

R02882



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San Jose, California 95119 USA
408.224.4724 800.477.7411
Fax 408.225.8506

October 4, 2005

Project Number: SJ18-01S-G.2005

Mr. Jerry Wickham
Environmental Health Services – Environmental Protection
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Alameda County
OCT 07 2005
Environmental Health

Re: Annual Groundwater Monitoring Report – Second Quarter 2005
Shell Service Station
1801 Santa Rita Road
Pleasanton, California

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following annual groundwater monitoring and sampling report for the above referenced site. A site location map is included as Figure 1.

BACKGROUND

Wells MW-1 through MW-4 were installed during October 2002 as part of Shell's GRoundwater ASsessment Program (GRASP). 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.

An Unauthorized Release Report (URR) was previously submitted for this site in November 2002 based on detections of Total Petroleum Hydrocarbons as gasoline (TPH-G) (maximum concentration = 170 milligrams per kilogram (mg/kg)) and benzene (maximum concentration = 2 mg/kg) in soil during site fuel dispenser and piping upgrades.

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Letter of Transmittal

To:	Alameda County Health Care Services Agency Environmental Health Service - Environmental Protection 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577	Date: 10/4/2005
		Job No: SJ18-01S-G.2005
Attn:	Jerry Wickham	

We are sending the following items:

Date	Copies	Description
4-Oct-05	1	Annual Groundwater Monitoring Report - Second Quarter 2005
		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

Copies to: _____ By: Heather Buckingham

_____ Title: Senior Staff Geologist

The information contained in this transmission is confidential and intended only for the addressee. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or action taken in reliance on the contents of this facsimile transmittal is strictly prohibited. If you have received this facsimile in error, please call us immediately to arrange for the return of these documents.

OCT 07 2005
Alameda County
Environmental Health

On April 19, 2005, a hydraulic hoist located within the station building service bay was removed and Delta collected a soil sample beneath the former hoist at a depth of 8.5 feet below grade (bg). A second URR was submitted for the site based on detections of petroleum based total oil and grease (7,900 mg/kg) and total petroleum hydrocarbons as diesel (TPH-D, 18,000 mg/kg) in May 2005.

Shell recently received a notice of responsibility letter dated August 17, 2005 from the Alameda County Health Care Services Agency (ACHCSA) placing the site in the Local Oversight Program.

GROUNDWATER MONITORING PROGRAM

Groundwater monitoring wells were gauged and sampled by Blaine Tech Services (Blaine), at the direction of Delta, on April 14, 2005. Depth to groundwater was measured in Wells MW-1 through MW-4. Groundwater elevation data and contours are presented on Figure 2.

Groundwater samples were collected from Wells MW-1 through MW-4. Samples were submitted by Blaine to Severn Trent Laboratories (STL) in Pleasanton, California for analysis for TPH-G; TPH-D; benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds); the fuel oxygenates methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) using EPA Method 8260B. TPH-G, benzene, and MTBE concentrations in groundwater are presented on Figure 3.

Blaine's groundwater monitoring and sampling report, which includes historical and current groundwater elevation data, historical and current analytical results, and field data records for the current monitoring event, is included as Attachment A.

Discussion

Depth to groundwater in site wells has decreased by an average of 10.49 feet since the last annual groundwater monitoring event conducted in June 2004. Depth to groundwater has continually decreased since well installation in 2002, resulting in a total water table rise of approximately 30 feet at the site. Well screens in Wells MW-1 through MW-4 (77 to 97 feet bg) are now drowned. The horizontal groundwater gradient on April 14, 2005 was toward the west-southwest at a magnitude of less than 0.01 feet/feet (essentially flat), consistent with previous site data.

TPH-D, detected only in Well MW-2, decreased from 90 micrograms per liter ($\mu\text{g/l}$) during the previous monitoring event to 77 $\mu\text{g/l}$ during this event. TPH-D in Well MW-2 continues to not match the laboratory's standard chromatographic pattern for diesel. All other analytes remained below the laboratory reporting limit in Wells MW-1 through MW-4.

Recommendations

Per Shell's GRASP protocol, site wells were not purged prior to groundwater sampling. Delta proposes to perform an additional groundwater monitoring and sampling event during the fourth quarter 2005 to implement and obtain post-purge sampling data. Based on the results of the fourth quarter 2005 quarterly monitoring report, Delta will evaluate the need to increase the groundwater monitoring frequency.

Delta will prepare a comprehensive site conceptual model (SCM) spreadsheet for submittal to the Alameda County Health Care Services Agency (ACHCSA). The SCM, in electronic report format, will include recommendations for possible additional soil and groundwater investigation activities at the site in order to move towards case closure.

REMARKS

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

If you have any questions regarding this site, please contact Debbie Arnold (Delta) at (408) 224-4724, or Mr. Denis Brown (Shell Project Manager) at (707) 865-0251.

Sincerely,
Delta Environmental Consultants, Inc.

Heather Buckingham

Heather Buckingham
Senior Staff Geologist

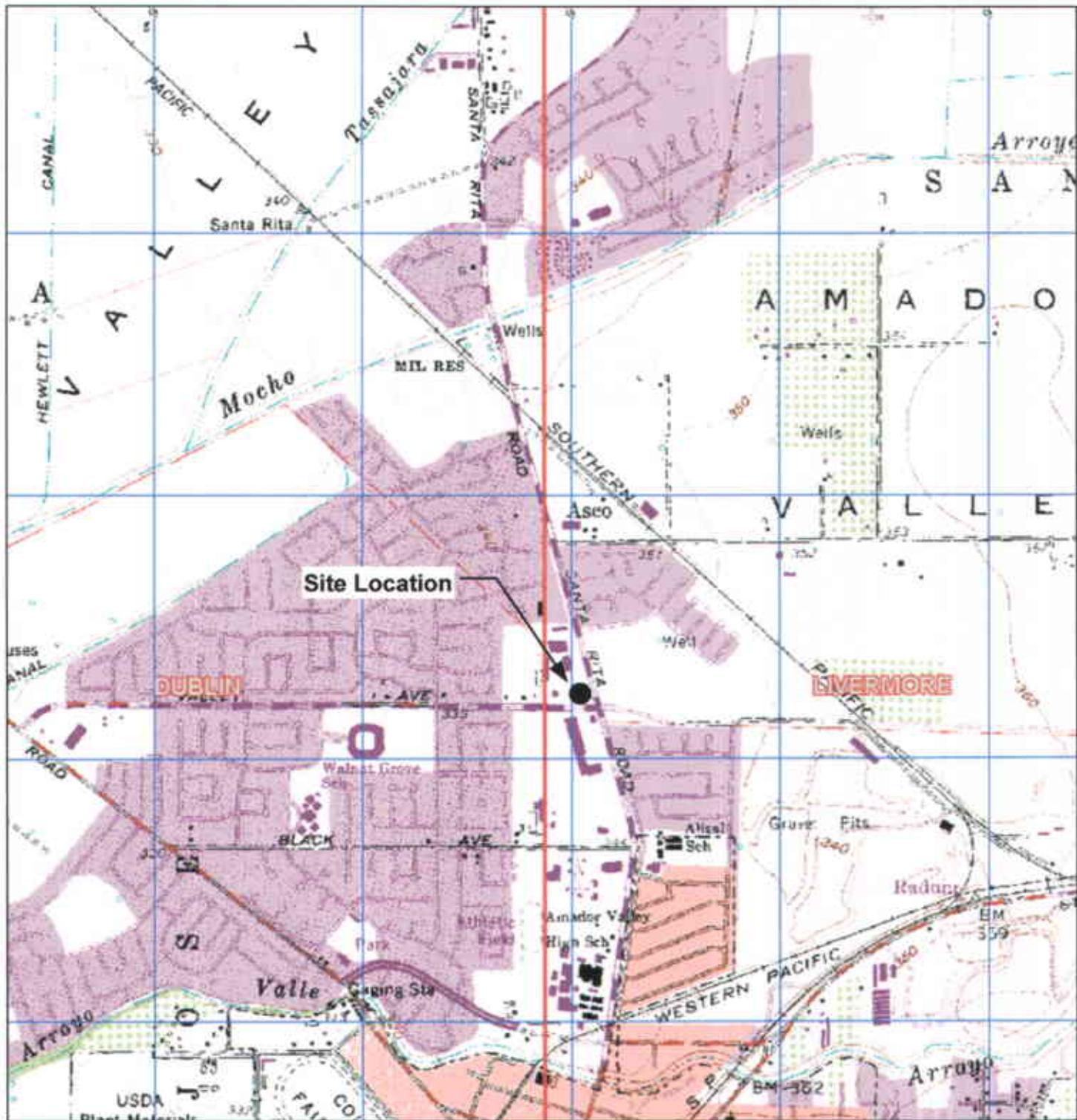
D. Arnold

Debbie Arnold
Project Manager
PG 7745



Attachments: Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour Map, April 14, 2005
Figure 3 – TPH-G, Benzene, and MTBE Concentration Map, April 14, 2005
Attachment A – Groundwater Monitoring and Sampling Report, May 6, 2005

cc: Isabel Mejia, Shell Oil Products US, Carson
Denis Brown, Shell Oil Products US (by email)



GENERAL NOTES:

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



0 1,800 3,600
Scale, Feet

North

FIGURE 1
SITE LOCATION MAP

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

PROJECT NO. SJ18-01S-G-2004	DRAWN BY VF 10/23/03
FILE NO. SJ18-01S-G-2004	PREPARED BY VF
REVISION NO.	REVIEWED BY



North



LEGEND

- MW-1 ● GROUNDWATER MONITORING WELL
- (263.11) GROUNDWATER ELEVATION (FEET-MSL), 4/14/05
- 286.15 — GROUNDWATER ELEVATION CONTOUR
- <0.01 ft APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT

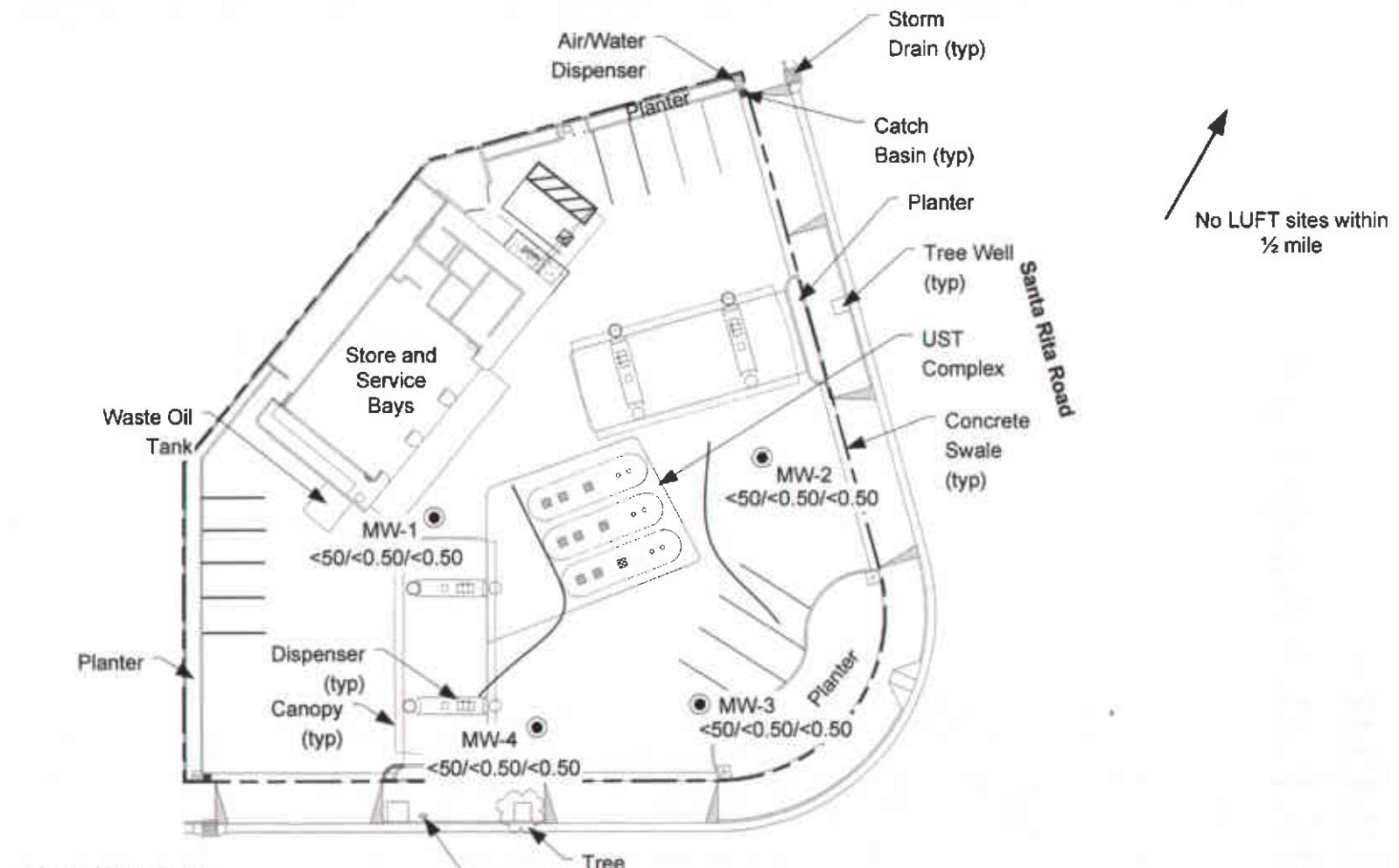


FIGURE 2
GROUNDWATER ELEVATION CONTOUR MAP,
APRIL 14, 2005

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

PROJECT NO. SJ18-01S-G 2005	DRAWN BY VF 10/23/03
FILE NO. SJ18-01S-G 2005year	PREPARED BY VF
REVISION NO. 2	REVIEWED BY

North



LEGEND

- MW-1 ● GROUNDWATER MONITORING WELL
MW-1 <50/<0.50/<0.50
TPH-G/BENZENE/MTBE CONCENTRATIONS
(UG/L), 04/14/05

0 40 FT
APPROX. SCALE

FIGURE 3
TPH-G, BENZENE, AND MTBE CONCENTRATIONS MAP
APRIL 14, 2005

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

PROJECT NO. SJ1B-01S-G 000G	DRAWN BY JL 09/21/05
FILE NO. SJ1B-01S-G 000G	PREPARED BY HB
REVISION NO. 1	REVIEWED BY

Attachment A

GROUNDWATER MONITORING AND SAMPLING REPORT

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

May 6, 2005

Carol Campagna
HSE – Environmental Services
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810

Second Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, CA

Monitoring performed on April 14, 2005

Groundwater Monitoring Report 050414-BA-2

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

SAN JOSE

1680 ROGERS AVENUE SAN JOSE, CA 95112-1106

SACRAMENTO

(408) 573-0555

LOS ANGELES

LIC. 746684

SAN DIEGO

www.blainetech.com

FAX (408) 573-7771

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Leon Gearhart
Project Coordinator

LG/jn

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Debbie Arnold
Delta Environmental
175 Bernal Road, Suite 200
San Jose, CA 95119

WELL CONCENTRATIONS
Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, CA

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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MW-1	12/12/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85.83	NA
MW-1	12/20/2002	<50	<50	<0.50	<0.50	<0.50	0.71	<0.50	<2.0	<2.0	<2.0	<50	NA	85.60	NA
MW-1	3/31/2003	<50	75	<0.50	<0.50	<0.50	<1.0	<5.0	NA	NA	NA	NA	342.10	77.36	264.74
MW-1	6/26/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	342.10	72.48	269.62
MW-1	9/15/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	342.10	79.03	263.07
MW-1	12/31/2003	<50	<50	<0.50	0.99	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	342.10	70.57	271.53
MW-1	3/8/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	342.10	65.95	276.15
MW-1	6/16/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	342.10	66.50	275.60
MW-1	4/14/2005	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	342.10	55.97	286.13

MW-2	12/12/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85.15	NA
MW-2	12/20/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	85.00	NA
MW-2	3/31/2003	<50	63	<0.50	0.71	<0.50	<1.0	<5.0	NA	NA	NA	NA	341.57	76.63	264.94
MW-2	6/26/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.57	71.94	269.63
MW-2	9/15/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.57	78.41	263.16
MW-2	12/31/2003	<50	120 a	<0.50	1.3	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.57	69.96	271.61
MW-2	3/8/2004	<50	110 a	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.57	65.34	276.23
MW-2	6/16/2004	<50	90 a	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.57	65.86	275.71
MW-2	4/14/2005	<50	77 a	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.57	55.35	286.22

MW-3	12/12/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85.49	NA
MW-3	12/20/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	85.25	NA
MW-3	3/31/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	NA	NA	NA	NA	341.65	76.81	264.84
MW-3	6/26/2003	<50	80 a	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.65	72.05	269.60
MW-3	9/15/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.65	78.52	263.13
MW-3	12/31/2003	<50	<50	<0.50	1.2	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.65	70.15	271.50

WELL CONCENTRATIONS
Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, CA

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
---------	------	----------------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------

MW-3	3/8/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.65	65.46	276.19
MW-3	6/16/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.65	65.87	275.78
MW-3	4/14/2005	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	341.65	55.50	286.15

MW-4	12/12/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	84.36	NA
MW-4	12/20/2002	<50	69	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	84.15	NA
MW-4	3/31/2003	<50	70	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	340.68	75.90	264.78
MW-4	6/26/2003	<50	86 a	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	340.68	71.01	269.67
MW-4	9/15/2003	<50	120 a	1.0	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	340.68	77.57	263.11
MW-4	12/31/2003	<50	<50	<0.50	0.64	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	340.68	69.15	271.53
MW-4	3/8/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	340.68	64.51	276.17
MW-4	6/16/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	340.68	65.04	275.64
MW-4	4/14/2005	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	340.68	54.53	286.15

WELL CONCENTRATIONS
Shell-branded Service Station
1801 Santa Rita Road
Pleasanton, CA

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
---------	------	----------------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B.

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

TBA = Tertiary Butanol or Tertiary butyl alcohol

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

NA = Not applicable

Notes:

a = Hydrocarbon does not match pattern of laboratory's standard.

Site surveyed January 14, 2003 by Mid Coast Engineers.

Blaine Tech Services, Inc.

April 29, 2005

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 050414-BA2

Project: 97402155

Site: 1801 Santa Rita Rd., Pleasanton

Dear Mr.Gearhart,

Attached is our report for your samples received on 04/15/2005 15:53

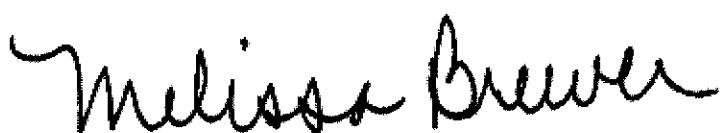
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
05/30/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,



Melissa Brewer
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	04/14/2005 14:30	Water	1
MW-2	04/14/2005 13:45	Water	2
MW-3	04/14/2005 14:00	Water	3
MW-4	04/14/2005 14:15	Water	4

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 3511

Sample ID: MW-1

Sampled: 04/14/2005 14:30

Matrix: Water

Test(s): 8015M

Lab ID: 2005-04-0533 - 1

Extracted: 4/21/2005 14:59

QC Batch#: 2005/04/21-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/22/2005 21:32	
Surrogate(s) o-Terphenyl	95.3	64-127	%	1.00	04/22/2005 21:32	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 3511

Test(s): 8015M

Sample ID: MW-2

Lab ID: 2005-04-0533 - 2

Sampled: 04/14/2005 13:45

Extracted: 4/21/2005 14:59

Matrix: Water

QC Batch#: 2005/04/21-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	77	50	ug/L	1.00	04/22/2005 18:50	ndp
Surrogate(s) o-Terphenyl	98.0	64-127	%	1.00	04/22/2005 18:50	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 3511

Sample ID: MW-3

Sampled: 04/14/2005 14:00

Matrix: Water

Test(s): 8015M

Lab ID: 2005-04-0533 - 3

Extracted: 4/21/2005 14:59

QC Batch#: 2005/04/21-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/22/2005 18:23	
Surrogate(s)						
o-Terphenyl	98.5	64-127	%	1.00	04/22/2005 18:23	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 3511

Sample ID: MW-4

Sampled: 04/14/2005 14:15

Matrix: Water

Test(s): 8015M

Lab ID: 2005-04-0533 -4

Extracted: 4/21/2005 14:59

QC Batch#: 2005/04/21-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/22/2005 17:56	
Surrogate(s) o-Terphenyl	91.9	64-127	%	1.00	04/22/2005 17:56	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Batch QC Report

Prep(s): 3511

Test(s): 8015M

Method Blank**QC Batch # 2005/04/21-06.10**

MB: 2005/04/21-06.10-001

Water**Date Extracted: 04/21/2005 14:59**

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	04/23/2005 09:17	
Surrogates(s) o-Terphenyl	96.8	64-127	%	04/23/2005 09:17	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Batch QC Report

Prep(s): 3511

Test(s): 8015M

Laboratory Control Spike**Water****QC Batch # 2005/04/21-06.10**

LCS 2005/04/21-06.10-002

Extracted: 04/21/2005

Analyzed: 04/23/2005 09:17

LCSD 2005/04/21-06.10-003

Extracted: 04/21/2005

Analyzed: 04/23/2005 09:17

Compound	Conc.	ug/L	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	587	677	680	86.3	99.6	14.3	60-150	25		
Surrogates(s)										
<i>o-Terphenyl</i>	1.35	1.48	1.25	107.7	118.5		64-127	0		

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

04/26/2005 17:51

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	04/14/2005 14:30	Water	1
MW-2	04/14/2005 13:45	Water	2
MW-3	04/14/2005 14:00	Water	3
MW-4	04/14/2005 14:15	Water	4

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-1

Lab ID: 2005-04-0533 - 1

Sampled: 04/14/2005 14:30

Extracted: 4/27/2005 23:46

Matrix: Water

QC Batch#: 2005/04/27-2A.66

pH: <2

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	04/27/2005 23:46	
Benzene	ND	0.50	ug/L	1.00	04/27/2005 23:46	
Toluene	ND	0.50	ug/L	1.00	04/27/2005 23:46	
Ethylbenzene	ND	0.50	ug/L	1.00	04/27/2005 23:46	
Total xylenes	ND	1.0	ug/L	1.00	04/27/2005 23:46	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	04/27/2005 23:46	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/27/2005 23:46	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	04/27/2005 23:46	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	04/27/2005 23:46	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	04/27/2005 23:46	
Surrogate(s)						
1,2-Dichloroethane-d4	103.7	73-130	%	1.00	04/27/2005 23:46	
Toluene-d8	106.8	81-114	%	1.00	04/27/2005 23:46	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-2

Lab ID: 2005-04-0533 - 2

Sampled: 04/14/2005 13:45

Extracted: 4/28/2005 00:11

Matrix: Water

QC Batch#: 2005/04/27-2A.66

pH: <2

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	04/28/2005 00:11	Q6
Benzene	ND	0.50	ug/L	1.00	04/28/2005 00:11	
Toluene	ND	0.50	ug/L	1.00	04/28/2005 00:11	
Ethylbenzene	ND	0.50	ug/L	1.00	04/28/2005 00:11	
Total xylenes	ND	1.0	ug/L	1.00	04/28/2005 00:11	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	04/28/2005 00:11	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/28/2005 00:11	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	04/28/2005 00:11	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	04/28/2005 00:11	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	04/28/2005 00:11	
Surrogate(s)						
1,2-Dichloroethane-d4	104.0	73-130	%	1.00	04/28/2005 00:11	
Toluene-d8	107.2	81-114	%	1.00	04/28/2005 00:11	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-3

Lab ID: 2005-04-0533 - 3

Sampled: 04/14/2005 14:00

Extracted: 4/28/2005 00:37

Matrix: Water

QC Batch#: 2005/04/27-2A.66

pH: <2

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	04/28/2005 00:37	
Benzene	ND	0.50	ug/L	1.00	04/28/2005 00:37	
Toluene	ND	0.50	ug/L	1.00	04/28/2005 00:37	
Ethylbenzene	ND	0.50	ug/L	1.00	04/28/2005 00:37	
Total xylenes	ND	1.0	ug/L	1.00	04/28/2005 00:37	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	04/28/2005 00:37	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/28/2005 00:37	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	04/28/2005 00:37	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	04/28/2005 00:37	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	04/28/2005 00:37	
Surrogate(s)						
1,2-Dichloroethane-d4	106.5	73-130	%	1.00	04/28/2005 00:37	
Toluene-d8	106.5	81-114	%	1.00	04/28/2005 00:37	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-4

Lab ID: 2005-04-0533 - 4

Sampled: 04/14/2005 14:15

Extracted: 4/28/2005 01:02

Matrix: Water

QC Batch#: 2005/04/27-2A.66

pH: <2

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	04/28/2005 01:02	
Benzene	ND	0.50	ug/L	1.00	04/28/2005 01:02	
Toluene	ND	0.50	ug/L	1.00	04/28/2005 01:02	
Ethylbenzene	ND	0.50	ug/L	1.00	04/28/2005 01:02	
Total xylenes	ND	1.0	ug/L	1.00	04/28/2005 01:02	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	04/28/2005 01:02	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/28/2005 01:02	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	04/28/2005 01:02	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	04/28/2005 01:02	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	04/28/2005 01:02	
Surrogate(s)						
1,2-Dichloroethane-d4	105.1	73-130	%	1.00	04/28/2005 01:02	
Toluene-d8	105.2	81-114	%	1.00	04/28/2005 01:02	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method: Blank

Water

QC Batch # 2005/04/27-2A.66

MB: 2005/04/27-2A.66-052

Date Extracted: 04/27/2005 19:52

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	04/27/2005 19:52	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/27/2005 19:52	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/27/2005 19:52	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	04/27/2005 19:52	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	04/27/2005 19:52	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	04/27/2005 19:52	
Benzene	ND	0.5	ug/L	04/27/2005 19:52	
Toluene	ND	0.5	ug/L	04/27/2005 19:52	
Ethylbenzene	ND	0.5	ug/L	04/27/2005 19:52	
Total xylenes	ND	1.0	ug/L	04/27/2005 19:52	
Surrogates(s)					
1,2-Dichloroethane-d4	95.6	73-130	%	04/27/2005 19:52	
Toluene-d8	101.4	81-114	%	04/27/2005 19:52	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike**Water****QC Batch # 2005/04/27-2A.66**

LCS 2005/04/27-2A.66-027

Extracted: 04/27/2005

Analyzed: 04/27/2005 19:27

LCSD

Compound	Conc.	ug/L	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	17.8		25	71.2			65-165	20		
Benzene	18.8		25	75.2			69-129	20		
Toluene	20.8		25	83.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	459		500	91.8			73-130			
Toluene-d8	523		500	104.6			81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)**Water****QC Batch # 2005/04/27-2A.66**

MS/MSD

Lab ID: 2005-04-0516 - 002

MS: 2005/04/27-2A.66-049

Extracted: 04/27/2005

Analyzed: 04/27/2005 20:49

MSD: 2005/04/27-2A.66-014

Extracted: 04/27/2005

Dilution: 1.00

Analyzed: 04/27/2005 21:14

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	25.0	26.2	ND	25	100.0	104.8	4.7	65-165	20		
Benzene	25.3	26.3	ND	25	101.2	105.2	3.9	69-129	20		
Toluene	28.6	29.0	ND	25	114.4	116.0	1.4	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	484	475		500	96.9	95.0		73-130			
Toluene-d8	539	533		500	107.8	106.6		81-114			

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

04/29/2005 17:18

Page 8 of 9

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050414-BA2
97402155

Received: 04/15/2005 15:53

Site: 1801 Santa Rita Rd., Pleasanton

Legend and Notes

Sample Comment

Lab ID: 2005-04-0533 -2

Siloxane peaks were found in the sample which are not believed to be gasoline related. If they were to be quantified as gasoline, concentration would be 74 ug/L.

Result Flag

Q6

The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

LAB: STL

SHELL Chain Of Custody Record

114273

Les interférences d'expression

九

City, State, Zip

Shell Project Manager to be Invoiced:			INCIDENT NUMBER (S&E ONLY)									
<input checked="" type="checkbox"/> SCIENCE & ENGINEERING	Carol Campagna		9	7	4	0	2	1	5	5		
<input type="checkbox"/> TECHNICAL SERVICES						SAP or CRMT NUMBER (TS/CRMT)						
<input type="checkbox"/> CRMT HOUSTON												
LAB CODE: BTSS			SITE ADDRESS (Street and City): 1801 Santa Rita Rd., Pleasanton					GLOBAL ID NO:				
			THE DELIVERABLE TO (Responsible Party or Designee): Debbie Arnold					PHONE#:	E-MAIL:			
			(408)224-4724					dearnold@klim1.com			CONCURRENT PHOTOS#:	
											050414-BAZ	
EMAIL: gearhart@blainatech.com			BASER NAME(S) (PWS): Brian Alcorn					LAB USE ONLY			BTS #	
<input type="checkbox"/> 24 HOURS <input type="checkbox"/> LESS THAN 24 HOURS			REQUESTED ANALYSIS					FIELD NOTES:				
			TPH - Gas, Purgeable	BTEX	MTBE [0021B + 5ppb RL]	MTBE [0280B + 0.5ppb RL]	Oxygenates (S) by [0280B]	TPH - Diesel, Extractable	Container/Preservative or PID Readings or Laboratory Notes			
									3			
									TEMPERATURE ON RECEIPT °C			
SAMPLING		MATRIX	NO. OF CONT.									
DATE	TIME											
4/14	1430	W	6	X	X	X	X	X				
	1315		1	X	X	X	X	X				
	1400			X	X	X	X	X				
	1415		7	X	X	X	X	X				
Received by (Signature) <i>J. Morley</i>												
1835 15/05		Received by (Signature) <i>J. Morley</i>		Date 4/15/05		Time 1530						
Received by (Signature) <i>J. Morley</i>		Received by (Signature) <i>J. Morley</i>		Date 04/05/05		Time 1835						

DISTRIBUTION: White with faint red ink. Given to File 1980 and Post to Clerks.

第15章 算法设计

2023年3月

SITE DEPARTURE CHECKLIST

Client Shell Date 4/14/05

Site Address 1801 Santa Rita, Pleasanton

Job Number 050414-B42 Technician Brian Alcom

Caps, Locks and Wellbox Bolts Secured at all Accessed Wells (except as noted on Wellhead Repair Order)	<input checked="" type="checkbox"/>	
Drum(s) Labeled and Secured	<input type="checkbox"/>	(N/A)
Equipment Decontaminated	<input checked="" type="checkbox"/>	N/A
Housekeeping of Site Checked (clean or cleaner)	<input checked="" type="checkbox"/>	N/A
Scope Of Work (SOW) Reviewed for Completion	<input checked="" type="checkbox"/>	
Sample Container Set(s) Complete, Present and Secure	<input checked="" type="checkbox"/>	N/A
Bill of Lading Completed	<input type="checkbox"/>	(N/A)
Chain of Custody Completed	<input checked="" type="checkbox"/>	N/A
Call In to Project Coordinator / Base Completed	<input checked="" type="checkbox"/>	N/A
Route to Next Destination Known, Mapped and Understood	<input checked="" type="checkbox"/>	
Traffic Control Devices Collected	<input checked="" type="checkbox"/>	N/A
Cargo Secured on Truck	<input checked="" type="checkbox"/>	N/A
Check Out of Facility / Site	<input type="checkbox"/>	(N/A)
Secure Site / Close and Lock Gate	<input type="checkbox"/>	(N/A)

If Checklist Task cannot be completed, explain: _____

PROJECT COORDINATOR ONLY

Checklist Reviewed	<u>Initials/Date</u>	Notes
--------------------	----------------------	-------

WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Client _____ Shell _____ Date 4/14/05

Date 4/14/05

Site Address 1801 Santa Rita Rd.

Job Number 250414-BAL Technician Brian L. Cerny

NOTES: _____

WELL GAUGING DATA

Project # 050414-342 Date 4/14/05 Client Shell

Site 1801 Santa Rita Rd

SHELL WELL MONITORING DATA SHEET

BTS #:	050414-BAZ			Site:	1801 Santa Rita Rd				
Sampler:	Brian Alcorn			Date:	4/14/05				
Well I.D.:	MW-1			Well Diameter:	2	3	4	6	8
Total Well Depth (TD):	91.78			Depth to Water (DTW):	55.97				
Depth to Free Product:	—			Thickness of Free Product (feet):	—				
Referenced to:	PVC	Grade		D.O. Meter (if req'd):	YSI	HACH			
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:									

Purge Method: Bailer
 Disposable Bailer
 Positive Air Displacement
 Electric Submersible
 Other

Water: Peristaltic
 Extraction Pump
 Other

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Dedicated Tubing
 Other

No Purge

(Gals.) X	<input type="text"/>	=	Gals.
1 Case Volume	Specified Volumes	Calculated Volume	

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

Time	Temp (°F)	pH	Cond. (mS or OS)	Turbidity (NTUs)	Gals. Removed	Observations
1430	66.0	6.7	1,476	15	~1/4	clear

Did well dewater? Yes No Gallons actually evacuated: *~1/4*

Sampling Date: *4/14/05* Sampling Time: *1430* Depth to Water: *55.97*

Sample I.D.: *MW-1* Laboratory: STL Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: *Oxys*

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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

SHELL WELL MONITORING DATA SHEET

BTS #:	050414-BAZ			Site:	1801 Santa Rita Rd, Pleasanton		
Sampler:	Brian Alcorn			Date:	4/14/05		
Well I.D.:	MW-2			Well Diameter:	2	3	(4) 6 8
Total Well Depth (TD):	93.15			Depth to Water (DTW):	55.35		
Depth to Free Product:				Thickness of Free Product (feet):			
Referenced to:	PVC	Grade		D.O. Meter (if req'd):	YSI	HACH	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:							

Purge Method: Bailer
 Disposable Bailer
 Positive Air Displacement
 Electric Submersible

Waterra
 Peristaltic
 Extraction Pump
 Other _____

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Dedicated Tubing

Other: _____

No Purge

(Gals.) X _____ = _____ Gals.
 1 Case Volume Specified Volumes Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1345	69.0	11.4	2,031	27	n/a	clear

Did well dewater? Yes No Gallons actually evacuated: n/a

Sampling Date: 4/14/05 Sampling Time: 1345 Depth to Water: 55.35

Sample I.D.: MW-2 Laboratory: STL Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oryx

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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

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

SHELL WELL MONITORING DATA SHEET

BTS #:	050414-B47			Site:	1801 Santa Rita Rd, Pleasanton		
Sampler:	Brian Alcom			Date:	4/14/05		
Well I.D.:	MW-3			Well Diameter:	2	3	(4) 6 8
Total Well Depth (TD):	96.90			Depth to Water (DTW):	55.50		
Depth to Free Product:				Thickness of Free Product (feet):			
Referenced to:	PVC	Grade		D.O. Meter (if req'd):	YSI	HACH	
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:							

Purge Method: Bailer
~~Disposable Bailer~~
~~Positive Air Displacement~~
~~Electric Submersible~~ Waterra
~~Other~~ Peristaltic
~~Extraction Pump~~
 Sampling Method: Bailer
~~Disposable Bailer~~
~~Extraction Port~~
~~Dedicated Tubing~~
 Other:

<u>No Purge</u>		Well Diameter	Multiplier	Well Diameter	Multiplier
(Gals.) X		1"	0.04	4"	0.65
1 Case Volume	Specified Volumes	2"	0.16	6"	1.47
		3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or PS)	Turbidity (NTUs)	Gals. Removed	Observations
1400	67.6	7.6	1,330	18	n/a	clear

Did well dewater? Yes No Gallons actually evacuated: n/a

Sampling Date: 4/14/05 Sampling Time: 1400 Depth to Water: 55.50

Sample I.D.: MW-3 Laboratory: STL Other:

Analyzed for: TPH-G ~~BTEX~~ MTBE TPH-D Other: Oxys

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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

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

SHELL WELL MONITORING DATA SHEET

BTS #:	050414 -BAZ		Site:	1801 Santa Rita Rd, Pleasanton				
Sampler:	Brian Alcorn		Date:	4/14/05				
Well I.D.:	MW-4		Well Diameter:	(2)	3	4	6	8
Total Well Depth (TD):	94.37		Depth to Water (DTW):	54.53				
Depth to Free Product:			Thickness of Free Product (feet):					
Referenced to:	PVC	Grade	D.O. Meter (if req'd):	YSI	HACH			
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:								

Purge Method:	Bailer	Waterra	Sampling Method:																															
Disposable Bailer	Positive Air Displacement	Peristaltic	Bailer																															
Electric Submersible	Other	Extraction Pump	<i>No Purge</i>		Other:	Disposable Bailer	(Gals.) X		=	Gals.	1 Case Volume	Specified Volumes	Calculated Volume		<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Well Diameter</th> <th style="width: 25%;">Multiplier</th> <th style="width: 25%;">Well Diameter</th> <th style="width: 25%;">Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>				Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
<i>No Purge</i>		Other:	Disposable Bailer																															
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3"	0.37	Other	radius ² * 0.163																															

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1415	66.3	6.8	1,370	18	N/A	clear

Did well dewater? Yes No Gallons actually evacuated: N/A

Sampling Date: 4/14/05 Sampling Time: 1415 Depth to Water: 54.53

Sample I.D.: MW-4 Laboratory: STL Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxy's

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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

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