD 83 Datum. The accuracy range of the reported information is +/- 5mm. GPS equipment is the Trimble 5700 system (Code T57).

The benchmark used for this survey is Q 1257, a disk on the top of a copper coated rod, stamped "Q 1257 1974", at the junction of Santa Rita Road and Black Avenue, at the Amador Valley Community Park. Elevation = 341.578 feet, NGVD 29, as obtained from the City of Pleasanton Public Works Department.

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

Yours truly,

Lee D. Vaage



SHELL-BRANDED SERVICE STATION
1801 Santa Rita Road
Pleasanton, California

KHM Project C81-1801 Santa Rita

Project :02250
User name MCE Date & Time 4:07:07 PM 01/14/2003
Coordinate System US State Plane 1983 Zone California Zone 3 0403
Project Datum NAD 1983 (Conus)
Vertical Datum NGVD29
Coordinate Units US survey feet
Distance Units US survey feet
Elevation Units US survey feet

Point listing

Name	Northing	Easting	Elevation	Description
103	2071834.61	6163887.97	340.68	MW-4toc
104	2071835.08	6163888.00	341.07	MW-4tob
105	2071844.70	6163932.52	341.65	MW-3toc
106	2071845.01	6163932.65	342.10	MW-3tob
107	2071898.29	6163954.92	341.57	MW-2toc
108	2071898.72	6163954.83	341.97	MW-2tob
110	2071885.88	6163852.38	342.10	MW-1toc
111	2071886.20	6163852.42	342.60	MW-1tob
113	2070926.41	6164346.77	341.578	BM-Q1257

SHELL-BRANDED SERVICE STATION
1801 Santa Rita Road
Pleasanton, California

KHM Project C81-1801 Santa Rita

Project :02250
User name MCE Date & Time 4:07:07 PM 01/14/2003
Coordinate System US State Plane 1983 Zone California Zone 3 0403
Project Datum NAD 1983 (Conus)
Vertical Datum NGVD29
Coordinate Units US survey feet
Distance Units US survey feet
Elevation Units US survey feet

Point listing

Name	Latitude	Longitude	Elevation	Description
103	37.676835287°N	121.874527932°W	340.68	MW-4toc
104	37.676836595°N	121.874527845°W	341.07	MW-4tob
105	37.676864798°N	121.874374521°W	341.65	MW-3toc
106	37.676865666°N	121.874374085°W	342.10	MW-3tob
107	37.677012858°N	121.874299848°W	341.57	MW-2toc
108	37.677014038°N	121.874300185°W	341.97	MW-2tob
110	37.676974642°N	121.874653492°W	342.10	MW-1toc
111	37.676975539°N	121.874653381°W	342.60	MW-1tob
113	37.674359783°N	121.872896753°W	341.578	BM-Q1257

	A	B	C	D	E	F	G	H	I	J	K	L
1	**SHELL-BRANDED SERVICE STATION**											
2	**1801 Santa Rita Road**											
3	**Pleasanton, California**											
4												
5	**KHM Project C81-1801 Santa Rita**											
6												
7	Project :02250											
8	User name MCE Date & Time 4:07:07 PM 01/14/2003											
9	Coordinate System US State Plane 1983 Zone California Zone 3 0403											
10	Project Datum NAD 1983 (Conus)											
11	Vertical Datum NGVD29											
12	Coordinate Units US survey feet											
13	Distance Units US survey feet											
14	Elevation Units US survey feet											
15												
16		MW-1	MW	01/08/2003	37.6769746	-121.8746535	CGPS	NAD83	0.05	Mid Coast Engineers	T57	top of casing
17		MW-2	MW	01/08/2003	37.6770129	-121.8742998	CGPS	NAD83	0.05	Mid Coast Engineers	T57	top of casing
18		MW-3	MW	01/08/2003	37.6768648	-121.8743745	CGPS	NAD83	0.05	Mid Coast Engineers	T57	top of casing
19		MW-4	MW	01/08/2003	37.6768353	-121.8745279	CGPS	NAD83	0.05	Mid Coast Engineers	T57	top of casing

	A	B	C	D	E	F	G	H	I	J
1	**SHELL-BRANDED SERVICE STATION**									
2	**1801 Santa Rita Road**									
3	**Pleasanton, California**									
4										
5	**KHM Project C81-1801 Santa Rita**									
6										
7	Project :02250									
8	User name MCE Date & Time 4:07:07 PM 01/14/2003									
9	Coordinate System US State Plane 1983 Zone California Zone 3 0403									
10	Project Datum NAD 1983 (Conus)									
11	Vertical Datum NGVD29									
12	Coordinate Units US survey feet									
13	Distance Units US survey feet									
14	Elevation Units US survey feet									
15										
16		MW-1	01/08/2003	342.10	CGPS	29		Mid Coast Engineers		top of casing
17		MW-2	01/08/2003	341.57	CGPS	29		Mid Coast Engineers		top of casing
18		MW-3	01/08/2003	341.65	CGPS	29		Mid Coast Engineers		top of casing
19		MW-4	01/08/2003	340.68	CGPS	29		Mid Coast Engineers		top of casing

APPENDIX E

SOIL LABORATORY REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION

KIFF ANALYTICAL LLC

Report Number : 29243
Date : 10/31/2002

Tena Seeds
KHM Environmental Management
6284 San Ignacio Ave.
San Jose, CA 95119

Subject : 3 Soil Samples
Project Name : 1801 Santa Rita Road, Pleasanton
Project Number : C81-1801 Santa Rita
P.O. Number : 97402155

Dear Ms. Seeds,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 29243
Date : 10/31/2002

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-1 @ 28.5 feet** Matrix : Soil Lab Number : 29243-01
Sample Date :10/15/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.050**	0.050	mg/Kg	EPA 8260B	10/28/2002
Toluene	**1.5**	0.050	mg/Kg	EPA 8260B	10/28/2002
Ethylbenzene	**5.1**	0.050	mg/Kg	EPA 8260B	10/28/2002
Total Xylenes	**37**	0.10	mg/Kg	EPA 8260B	10/28/2002
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
TPH as Gasoline	**420**	5.0	mg/Kg	EPA 8260B	10/28/2002
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/28/2002
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/28/2002

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29243
Date : 10/31/2002

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-1 @ 30 feet** Matrix : Soil Lab Number : 29243-02
Sample Date :10/15/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.023**	0.005	mg/Kg	EPA 8260B	10/28/2002
Toluene	**0.13**	0.005	mg/Kg	EPA 8260B	10/28/2002
Ethylbenzene	**0.094**	0.005	mg/Kg	EPA 8260B	10/28/2002
Total Xylenes	**0.59**	0.005	mg/Kg	EPA 8260B	10/28/2002
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/28/2002
TPH as Gasoline	**3.2**	1.0	mg/Kg	EPA 8260B	10/28/2002
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	10/28/2002
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	10/28/2002

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29243
Date : 10/31/2002

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-1 @ 35 feet** Matrix : Soil Lab Number : 29243-03
Sample Date :10/16/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/26/2002
Toluene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/26/2002
Ethylbenzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/26/2002
Total Xylenes	**0.014**	0.005	mg/Kg	EPA 8260B	10/26/2002
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/26/2002
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/26/2002
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/26/2002
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/26/2002
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/26/2002
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	10/26/2002
Toluene - d8 (Surr)	94.0		% Recovery	EPA 8260B	10/26/2002
4-Bromofluorobenzene (Surr)	113		% Recovery	EPA 8260B	10/26/2002

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 29243

Date : 10/31/2002

QC Report : Method Blank Data

Project Name : **1801 Santa Rita Road, Pleasanton**

Project Number : **C81-1801 Santa Rita**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.005	0.005	mg/Kg	EPA 8260B	10/25/2002
Toluene	< 0.005	0.005	mg/Kg	EPA 8260B	10/25/2002
Ethylbenzene	< 0.005	0.005	mg/Kg	EPA 8260B	10/25/2002
Total Xylenes	< 0.005	0.005	mg/Kg	EPA 8260B	10/25/2002
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	mg/Kg	EPA 8260B	10/25/2002
Diisopropyl ether (DIPE)	< 0.5	0.5	mg/Kg	EPA 8260B	10/25/2002
Ethyl-t-butyl ether (ETBE)	< 0.5	0.5	mg/Kg	EPA 8260B	10/25/2002
Tert-amyl methyl ether (TAME)	< 0.5	0.5	mg/Kg	EPA 8260B	10/25/2002
Tert-Butanol	< 0.5	0.5	mg/Kg	EPA 8260B	10/25/2002
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/25/2002
Toluene - d8 (Surr)	102		%	EPA 8260B	10/25/2002
4-Bromofluorobenzene (Surr)	85.9		%	EPA 8260B	10/25/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 29243

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 10/31/2002

Project Name : **1801 Santa Rita Road,**

Project Number : **C81-1801 Santa Rita**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	29270-04	<0.0050	0.0391	0.0394	0.0389	0.0355	mg/Kg	EPA 8260B	10/25/02	99.4	90.2	9.71	70-130	25
Toluene	29270-04	<0.0050	0.0391	0.0394	0.0377	0.0347	mg/Kg	EPA 8260B	10/25/02	96.4	88.1	8.94	70-130	25
Tert-Butanol	29270-04	<0.0050	0.196	0.197	0.175	0.171	mg/Kg	EPA 8260B	10/25/02	89.6	87.1	2.82	70-130	25
Methyl-t-Butyl Ether	29270-04	<0.0050	0.0391	0.0394	0.0324	0.0304	mg/Kg	EPA 8260B	10/25/02	82.8	77.2	6.97	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 29243

Date : 10/31/2002

QC Report : Laboratory Control Sample (LCS)

Project Name : **1801 Santa Rita Road,**

Project Number : **C81-1801 Santa Rita**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	0.0367	mg/Kg	EPA 8260B	10/25/02	97.2	70-130
Toluene	0.0367	mg/Kg	EPA 8260B	10/25/02	95.0	70-130
Tert-Butanol	0.183	mg/Kg	EPA 8260B	10/25/02	76.6	70-130
Methyl-t-Butyl Ether	0.0367	mg/Kg	EPA 8260B	10/25/02	76.1	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL

720 Olive Drive, Suite D
Davis, CA 95616
(530) 297-4800 (530) 297-4803 fax

EQUIVA Services LLC Chain Of Custody Record

Equiva Project Manager to be invoiced:
☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

Lynn Walker

292243

INCIDENT NUMBER (S&E ONLY): 9 7 4 0 2 1 5 5

DATE: October 16, 2002

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
KHM Environmental Mangement	KHMS	1801 Santa Rita Road, Pleasanton	

ADDRESS:	EDF DELIVERABLE TO (Responsible Party or Designee):	PHONE NO.:	E-MAIL:	CONSULTANT PROJECT NO.:
6284 San Ignacio Ave., San Jose, CA 95119	Tena Seeds	(425) 558-0134	tseeds@khm1.com	C81-1801 Santa Rita

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	E-MAIL:	SAMPLER NAME(S) Print:	LAB USE ONLY:
Tena Seeds	(425) 558-0134	(425)869-7494	tseeds@khm1.com	Jonathan Pearson	

TURNAROUND TIME (BUSINESS DAYS):
☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: ACWD

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED ☐

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 503B Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (48-		TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note	TEMPERATURE ON RECEIPT C°
	MW-1 @ 28.5 feet	15-Oct	17:10	soil	1	X	X			X																-01
	MW-1 @ 30 feet	15-Oct	17:25	soil	1	X	X			X																-02
	MW-1 @ 35 feet	16-Oct	8:30	soil	1	X	X			X																-03

FIELD NOTES:
Container/Preservative or PID Readings or Laboratory Notes

292 20

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle/Kiff Analytical	Date: 101802	Time: 1046

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

Q&Q Graphic (714) 898-9702

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Tena Seeds
KHM Environmental Management
6284 San Ignacio Ave.
San Jose, CA 95119

Subject : 6 Soil Samples
Project Name : 1801 Santa Rita Road, Pleasanton
Project Number : C81-1801 Santa Rita
P.O. Number : 97402155

Dear Ms. Seeds,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-4 @ 24.5 feet** Matrix : Soil Lab Number : 29185-01
Sample Date :10/10/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Toluene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Ethylbenzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Total Xylenes	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	10/22/02
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	10/22/02
4-Bromofluorobenzene (Surr)	97.6		% Recovery	EPA 8260B	10/22/02

Approved By: Joel Kiff

2795 2nd St. Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-4 @ 29.5 feet** Matrix : Soil Lab Number : 29185-02
Sample Date :10/10/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.77**	0.025	mg/Kg	EPA 8260B	10/24/02
Toluene	**3.7**	0.025	mg/Kg	EPA 8260B	10/24/02
Ethylbenzene	**0.25**	0.025	mg/Kg	EPA 8260B	10/24/02
Total Xylenes	**1.3**	0.050	mg/Kg	EPA 8260B	10/24/02
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
TPH as Gasoline	**57**	5.0	mg/Kg	EPA 8260B	10/24/02
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/24/02
4-Bromofluorobenzene (Surr)	93.3		% Recovery	EPA 8260B	10/24/02

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-4 @ 34.5 feet** Matrix : Soil Lab Number : 29185-03
Sample Date :10/10/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2.0**	0.005	mg/Kg	EPA 8260B	10/24/02
Toluene	**0.61**	0.005	mg/Kg	EPA 8260B	10/24/02
Ethylbenzene	**0.26**	0.005	mg/Kg	EPA 8260B	10/24/02
Total Xylenes	**0.41**	0.010	mg/Kg	EPA 8260B	10/24/02
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
TPH as Gasoline	**8.2**	1.0	mg/Kg	EPA 8260B	10/24/02
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	10/24/02
4-Bromofluorobenzene (Surr)	93.8		% Recovery	EPA 8260B	10/24/02

Approved By: Joel Kiff

2795 2nd St . Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-4 @ 40 feet** Matrix : Soil Lab Number : 29185-04
Sample Date :10/10/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1.7**	0.025	mg/Kg	EPA 8260B	10/21/02
Toluene	**0.39**	0.025	mg/Kg	EPA 8260B	10/21/02
Ethylbenzene	**2.3**	0.025	mg/Kg	EPA 8260B	10/21/02
Total Xylenes	**9.6**	0.050	mg/Kg	EPA 8260B	10/21/02
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/21/02
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/21/02
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/21/02
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/21/02
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/21/02
TPH as Gasoline	**170**	5.0	mg/Kg	EPA 8260B	10/21/02
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	10/21/02
4-Bromofluorobenzene (Surr)	98.1		% Recovery	EPA 8260B	10/21/02

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-4 @ 45 feet** Matrix : Soil Lab Number : 29185-05
Sample Date :10/10/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.0069**	0.005	mg/Kg	EPA 8260B	10/22/02
Toluene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Ethylbenzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Total Xylenes	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/22/02
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/22/02
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	10/22/02
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	10/22/02
4-Bromofluorobenzene (Surr)	98.6		% Recovery	EPA 8260B	10/22/02

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 29185
Date : 10/25/02

Project Name : **1801 Santa Rita Road, Pleasanton**
Project Number : **C81-1801 Santa Rita**

Sample : **MW-4 @ 50 feet** Matrix : Soil Lab Number : 29185-06
Sample Date :10/10/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/24/02
Toluene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/24/02
Ethylbenzene	**< 0.005**	0.005	mg/Kg	EPA 8260B	10/24/02
Total Xylenes	**< 0.010**	0.010	mg/Kg	EPA 8260B	10/24/02
Methyl-t-butyl ether (MTBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Diisopropyl ether (DIPE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Ethyl-t-butyl ether (ETBE)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Tert-amyl methyl ether (TAME)	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
Tert-Butanol	**< 0.5**	0.5	mg/Kg	EPA 8260B	10/24/02
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	10/24/02
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	10/24/02
4-Bromofluorobenzene (Surr)	86.1		% Recovery	EPA 8260B	10/24/02

Approved By: Joel Kiff

2795 2nd St Suite 300 Davis CA 95616 530-297-4800

Report Number : 29185

Date : 10/25/02

QC Report : Method Blank Data

Project Name : **1801 Santa Rita Road, Pleasanton**

Project Number : **C81-1801 Santa Rita**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.005	0.005	mg/Kg	EPA 8260B	10/21/02
Toluene	< 0.005	0.005	mg/Kg	EPA 8260B	10/21/02
Ethylbenzene	< 0.005	0.005	mg/Kg	EPA 8260B	10/21/02
Total Xylenes	< 0.005	0.005	mg/Kg	EPA 8260B	10/21/02
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	mg/Kg	EPA 8260B	10/21/02
Diisopropyl ether (DIPE)	< 0.5	0.5	mg/Kg	EPA 8260B	10/21/02
Ethyl-t-butyl ether (ETBE)	< 0.5	0.5	mg/Kg	EPA 8260B	10/21/02
Tert-amyl methyl ether (TAME)	< 0.5	0.5	mg/Kg	EPA 8260B	10/21/02
Tert-Butanol	< 0.5	0.5	mg/Kg	EPA 8260B	10/21/02
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/21/02
Toluene - d8 (Surr)	106		%	EPA 8260B	10/21/02
4-Bromofluorobenzene (Surr)	98.2		%	EPA 8260B	10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 29185

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 10/25/02

Project Name : **1801 Santa Rita Road,**

Project Number : **C81-1801 Santa Rita**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	29205-01	<0.0050	0.0401	0.0404	0.0381	0.0362	mg/Kg	EPA 8260B	10/20/02	95.2	89.6	5.95	70-130	25
Toluene	29205-01	<0.0050	0.0401	0.0404	0.0377	0.0353	mg/Kg	EPA 8260B	10/20/02	94.0	87.3	7.44	70-130	25
Tert-Butanol	29205-01	<0.0050	0.200	0.202	0.206	0.189	mg/Kg	EPA 8260B	10/20/02	103	93.4	9.84	70-130	25
Methyl-t-Butyl Ether	29205-01	<0.0050	0.0401	0.0404	0.0426	0.0425	mg/Kg	EPA 8260B	10/20/02	106	105	1.18	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 29185

Date : 10/25/02

QC Report : Laboratory Control Sample (LCS)

Project Name : **1801 Santa Rita Road,**

Project Number : **C81-1801 Santa Rita**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	0.0398	mg/Kg	EPA 8260B	10/20/02	92.2	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	10/20/02	92.0	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	10/20/02	87.8	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	10/20/02	95.3	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL

720 Olive Drive, Suite D

Davis, CA 95616

(530) 297-4800 (530) 297-4803 fax

EQUIVA Services LLC Chain Of Custody Record

Equiva Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING

☐ TECHNICAL SERVICES

☐ CRMT HOUSTON

Lynn Walker

29185

INCIDENT NUMBER (G&E ONLY): 9 7 4 0 2 1 5 5

SAP or CRMT NUMBER (TS/CRMT):

DATE: October 14, 2002

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
KHM Environmental Mangement	KHMS	1801 Santa Rita Road, Pleasanton	

ADDRESS:	EDF DELIVERABLE TO (Responsible Party or Designee):	PHONE NO.:	E-MAIL:	CONSULTANT PROJECT NO.:
6284 San Ignacio Ave., San Jose, CA 95119	Tena Seeds	(425) 558-0134	tseeds@khm1.com	C81-1801 Santa Rita

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	E-MAIL:	SAMPLER NAME(S) (Print):
Tena Seeds	(425) 558-0134	(425)869-7494	tseeds@khm1.com	Jonathan Pearson

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS):

☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: ACWD

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED ☐

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (48-_____)		TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note	TEMPERATURE ON RECEIPT C°
	MW-4 @ 24.5 feet	10-Oct	10:00	soil	1	X	X			X																-01
	MW-4 @ 29.5 feet	10-Oct	10:15	soil	1	X	X			X																-02
	MW-4 @ 34.5 feet	10-Oct	10:42	soil	1	X	X			X																-03
	MW-4 @ 40 feet	10-Oct	10:58	soil	1	X	X			X																-04
	MW-4 @ 45 feet	10-Oct	11:10	soil	1	X	X			X																-05
	MW-4 @ 50 feet	10-Oct	11:30	soil	1	X	X			X																-06

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
D. Arnold			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle / Kiff Analytical	Date: 101502	Time: 1100

FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client

10/15/00 Revision

C&Q Graphic (714) 898-9702

APPENDIX F

WELL GAUGING DATA

WELL GAUGING DATA

Project # 021212-MW1 Date 12/12/02 Client Shell

Site 1801 Santa Rita Rd., Pleasanton

Well ID	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	
MW-1	4					85.83	90.40		
MW-2	4					85.15	91.50		
MW-3	4					85.44	97.00		
MW-4	4					84.36	93.50		

WELL GAUGING DATA

Project # 021220-551 Date 12/20/02 Client Shell

Site 1501 Santa Rita Rd. Pleasanton

Well ID	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	
MW-1	4					85.60	92.00		
MW-2	4					85.00	95.00		
MW-3	4					85.25	97.05		
MW-4	2					84.15	94.45	↓	

APPENDIX G

GROUNDWATER LABORATORY REPORT
AND
CHAIN-OF-CUSTODY DOCUMENTATION

KIFF ANALYTICAL LLC

Report Number : 30561
Date : 1/3/2003

Leon Gearhart
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 4 Water Samples
Project Name : 1801 Santa Rita Rd., Pleasanton
Project Number : 021220-SS1
P.O. Number : 97402155

Dear Mr. Gearhart,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 30561
Date : 1/3/2003

Subject : 4 Water Samples
Project Name : 1801 Santa Rita Rd., Pleasanton
Project Number : 021220-SS1
P.O. Number : 97402155

Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample MW-4.

Approved By: Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 30561
Date : 1/3/2003

Project Name : **1801 Santa Rita Rd., Pleasanton**
Project Number : **021220-SS1**

Sample : **MW-1** Matrix : Water Lab Number : 30561-01
Sample Date :12/20/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Total Xylenes	**0.71**	0.50	ug/L	EPA 8260B	12/26/2002
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/26/2002
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/26/2002
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	12/26/2002
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	12/26/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/26/2002
Toluene - d8 (Surr)	94.7		% Recovery	EPA 8260B	12/26/2002
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	12/26/2002
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	12/27/2002

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30561
Date : 1/3/2003

Project Name : **1801 Santa Rita Rd., Pleasanton**
Project Number : **021220-SS1**

Sample : **MW-2** Matrix : Water Lab Number : 30561-02
Sample Date :12/20/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	12/26/2002
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/26/2002
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/26/2002
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	12/26/2002
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	12/26/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/26/2002
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/26/2002
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	12/26/2002
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	12/27/2002

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30561
Date : 1/3/2003

Project Name : **1801 Santa Rita Rd., Pleasanton**
Project Number : **021220-SS1**

Sample : **MW-3** Matrix : Water Lab Number : 30561-03
Sample Date :12/20/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/27/2002
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/27/2002
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	12/27/2002
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	12/27/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/27/2002
Toluene - d8 (Surr)	95.0		% Recovery	EPA 8260B	12/27/2002
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	12/27/2002
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	12/27/2002

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30561
Date : 1/3/2003

Project Name : **1801 Santa Rita Rd., Pleasanton**
Project Number : **021220-SS1**

Sample : **MW-4** Matrix : Water Lab Number : 30561-04
Sample Date :12/20/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/2002
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/27/2002
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/27/2002
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	12/27/2002
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	12/27/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/27/2002
Toluene - d8 (Surr)	96.4		% Recovery	EPA 8260B	12/27/2002
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	12/27/2002
TPH as Diesel	**69**	50	ug/L	M EPA 8015	1/2/2003

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30561

Date : 1/3/2003

QC Report : Method Blank Data

Project Name : **1801 Santa Rita Rd., Pleasanton**

Project Number : **021220-SS1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/26/2002
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/26/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2002
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	12/26/2002
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	12/26/2002
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	12/26/2002
Tert-Butanol	< 50	50	ug/L	EPA 8260B	12/26/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/26/2002
Toluene - d8 (Surr)	104		%	EPA 8260B	12/26/2002
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	12/26/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30561

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 1/3/2003

Project Name : **1801 Santa Rita Rd.,**

Project Number : **021220-SS1**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	962	919	ug/L	M EPA 8015	12/26/02	96.2	91.9	4.54	70-130	25
Benzene	30561-02	<0.50	40.0	40.0	40.0	38.9	ug/L	EPA 8260B	12/26/02	100	97.2	2.86	70-130	25
Toluene	30561-02	<0.50	40.0	40.0	37.5	37.6	ug/L	EPA 8260B	12/26/02	93.8	94.1	0.319	70-130	25
Tert-Butanol	30561-02	<5.0	200	200	199	201	ug/L	EPA 8260B	12/26/02	99.6	101	0.979	70-130	25
Methyl-t-Butyl Ether	30561-02	<0.50	40.0	40.0	42.5	41.8	ug/L	EPA 8260B	12/26/02	106	105	1.54	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30561

QC Report : Laboratory Control Sample (LCS)

Date : 1/3/2003

Project Name : **1801 Santa Rita Rd.,**

Project Number : **021220-SS1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	12/26/02	98.6	70-130
Toluene	40.0	ug/L	EPA 8260B	12/26/02	95.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/26/02	95.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/26/02	106	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

LAB: KIFF

SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced: Lynn Walker

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

30561

INCIDENT NUMBER (S&E ONLY): 9 7 4 0 2 1 5 5

SAP or CRMT NUMBER (TS/CRMT):

DATE: 12/20/02

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
Blaine Tech Services	BTSS	1801 Santa Rita Rd., Pleasanton	pending

ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112

PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: lgearhart@blainetech.com

EDF DELIVERABLE TO (Responsible Party or Designee): Debbie Arnold PHONE NO.: (408)224-4724 E-MAIL: darnold@khm1.com CONSULTANT PROJECT NO.: BTS # 021220-SS1

SAMPLER NAME(S) (Print): SUCHEON SUNG

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☒ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	TPH - Diesel, Extractable	TEMPERATURE ON RECEIPT C°
	MW-1	12/20/02	1100	GW	5	X	X			X	X	-01
	MW-2	"	947	"	"	X	X			X	X	-02
	MW-3	"	1045	"	"	X	X			X	X	-03
	MW-4	"	920	"	"	X	X			X	X	-04

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date: 12/23/02	Time: 1022
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle/Kiff Analytical	Date: 122302	Time: 1022

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client

10/16/00 Revision

Q&Q Graphic (714) 898-9702

APPENDIX H

UNAUTHORIZED RELEASE REPORT

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.
SIGNED _____ DATE _____

REPORT DATE: 10/31/02 | CASE #:

REPORTED BY
- NAME OF INDIVIDUAL FILING REPORT: Ms. Karen Petryna | PHONE: (559) 645-9306 | SIGNATURE:
- REPRESENTING: ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER _____ | COMPANY OR AGENCY NAME: Shell Oil Products US
- ADDRESS: P.O. Box 7869 (STREET) | Burbank (CITY) | CA (STATE) | 91510-7869 (ZIP)

RESPONSIBLE PARTY
- NAME: Shell Oil Products US ☐ UNKNOWN | CONTACT PERSON: Karen Petryna | PHONE: (559) 645-9306
- ADDRESS: 2255 N. Ontario (STREET) | Burbank (CITY) | CA (STATE) | 91504 (ZIP)

SITE LOCATION
- FACILITY NAME (IF APPLICABLE): Shell Service Station | OPERATOR: | PHONE: ( )
- ADDRESS: 1801 Santa Rita Road (STREET) | Pleasanton (CITY) | Alameda (COUNTY) | ZIP:
- CROSS STREET: Valley Avenue

IMPLEMENTING AGENCIES
- LOCAL AGENCY / AGENCY NAME: Livermore-Pleasanton Fire Dep't | CONTACT PERSON: Danielle Stefani | PHONE: (925) 454-2338
- REGIONAL BOARD: San Francisco Bay RWQCB | Mr. Chuck Headlee | PHONE: (510) 622-2433

SUBSTANCES INVOLVED
- (1) NAME: TPH-g, BTEX compounds | QUANTITY LOST (GALLONS): _____ ☐ UNKNOWN
- (2) _____ ☐ UNKNOWN

DISCOVERY/ABATEMENT
- DATE DISCOVERED: 10/25/02 | HOW DISCOVERED: ☐ INVENTORY CONTROL ☒ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☐ OTHER _____
- DATE DISCHARGE BEGAN: ☒ UNKNOWN
- HAS DISCHARGE BEEN STOPPED? ☐ YES ☐ NO IF YES, DATE
- METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING ☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE ☐ REPLACE TANK ☐ OTHER _____

SOURCE/CAUSE
- SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER
- CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER _____

CASE TYPE
CHECK ONE ONLY: ☐ UNDETERMINED ☒ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY:
- ☐ NO ACTION TAKEN
- ☒ LEAK BEING CONFIRMED
- ☐ REMEDIATION PLAN
- ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED
- ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY
- ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY)
- ☐ POLLUTION CHARACTERIZATION
- ☐ POST CLEANUP MONITORING IN PROGRESS
- ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS):
- ☐ CAP SITE (CD)
- ☐ CONTAINMENT BARRIER (CB)
- ☐ VACUUM EXTRACT (VE)
- ☐ EXCAVATE & DISPOSE (ED)
- ☐ EXCAVATE & TREAT (ET)
- ☐ NO ACTION REQUIRED (NA)
- ☒ OTHER (OT) Groundwater Monitoring
- ☐ REMOVE FREE PRODUCT (FP)
- ☐ PUMP & TREAT GROUNDWATER (GT)
- ☐ TREATMENT AT HOOKUP (HU)
- ☐ ENHANCED BIO DEGRADATION (IT)
- ☐ REPLACE SUPPLY (RS)
- ☐ VENT SOIL (VS)

COMMENTS
TPH-g and BTEX compounds detected in soil samples from borings for new site monitoring wells. Max TPH-g = 170 mg/Kg. Max. benzene = 2.0 mg/Kg. No MTBE. Groundwater analytical data pending

HSC 05 (8/90)

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

MAY BE EMERGENCY: ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED ? ☐ YES ☒ NO

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SIGNED _____ DATE _____

REPORT DATE: 10/31/02
CASE #:

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: Ms. Karen Petryna
PHONE: (559)645-9306
SIGNATURE: Karen E Petryna
REPRESENTING: ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: Shell Oil Products US
ADDRESS: P.O. Box 7869 (STREET) Burbank (CITY) CA (STATE) 91510-7869 (ZIP)

RESPONSIBLE PARTY
NAME: Shell Oil Products US ☐ UNKNOWN
CONTACT PERSON: Karen Petryna
PHONE: (559)645-9306
ADDRESS: 2255 N. Ontario (STREET) Burbank (CITY) CA (STATE) 91504 (ZIP)

SITE LOCATION
FACILITY NAME (IF APPLICABLE): Shell Service Station
OPERATOR:
PHONE: ( )
ADDRESS: 1801 Santa Rita Road (STREET) Pleasanton (CITY) Alameda (COUNTY) (ZIP)
CROSS STREET: Valley Avenue

IMPLEMENTING AGENCIES
LOCAL AGENCY — AGENCY NAME: Livermore-Pleasanton Fire Dept
CONTACT PERSON: Danielle Stefani
PHONE: (925) 454-2335
REGIONAL BOARD: San Francisco Bay RWQCB
CONTACT PERSON: Mr. Chuck Headlee
PHONE: (510) 622-2433

SUBSTANCE(S) INVOLVED
(1) NAME: TPH-g, BTEX compounds — QUANTITY LOST (GALLONS): _____ ☐ UNKNOWN
(2) NAME: _____ ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: 10/23/02
HOW DISCOVERED: ☐ TANK TEST ☐ INVENTORY CONTROL ☒ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK REMOVAL ☐ OTHER
DATE DISCHARGE BEGAN: ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED ? ☐ YES ☐ NO IF YES, DATE:
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING ☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE ☐ REPLACE TANK ☐ OTHER

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☐ PIPING LEAK ☒ UNKNOWN ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER

CASE TYPE
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CURRENT STATUS
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☒ LEAK BEING CONFIRMED
☐ REMEDIATION PLAN
☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED
☐ PRELIMINARY SITE ASSESSMENT UNDERWAY
☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY)
☐ POLLUTION CHARACTERIZATION
☐ POST CLEANUP MONITORING IN PROGRESS
☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CS)
☐ CONTAINMENT BARRIER (CB)
☐ VACUUM EXTRACT (VE)
☐ EXCAVATE & DISPOSE (ED)
☐ EXCAVATE & TREAT (ET)
☐ NO ACTION REQUIRED (NA)
☐ REMOVE FREE PRODUCT (FP)
☐ PUMP & TREAT GROUNDWATER (GT)
☐ TREATMENT AT HOOKUP (HU)
☐ ENHANCED BIO DEGRADATION (EB)
☐ REPLACE SUPPLY (RS)
☐ VENT SOIL (VS)
☒ OTHER (OT) Groundwater Monitoring

COMMENTS
TPH-g and BTEX compounds detected in soil samples from borings for new site monitoring wells. Max TPH-g = 170 mg/Kg. Max. benzene = 2.0 mg/Kg. No MTBE. Groundwater analytical data pending