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Alameda County  
Environmental Health

6723 Towpath Road, Box 66  
Syracuse, NY 13214-0066

June 22, 2007

Reference No. 17366-208

Mr. Jerry Wickham, Hazardous Materials Specialist  
Alameda County Environmental Health Services  
Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Dear Mr. Wickham:

Re: April 2007 Groundwater Sampling  
SLIC Case No. RO0002571  
Saturn of Pleasanton  
4340 Rosewood Boulevard  
Pleasanton, California

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This letter has been prepared by Encore Environmental Consortium, LLC (EEC) on behalf of Saturn Retail of South Carolina (Saturn) to supplement the Soil and Groundwater Investigation (Revised) report dated June 30, 2006, and to summarize the groundwater sampling conducted on April 19, 2007 at the above referenced property (the Site). Per our request dated March 2, 2007 (and approved by you on March 16, 2007), EEC installed and sampled one monitoring well in lieu of sampling off-Site water supply wells 3S1/E 5J6 and 3S1/E 5J7.

### **1.0 Monitoring Well Installation**

On April 11, 2007, MW-1 was installed in the southwest corner of the Site. Figure 1 presents the Site location. Figure 2 presents the monitoring well location. The monitoring well was constructed of two-inch polyvinyl chloride (PVC) casing with a flush-mounted cover, including a 10 foot-long 0.010-inch slotted screen set from approximately 40 feet below ground surface (bgs) to approximately 50 feet bgs. Attachment A presents the stratigraphic log for MW-1.

MW-1 was developed by removing 55 gallons of groundwater and until purge water appeared to be free of significant silt content. The groundwater sample was then collected via low flow sampling techniques utilizing a submersible bladder pump. The groundwater sample was collected in a clean laboratory-supplied container, placed on ice, and shipped for laboratory analysis of total petroleum hydrocarbons (TPH) as diesel range organics (DRO) using silica gel cleanup, TPH as gasoline range organics (GRO), volatile organic compounds (VOCs), methyl tert butyl ether (MTBE), and

fuel oxygenates on a 72-hr turn around time (TAT) to Severn Trent Laboratories (STL) in Sacramento, California. It should be noted that the groundwater sample was not analyzed for TPH as DRO without the silica gel cleanup due to laboratory error.

## **2.0 Conclusions**

Concentrations of TPH-DRO with silica gel cleanup, TPH-GRO, VOCs, MTBE, and fuel oxygenates were not detected above laboratory detection limits in the groundwater sample collected from MW-1. Attachment B presents the laboratory analytical report. Based on laboratory analytical results, contaminants previously identified near the oil/water separator at the Site do not appear to be migrating off Site.

Table 1 presents the sample summary and Table 2 presents a summary of detected parameters in groundwater at the Site. These tables have been updated to include all samples previously collected at the Site.

## **3.0 Recommendations**

Based on the results of groundwater sampling in the southwest portion of the Site (closest to the adjacent property), subsurface impacts previously detected in the vicinity of the oil-water separator do not appear to be migrating off Site. Therefore, no additional investigation or remediation is recommended at this time. On behalf of Saturn, we request that SLIC Case No. RO0002571 be reevaluated by your department for case closure.

## **4.0 Certification**

I declare under penalty of perjury that, based on my inquiry of those individuals responsible for obtaining the information contained in this report, the information is true and correct to the best of my knowledge in accordance with the California Business and Professions Code (Section 6735, 6835, and 7835.1).

  
Robert T. Siegfried, R.G., E.G.



June 22, 2007

Reference No. 17366-208

Questions on the information contained herein can be directed to me at (517) 316-2397. On behalf of Saturn, we appreciate your time and consideration of this request.

Sincerely yours,

ENCORE ENVIRONMENTAL CONSORTIUM, LLC



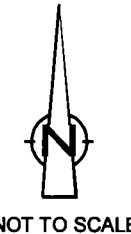
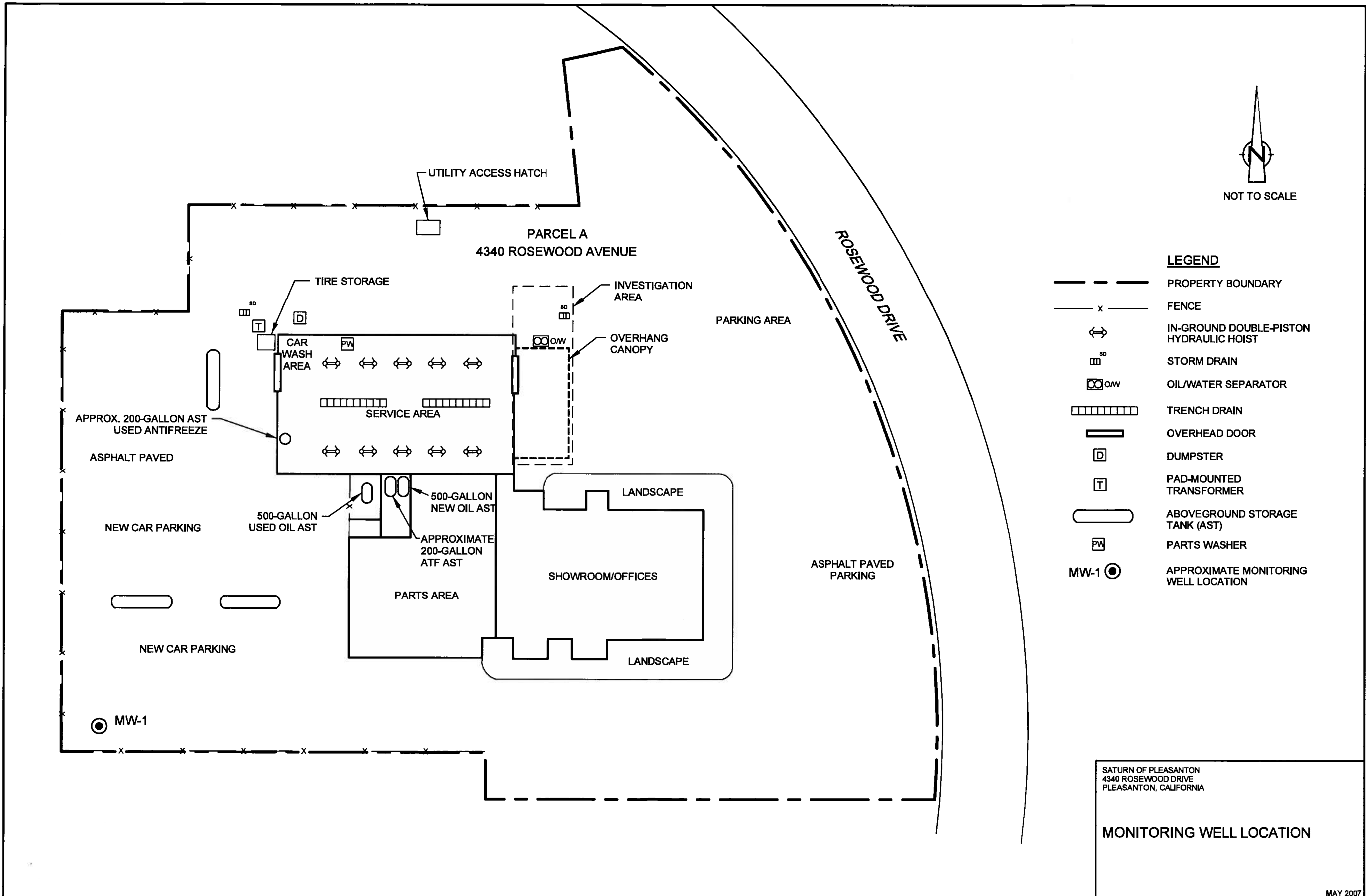
Martha F. Darnton

MFD/bfm/3/Lan.

Encl.

cc: Pamela Merritt, Saturn Retail of South Carolina, LLC  
Bob Siegfried, EEC

17366-208(WICH003)GN-DE002 MAY 10/2007



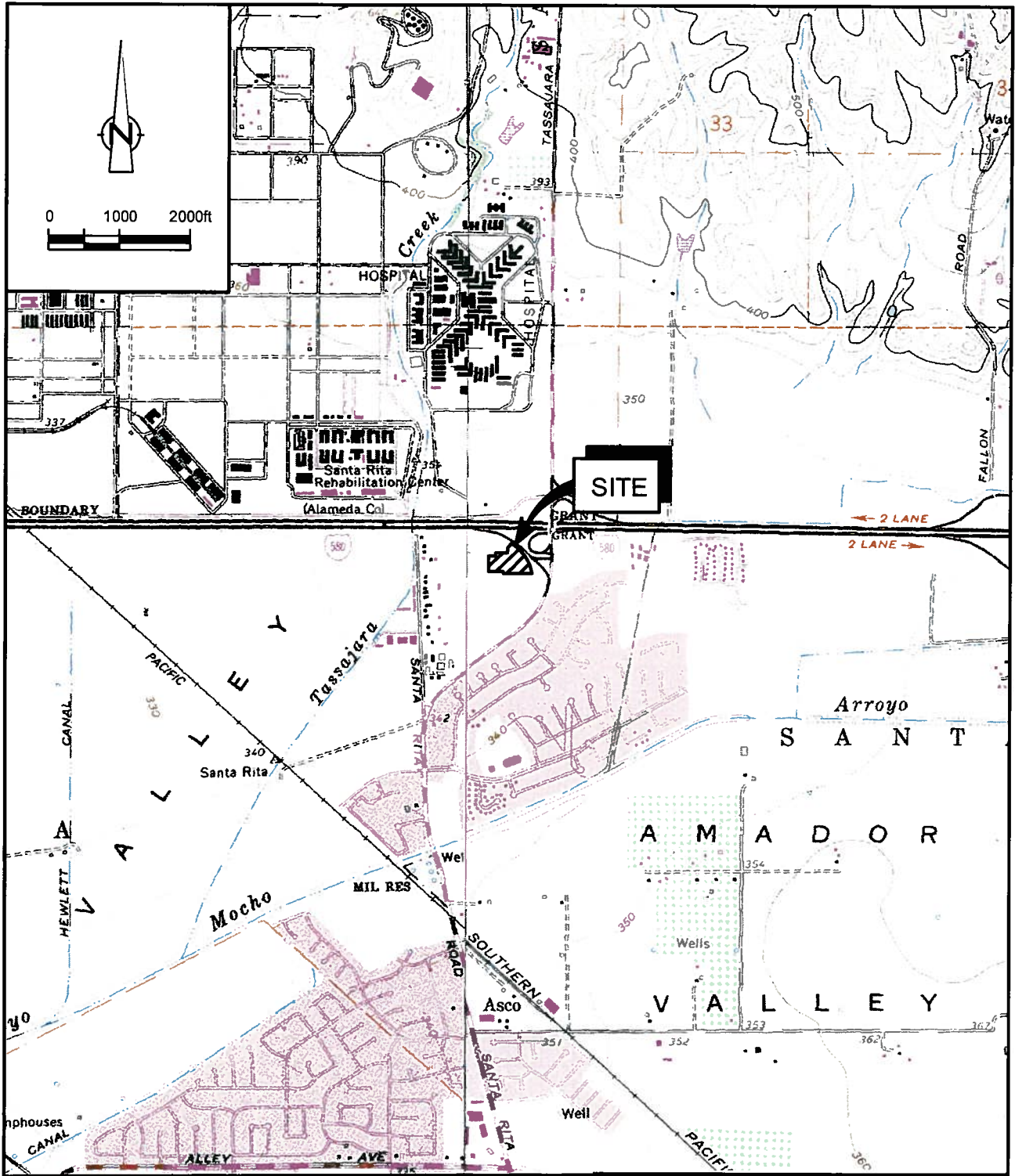
NOT TO SCALE

**LEGEND**

- PROPERTY BOUNDARY
- FENCE
- IN-GROUND DOUBLE-PISTON HYDRAULIC HOIST
- STORM DRAIN
- OIL/WATER SEPARATOR
- TRENCH DRAIN
- OVERHEAD DOOR
- DUMPSTER
- PAD-MOUNTED TRANSFORMER
- ABOVEGROUND STORAGE TANK (AST)
- PARTS WASHER
- APPROXIMATE MONITORING WELL LOCATION

SATURN OF PLEASANTON  
 4340 ROSEWOOD DRIVE  
 PLEASANTON, CALIFORNIA

**MONITORING WELL LOCATION**



SOURCE: USGS QUADRANGLE MAP;  
LIVERMORE AND DUBLIN, CALIFORNIA

SATURN OF PLEASANTON  
4340 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA

**SITE LOCATION**



SCALE: 1"=2000'

MAY 2007

FIGURE 1

17366-208(WIC:H003)GN-DE001 MAY 07/2007

TABLE 1

SAMPLE SUMMARY (2005)  
 SATURN OF PLEASANTON  
 4340 ROSEWOOD BOULEVARD  
 PLEASANTON, CALIFORNIA

<u>Sample Identification</u>	<u>Sample Location</u>	<u>Sample Depth (ft. bgs)</u>	<u>Matrix</u>	<u>Analysis<sup>(1)</sup></u>
S-17366-111905-MM-001	SB-9	15-20	Soil	TCL VOC, TPH-DRO, 1,4 - Dioxane
S-17366-111905-MM-002	SB-9	20-25	Soil	TCL VOC, TPH-DRO, 1,4 - Dioxane
S-17366-111905-MM-003	SB-VAS-1	15-20	Soil	TCL VOC, TPH-DRO, 1,4 - Dioxane
S-17366-111905-MM-004	SB-VAS-1	20-25	Soil	TCL VOC, TPH-DRO, 1,4 - Dioxane
GW-17366-111905-MM-005	SB-VAS-1	30-35	Water	TCL VOC, TPH-GRO, TPH-DRO, 1,4 - Dioxane
GW-17366-111905-MM-006	SB-VAS-1	40-45	Water	TCL VOC, TPH-GRO, TPH-DRO, 1,4 - Dioxane
GW-17366-111905-MM-007	SB-VAS-1	50-55	Water	TCL VOC, TPH-GRO
GW-17366-111905-MM-008	SB-VAS-1	70-75	Water	TCL VOC, TPH-GRO, TPH-DRO, 1,4 - Dioxane
TB-17366-111905-MM-011	--	--	Water	TCL VOC
S-120705-RTS-001	SB-VAS-3	15-19	Soil	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
S-120705-RTS-002	SB-VAS-3	20-24	Soil	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
GW-120705-RTS-003	SB-VAS-3	50-55	Water	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
S-120805-RTS-004	SB-VAS-2	13-17	Soil	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
S-120805-RTS-005	SB-VAS-2	17-21	Soil	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
S-120805-RTS-006	SB-VAS-2	21-25	Soil	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
GW-120805-RTS-007	SB-VAS-2	30-35	Water	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
GW-120805-RTS-008	SB-VAS-2	38-43	Water	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
GW-120805-RTS-009	SB-VAS-2	50-55	Water	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>
GW-041907-TR-001	MW-1	40-50	Water	TCL VOC, TPH-GRO, TPH-DRO, Oxygenates <sup>(2)</sup>

**Notes:**

- <sup>(1)</sup> Samples were transported under chain of custody (COC) protocol to STL Laboratories (STL), located in Pleasanton, California to be analyzed within a 72-hour TAT.
  - <sup>(2)</sup> Oxygenates include: tertiary amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), diisopropyl ether (DIPE) and tertiary butanol (TBA)
  - <sup>(3)</sup> Sample was transported under COC protocol to STL, located in Sacramento, California to be analyzed within a 72-hour TAT.
- TCL VOCs - Target Compound List Volatile Organic Compounds  
 TPH-GRO - Total Petroleum Hydrocarbons as Gasoline Range Organics  
 TPH-DRO - Total Petroleum Hydrocarbons as Diesel Range Organics  
 ft. bgs - feet below ground surface

TABLE 2

**SUMMARY OF DETECTED PARAMETERS IN GROUNDWATER SAMPLES  
SATURN OF PLEASANTON  
4340 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA**

Sample Location		<i>SF Bay RWQCB</i>	<i>SB-VAS-1</i>	<i>SB-VAS-1</i>	<i>SB-VAS-1</i>	<i>SB-VAS-1</i>	<i>SB-VAS-2</i>	<i>SB-VAS-2</i>	<i>SB-VAS-2</i>
Sample ID		<i>Groundwater ESLs</i>	<i>GW-17366-111905-MM-005</i>	<i>GW-17366-111905-MM-006</i>	<i>GW-17366-111905-MM-007</i>	<i>GW-17366-111905-MM-008</i>	<i>GW-120805-RTS-007</i>	<i>GW-120805-RTS-008</i>	<i>GW-120805-RTS-009</i>
Sample Date		<i>GW is a Current</i>	<i>11/19/2005</i>	<i>11/19/2005</i>	<i>11/19/2005</i>	<i>11/19/2005</i>	<i>12/8/2005</i>	<i>12/8/2005</i>	<i>12/8/2005</i>
Sample Depth		<i>or Potential Drinking</i>	<i>(30-35)</i>	<i>(40-45)</i>	<i>(50-55)</i>	<i>(70-75)</i>	<i>(30-35)</i>	<i>(38-43)</i>	<i>(50-55)</i>
Sample Type		<i>Water Resource<sup>(1)</sup></i>							
		<i>Units</i>							
Analysis Date (DRO results only)			<i>11/23/2005</i>	<i>11/23/2005</i>		<i>11/23/2005</i>	<i>12/9/2005</i>	<i>12/13/2005</i>	<i>12/9/2005</i>
Analysis Date (DRO results only Silica Gel Cleanup)			<i>1/10/2006</i>	<i>1/10/2006</i>		<i>1/10/2006</i>			
<b>Petroleum Products</b>									
TPH - extractable (DRO)	ug/L	100	<b>690</b>	<b>11000</b>	NS	<b>630</b>	ND(100)U	<b>450</b>	ND(120)U
TPH - extractable (DRO) Silica Gel Cleanup		100	73 B	<b>1500 B</b>	N	81 JB	NS	NS	NS
Total Petroleum Hydrocarbons - purgeable (GRO)	ug/L	100	NS	NS	NS	NS	NS	NS	NS
Total Petroleum Hydrocarbons - purgeable (GRO)	ug/L	100	ND(28)	33 J	ND(28)	72	ND(28)	ND(28)	ND(28)
<b>SVOCs</b>									
1,4-Dioxane	ug/L	3	ND(0.31)	ND(0.45)	NS	R	ND(0.29)	ND(0.29)	ND(0.38)
<b>VOCs</b>									
1,1-Dichloroethane	ug/L	5	ND(0.23)	ND(0.23)	ND(0.23)	ND(0.23)	ND(0.23)	0.28 J	ND(0.23)
2-Chlorotoluene	ug/L	NC	ND(0.22)	ND(0.22)	ND(0.22)	ND(0.22)	0.83	ND(0.22)	ND(0.22)
Benzene	ug/L	1	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	0.41 J	0.19 J	ND(0.11)
Bromodichloromethane	ug/L	100	ND(0.11)	ND(0.11)	ND(0.11)	ND(0.11)	0.12 J	ND(0.11)	ND(0.11)
cis-1,2-Dichloroethene	ug/L	6	3.3	2.5	2.1	0.6	<b>11</b>	3.5	ND(0.42)
Dibromochloromethane	ug/L	100	ND(0.15)	ND(0.15)	ND(0.15)	ND(0.15)	0.17 J	ND(0.15)	ND(0.15)
Ethanol	ug/L	50000	ND(14)	ND(14)	30 J	28 J	ND(14)	ND(14)	ND(14)
Methyl Tert Butyl Ether	ug/L	5	<b>10</b>	<b>12</b>	<b>9.4</b>	4.7 J	<b>20</b>	<b>8.8</b>	2.7 J
Tert-Amyl Methyl Ether	ug/L	NC	0.7	0.58	0.39 J	ND(0.38)	0.67	ND(0.38)	ND(0.38)
Tert-Butyl Alcohol	ug/L	1.2	<b>16</b>	<b>14</b>	<b>8.8</b>	<b>7.1</b>	<b>14</b>	<b>8.6</b>	ND(1.6)
Tetrachloroethene	ug/L	5.0	ND(0.13)	ND(0.13)	ND(0.13)	ND(0.13)	0.46 J	0.22 J	ND(0.13)
Toluene	ug/L	40	ND(0.14)	ND(0.14)	ND(0.14)	26	ND(0.14)	0.16 J	ND(0.14)
trans-1,2-Dichloroethene	ug/L	10	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.15 J	ND(0.1)	ND(0.1)
Trichloroethene	ug/L	5	1.8	1.1	0.87	ND(0.12)	4.3	3.7	ND(0.12)
Xylene (total)	ug/L	20	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)	ND(0.77)

## Notes:

(1) Source: Table F-1a, Appendix 1, "Summary for Environmental Concerns At Sites With Contaminated Soil and Groundwater - Interim Final February 2005"

TPH-DRO - Total Petroleum Hydrocarbons as Diesel Range Organics

TPH-GRO - Total Petroleum Hydrocarbons as Gasoline Range Organics

SVOCs - Semi-Volatile Organic Compounds

VOCs - Volatile Organic Compounds

ug/l - micrograms per liter

NC - No criteria listed

ND ( ) - Not present at or above the associated value.

NS - Not sampled

B - Result was qualified due to method blank contamination.

J - Estimated concentration.

R - Result rejected due to broken bottle during sample shipment.

Results for DRO analysis on 1/10/06 represent the result after silica gel cleanup.

**690** - Exceeds SF Bay RWQCB Groundwater ESLs GW is a Current or Potential Drinking Water Resource

TABLE 2

**SUMMARY OF DETECTED PARAMETERS IN GROUNDWATER SAMPLES  
SATURN OF PLEASANTON  
4340 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA**

Sample Location	<i>SF Bay RWQCB Groundwater ESLs</i>	<i>SB-VAS-3 GW-120705-RTS-003</i>	<i>SP-1 GW-051303-RS-1</i>	<i>SP-2 GW-051303-RS-2</i>	<i>SP-3 GW-051303-RS-3</i>	<i>SP-4 GW-051303-RS-4</i>	<i>SP-5 GW-052803-RS-1</i>	<i>SP-6 GW-052803-RS-2</i>	<i>SP-7 GW-052803-RS-3</i>	<i>SP-8 GW-052803-RS-4</i>	<i>DP-11 W-120202-RS-11</i>	
Sample ID												
Sample Date		12/7/2005	5/13/2003	5/13/2003	5/13/2003	5/13/2003	5/28/2003	5/28/2003	5/28/2003	5/28/2003	12/2/2002	
Sample Depth		(50-55)									(22-23)	
Sample Type		<i>Water Resource<sup>(1)</sup></i>										
<i>Units</i>												
Analysis Date (DRO results only)		12/8/2005										
Analysis Date (DRO results only Silica Gel Cleanup)												
<i>Petroleum Products</i>												
TPH - extractable (DRO)	ug/L	100	ND(88)U	NS	NS	NS	NS	NS	NS	NS	NS	
TPH - extractable (DRO) Silica Gel Cleanup		100	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Total Petroleum Hydrocarbons - purgeable (GRO)	ug/L	100	NS	NS	NS	NS	NS	NS	NS	NS	330	
Total Petroleum Hydrocarbons - purgeable (GRO)	ug/L	100	ND(28)	NS	NS	NS	NS	NS	NS	NS	NS	
<i>SVOCs</i>												
1,4-Dioxane	ug/L	3	ND(0.23)	NS	NS	NS	NS	NS	NS	NS	NS	
<i>VOCs</i>												
1,1-Dichloroethane	ug/L	5	ND(0.23)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.6	ND(2.0)
2-Chlorotoluene	ug/L	NC	ND(0.22)	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	ug/L	1	ND(0.11)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.4)	6.3
Bromodichloromethane	ug/L	100	ND(0.11)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.4)	ND(2.0)
cis-1,2-Dichloroethene	ug/L	6	ND(0.42)	47	4.1	9.0	2.5	0.53	1.2	2.2	3.4	17
Dibromochloromethane	ug/L	100	ND(0.15)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.4)	ND(2.0)
Ethanol	ug/L	50000	ND(14)	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methyl Tert Butyl Ether	ug/L	5	0.38 J	62	6.2	29	8.4	0.75	3.0	12	4.9	ND(2.0)
Tert-Amyl Methyl Ether	ug/L	NC	ND(0.38)	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tert-Butyl Alcohol	ug/L	1.2	ND(1.6)	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	ug/L	5.0	ND(0.13)	2.6	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.67	ND(1.0)	4.2	2.8
Toluene	ug/L	40	ND(0.14)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.4)	ND(2.0)
trans-1,2-Dichloroethene	ug/L	10	ND(0.1)	ND(1.0)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.72)	8.2
Trichloroethene	ug/L	5	ND(0.12)	26	3.6	15	4.7	0.63	2.5	1.3	38	120
Xylene (total)	ug/L	20	ND(0.77)	3.2	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.4)	19

## Notes:

(1) Source: Table F-1a, Appendix 1, "Summary for Environmental Concerns At Sites With Contaminated Soil and Groundwater - Interim Final February 2005"

TPH-DRO - Total Petroleum Hydrocarbons as Diesel Range Organics

TPH-GRO - Total Petroleum Hydrocarbons as Gasoline Range Organics

SVOCs - Semi-Volatile Organic Compounds

VOCs - Volatile Organic Compounds

ug/l - micrograms per liter

NC - No criteria listed

ND ( ) - Not present at or above the associated value.

NS - Not sampled

B - Result was qualified due to method blank contamination.

J - Estimated concentration.

R - Result rejected due to broken bottle during sample shipment.

Results for DRO analysis on 1/10/06 represent the result after silica gel cleanup.

☐ - Exceeds SF Bay RWQCB Groundwater ESLs GW is a Current or Potential Drinking Water Resource



TABLE 2

SUMMARY OF DETECTED PARAMETERS IN GROUNDWATER SAMPLES  
 SATURN OF PLEASANTON  
 4340 ROSEWOOD DRIVE  
 PLEASANTON, CALIFORNIA

Sample Location	<i>SF Bay RWQCB</i>	<i>MW-1</i>
Sample ID	<i>Groundwater ESLs</i>	<i>W-041907-TR-001</i>
Sample Date	<i>GW is a Current</i>	<i>4/19/2007</i>
Sample Depth	<i>or Potential Drinking</i>	<i>(40-50)</i>
Sample Type	<i>Water Resource <sup>(1)</sup></i>	

*Units*

Analysis Date (DRO results only)		
Analysis Date (DRO results only Silica Gel Cleanup)		04/20/2007

**Petroleum Products**

TPH - extractable (DRO)	ug/L	100	NS
TPH - extractable (DRO) Silica Gel Cleanup		100	ND(50)
Total Petroleum Hydrocarbons - purgeable (GRO)	ug/L	100	ND(50)
Total Petroleum Hydrocarbons - purgeable (GRO)	ug/L	100	NS

**SVOCs**

1,4-Dioxane	ug/L	3	NS
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**VOCs**

1,1-Dichloroethane	ug/L	5	ND(1.0)
2-Chlorotoluene	ug/L	NC	ND(1.0)
Benzene	ug/L	1	ND(1.0)
Bromodichloromethane	ug/L	100	ND(1.0)
cis-1,2-Dichloroethene	ug/L	6	ND(1.0)
Dibromochloromethane	ug/L	100	ND(1.0)
Ethanol	ug/L	50000	ND(1.0)
Methyl Tert Butyl Ether	ug/L	5	ND(2.0)
Tert-Amyl Methyl Ether	ug/L	NC	ND(2.0)
Tert-Butyl Alcohol	ug/L	1.2	ND(50)
Tetrachloroethene	ug/L	5.0	ND(1.0)
Toluene	ug/L	40	ND(1.0)
trans-1,2-Dichloroethene	ug/L	10	ND(1.0)
Trichloroethene	ug/L	5	ND(1.0)
Xylene (total)	ug/L	20	ND(1.0)

Notes:

(1) Source: Table F-1a, Appendix 1, "Summary for Environmental Concerns At Sites With Contaminated Soil and Groundwater - Interim Final February 2005"

TPH-DRO - Total Petroleum Hydrocarbons as Diesel Range Organics  
 TPH-GRO - Total Petroleum Hydrocarbons as Gasoline Range Organics  
 SVOCs - Semi-Volatile Organic Compounds  
 VOCs - Volatile Organic Compounds

ug/l - micrograms per liter

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Results for DRO analysis on 1/10/06 represent the result after silica gel cleanup.

- Exceeds SF Bay RWQCB Groundwater ESLs GW is a Current or Potential Drinking Water Resource

**ATTACHMENT A**  
**STRAITGRAPHIC SOIL BORING LOG**



# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Saturn of Pleasanton  
 PROJECT NUMBER: 017366-208-03  
 CLIENT: Saturn Retail of South Carolina  
 LOCATION: Pleasanton, California

HOLE DESIGNATION: MW-1  
 DATE COMPLETED: April 11, 2007  
 DRILLING METHOD: 4.25"ID Hollow Stem Auger  
 FIELD PERSONNEL: B. Siegfried

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE			
				NUMBER	INTERVAL	REC (%)	N' VALUE
	ASPHALT	0.20	<p>Flush Mounted Cover</p> <p>Cement/Bentonite Grout</p> <p>Sch. 40 PVC</p> <p>Bentonite Pellets</p> <p>Silica Sand Screen</p> <p>End Cap</p>	1			
	ML - CLAYEY SILT - Stiff, Gray, Damp			2			
5	SP - SAND - Compact, Brown, Fine Grained, Damp	4.60		3			
	CH - SILTY CLAY - Stiff, Gray Brown, Plastic, Moist to Wet	5.00		4			
10				5			
15				6			
20	ML - CLAYEY SILT - Stiff, Light Brown, Wet	20.50		7			
25	ML - SILT - Soft, Light Gray Brown, Wet	24.00		8			
	ML - SILT - Stiff, Some Clay, Light Brown, Wet	25.80		9			
30				10			
35	ML - SANDY SILT - Stiff, Light Brown, Gravel Lenses, Wet	32.50					
	SP - SAND - Loose, Light Brown, Fine Grained, Wet (flowing)	34.50					
	No Recovery	35.00					
40	ML - SILT - Stiff, Light Brown, Wet	40.00					
45							
50	SP-SM - SAND with Some SILT - Compact, Brown, Medium and Fine Grained, Laminated, Wet	47.50					
	END OF BOREHOLE @ 50.0ft BGS	50.00					

**WELL DETAILS**  
 Screened interval:  
 39.50 to 49.50ft BGS  
 Length: 10ft  
 Diameter: 2in  
 Slot Size: 010  
 Material: PVC  
 Sand Pack:  
 50.00 to 37.50ft BGS  
 Material: 2/12 Silica Sand

OVERBURDEN LOG 017366-208-03.EEC.GPJ CRA\_CORP.GDT 4/23/07

**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE  
 WATER FOUND ▼ STATIC WATER LEVEL ▼ 4/11/07

**ATTACHMENT B**  
**ANALYTICAL DATA**

**CASE NARRATIVE**

**STL SACRAMENTO PROJECT NUMBER G7D200388**

**WATER, 8260B, VOCS**

Sample(s): 1, 2

There was insufficient sample available for matrix spikes.

**WATER, CALUFT/GCMS, TPH Gasoline**

Sample(s): 1, 2

There was insufficient sample available for matrix spikes.

**WATER, 8015 MOD, TPH Diesel**

Sample(s): 1

The laboratory control samples showed high surrogate recoveries. Since the sample showed an acceptable surrogate recovery & the laboratory control samples met acceptance criteria for TPH (as Diesel), no corrective action was performed.

Sample(s): 1

There was insufficient sample available for matrix spikes.

There were no other anomalies associated with this project.

# STL



## STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon*	CA 200005
Arizona	AZ0010	Pennsylvania	PA 1272
Arkansas	04-067-0	South Carolina	87014002
California	01119EA	Texas	TX 270-2002A
Colorado	NA	Utah*	QUAN1
Connecticut	PE0690	Virginia	VA 98178
Florida*	E87570	Washington	C087
Georgia	966	West Virginia	99800-359
Hawaii	NA	Wisconsin	998204680
Idaho	01987	Wyoming	NA
Michigan	9947	USACE	NA
Nevada	CA39	USDA Foreign Plants	37-82695
New Jersey*	CA005	USDA Foreign Soil	S-46613
New York	11166		

\*NELAP accredited. A more detailed parameter list is available upon request. Update 1/27/05

## QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

# STL

STL Sacramento  
880 Riverside Parkway  
West Sacramento, CA 95605

Tel: 916 373 5600  
Fax: 916 372 1059  
www.stl-inc.com

April 26, 2007

**STL SACRAMENTO PROJECT NUMBER: G7D200388**  
PO/CONTRACT: 4003799

Kathy Shaw  
Conestoga-Rovers & Associates  
45 Farmington Valley Drive  
Plainville, CT 06062

Dear Ms. Shaw,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on April 20, 2007. These samples are associated with your SATURN OF PLEASANTON project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4384.

Sincerely,



Karen Dahl  
Project Manager

## **TABLE OF CONTENTS**

### **STL SACRAMENTO PROJECT NUMBER G7D200388**

Case Narrative

STL Sacramento Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

**WATER, CALUFT/GCMS, TPH Gasoline**

Samples: 1, 2

Sample Data Sheets

Method Blank Report

Laboratory QC Reports

**WATER, 8260B, VOCS**

Samples: 1, 2

Sample Data Sheets

Method Blank Report

Laboratory QC Reports

**WATER, 8015 MOD, TPH Diesel**

Sample: 1

Sample Data Sheet

Method Blank Report

Laboratory QC Reports



# Sample Summary

## G7D200388

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
JVD4F	1	GW-041907-TR-001	4/19/2007 12:25 PM	4/20/2007 02:40 PM
JVD4J	2	TB-041907	4/19/2007	4/20/2007 02:40 PM

### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

**Required Client Information:**

Company: <u>Sutro Petrol CRA</u>	Report To: <u>Kathy Shaw (CRA)</u>
Address: <u>South Carolina 45 Farmington Willy Dr. Plainsville Connecticut</u>	Copy To: <u>Michelle Dawnson</u>
Phone: <u>860 777-1900</u>	Invoice To: <u>CRA Inc</u>
Fax: <u>860 777-1900</u>	P.O.:
E-mail: <u>Kshaw@crowork.com</u>	Project Name: <u>Sutro of Pleasanton</u>
	Project Number: <u>017366-208-03</u>

Laboratory: <u>STL</u>
Laboratory Location: <u>West Sacramento</u>
Laboratory Contact: <u>Karen Dahl</u>
Requested Due Date: _____ TAT: <u>72hr</u>
QA/QC Requirements:

ID # N° 01331

SSOW Ref. Code: 17366-208-004

Sample Identification:	Valid Matrix Codes: WG Groundwater WB Borehole Water WS Surface Water SO Soil SE Sediment See Back for Additional Codes	Matrix Code	Date Collected	Time Collected	# Containers	Preservative						Other:	Analysis and Method	Remarks/Lab ID
						Unpreserved	HCl	H2SO4	HNO3	NaOH				
1. <u>GW-041907-TR-001</u>		<u>WB</u>	<u>4/19/07</u>	<u>1225</u>	<u>10</u>	<u>X</u>	<u>X</u>					<u>\$260B Vials + Oxyperoxy</u>		
2. <u>TB-041907</u>					<u>2</u>		<u>X</u>					<u>TPH-G method 801</u>		
3. <u>Temp blank</u>					<u>1</u>	<u>X</u>						<u>TPH-D Method 8015</u>		
4.												<u>Dro (Silica Gel cleanup)</u>		
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														
13.														
14.														
15.														<u>END</u>

TOTAL NUMBER OF CONTAINERS 10

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
<u>Hand Deliver</u>	<u>1</u>	<u>Tom Royce</u>	<u>4/19/07</u>	<u>1500</u>	<u>Kal</u>	<u>4/20/07</u>	<u>0850</u>
AIRBILL NO. <u>NA</u>		<u>Kal</u>	<u>4/20/07</u>	<u>1440</u>	<u>Chris STL-SAC</u>	<u>4/20/07</u>	<u>1440</u>

Sample Condition	
Temp in °C	<u>6</u>
Received on Ice	<u>(X) N</u>
Sealed Cooler	<u>(X) N</u>
Samples Intact	<u>(X) N</u>

Additional Comments:

Sampler Name: Tom Royce  
 Sampler Signature: [Signature] Date: 4/19/07



Lot ID:

07D200388

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
VOAh*	6	2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AGB	4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
___AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
___CGJ																				
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
___"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				

1 = hydrochloric acid    s = sulfuric acid    na = sodium hydroxide    n = nitric acid    zn = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

**WATER, CALUFT/GCMS,  
TPH Gasoline**

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-041907-TR-001

GC/MS Volatiles

Lot-Sample #...: G7D200388-001    Work Order #...: JVD4F1AA    Matrix.....: WG  
Date Sampled...: 04/19/07    Date Received...: 04/20/07  
Prep Date.....: 04/20/07    Analysis Date...: 04/20/07  
Prep Batch #...: 7113320  
Dilution Factor: 1    Method.....: DHS CALUFT/GCMS V

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	99	(84 - 115)	

Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-041907

GC/MS Volatiles

Lot-Sample #...: G7D200388-002    Work Order #...: JVD4J1AC    Matrix.....: WQ  
Date Sampled...: 04/19/07    Date Received...: 04/20/07  
Prep Date.....: 04/20/07    Analysis Date...: 04/20/07  
Prep Batch #...: 7113320  
Dilution Factor: 1    Method.....: DHS CALUFT/GCMS V

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Gasoline)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Bromofluorobenzene	100	(84 - 115)	

# QC DATA ASSOCIATION SUMMARY

G7D200388

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WG	SW846 8015 MOD		7110492	
	WG	SW846 8260B		7111219	
	WG	DHS CALUFT/GCMS V		7113320	
002	WQ	SW846 8260B		7111219	
	WQ	DHS CALUFT/GCMS V		7113320	



METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G7D200388  
MB Lot-Sample #: G7D230000-320  
Analysis Date...: 04/20/07  
Dilution Factor: 1

Work Order #...: JVGQW1AA  
Prep Date.....: 04/20/07  
Prep Batch #...: 7113320

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
TPH (as Gasoline)	ND	50	ug/L	DHS CALUFT/GCMS V
Unknown Hydrocarbon	ND	50	ug/L	DHS CALUFT/GCMS V
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
4-Bromofluorobenzene	101	(84 - 115)		

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE DATA REPORT**

**GC/MS Volatiles**

Client Lot #...: G7D200388      Work Order #...: JVGQWLAC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: G7D230000-320      JVGQWLAD-LCSD  
 Prep Date.....: 04/20/07      Analysis Date...: 04/20/07  
 Prep Batch #...: 7113320  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
TPH (as Gasoline)	500	493	ug/L	99		DHS CALUFT/GCMS VPH
	500	488	ug/L	98	1.1	DHS CALUFT/GCMS VPH
<u>SURROGATE</u>				<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene				101		(84 - 115)
				102		(84 - 115)

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**GC/MS Volatiles**

Client Lot #...: G7D200388      Work Order #...: JVGQW1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: G7D230000-320      JVGQW1AD-LCSD  
 Prep Date.....: 04/20/07      Analysis Date...: 04/20/07  
 Prep Batch #...: 7113320  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	99	(75 - 115)			DHS CALUFT/GCMS VPH
	98	(75 - 115)	1.1	(0-23)	DHS CALUFT/GCMS VPH

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	101	(84 - 115)
	102	(84 - 115)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**WATER, 8260B, VOCS**

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-041907-TR-001

GC/MS Volatiles

Lot-Sample #...: G7D200388-001    Work Order #...: JVD4F1AD    Matrix.....: WG  
 Date Sampled...: 04/19/07    Date Received...: 04/20/07  
 Prep Date.....: 04/20/07    Analysis Date...: 04/20/07  
 Prep Batch #...: 7111219  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-041907-TR-001

GC/MS Volatiles

Lot-Sample #...: G7D200388-001 Work Order #...: JVD4F1AD Matrix.....: WG

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Isopropyl ether	ND	2.0	ug/L
t-Butanol	ND	50	ug/L
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	90	(75 - 132)
1,2-Dichloroethane-d4	99	(80 - 132)
Toluene-d8	101	(80 - 122)
4-Bromofluorobenzene	99	(65 - 120)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-041907

GC/MS Volatiles

Lot-Sample #...: G7D200388-002    Work Order #...: JVD4J1AA    Matrix.....: WQ  
 Date Sampled...: 04/19/07    Date Received...: 04/20/07  
 Prep Date.....: 04/20/07    Analysis Date...: 04/20/07  
 Prep Batch #...: 7111219  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
2,2-Dichloropropane	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
Dibromomethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,2-Dibromoethane (EDB)	ND	2.0	ug/L
Chlorobenzene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
m-Xylene & p-Xylene	ND	1.0	ug/L
o-Xylene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-041907

GC/MS Volatiles

Lot-Sample #...: G7D200388-002 Work Order #...: JVD4J1AA Matrix.....: WQ

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Isopropylbenzene	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
n-Propylbenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
n-Butylbenzene	ND	1.0	ug/L
1,2-Dibromo-3- chloropropane (DBCP)	ND	2.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Naphthalene	ND	1.0	ug/L
1,2,3-Trichlorobenzene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Isopropyl ether	ND	2.0	ug/L
t-Butanol	ND	50	ug/L
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L
Tert-amyl methyl ether	ND	2.0	ug/L
Tert-butyl ethyl ether	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	89	(75 - 132)
1,2-Dichloroethane-d4	101	(80 - 132)
Toluene-d8	103	(80 - 122)
4-Bromofluorobenzene	100	(65 - 120)



# QC DATA ASSOCIATION SUMMARY

G7D200388

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WG	SW846 8015 MOD		7110492	
	WG	SW846 8260B		7111219	
	WG	DHS CALUFT/GCMS V		7113320	
002	WQ	SW846 8260B		7111219	
	WQ	DHS CALUFT/GCMS V		7113320	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G7D200388  
 MB Lot-Sample #: G7D210000-219

Work Order #...: JVFR61AA

Matrix.....: WATER

Analysis Date...: 04/20/07  
 Dilution Factor: 1

Prep Date.....: 04/20/07

Prep Batch #...: 7111219

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Dichlorodifluoromethane (Freon 12)	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane (Freon 11)	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	2.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: G7D200388

Work Order #...: JVFR61AA

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	50	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Dibromofluoromethane	87	(75 - 132)
1,2-Dichloroethane-d4	97	(80 - 132)
Toluene-d8	99	(80 - 122)
4-Bromofluorobenzene	101	(65 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: G7D200388      Work Order #...: JVFR61AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: G7D210000-219      JVFR61AD-LCSD  
 Prep Date.....: 04/20/07      Analysis Date...: 04/20/07  
 Prep Batch #...: 7111219  
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Dichlorodifluoromethane (Freon 12)	20.0	19.6	ug/L	98		SW846 8260B
	20.0	18.6	ug/L	93	5.2	SW846 8260B
Trichlorofluoromethane (Freon 11)	20.0	22.0	ug/L	110		SW846 8260B
	20.0	19.8	ug/L	99	10	SW846 8260B
Chloromethane	20.0	20.0	ug/L	100		SW846 8260B
	20.0	19.3	ug/L	96	3.5	SW846 8260B
Vinyl chloride	20.0	18.7	ug/L	94		SW846 8260B
	20.0	17.6	ug/L	88	6.0	SW846 8260B
Bromomethane	20.0	22.1	ug/L	110		SW846 8260B
	20.0	21.3	ug/L	106	3.7	SW846 8260B
Chloroethane	20.0	21.7	ug/L	108		SW846 8260B
	20.0	20.2	ug/L	101	7.2	SW846 8260B
1,1-Dichloroethene	20.0	18.0	ug/L	90		SW846 8260B
	20.0	16.5	ug/L	82	9.2	SW846 8260B
Methylene chloride	20.0	18.5	ug/L	92		SW846 8260B
	20.0	16.7	ug/L	83	10	SW846 8260B
trans-1,2-Dichloroethene	20.0	18.1	ug/L	91		SW846 8260B
	20.0	17.0	ug/L	85	6.3	SW846 8260B
1,1-Dichloroethane	20.0	20.0	ug/L	100		SW846 8260B
	20.0	18.5	ug/L	93	7.9	SW846 8260B
2,2-Dichloropropane	20.0	18.2	ug/L	91		SW846 8260B
	20.0	16.9	ug/L	85	7.3	SW846 8260B
Bromochloromethane	20.0	18.2	ug/L	91		SW846 8260B
	20.0	16.9	ug/L	84	7.5	SW846 8260B
Chloroform	20.0	20.1	ug/L	101		SW846 8260B
	20.0	18.2	ug/L	91	10	SW846 8260B
1,1,1-Trichloroethane	20.0	20.3	ug/L	102		SW846 8260B
	20.0	18.1	ug/L	90	12	SW846 8260B
Carbon tetrachloride	20.0	19.6	ug/L	98		SW846 8260B
	20.0	17.8	ug/L	89	9.6	SW846 8260B
1,1-Dichloropropene	20.0	21.2	ug/L	106		SW846 8260B
	20.0	19.3	ug/L	97	9.2	SW846 8260B
Benzene	20.0	20.4	ug/L	102		SW846 8260B
	20.0	18.7	ug/L	94	8.5	SW846 8260B
1,2-Dichloroethane	20.0	20.6	ug/L	103		SW846 8260B
	20.0	18.9	ug/L	95	8.6	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: G7D200388      Work Order #...: JVFR61AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: G7D210000-219      JVFR61AD-LCSD  
 Prep Date.....: 04/20/07      Analysis Date...: 04/20/07  
 Prep Batch #...: 7111219  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Dichlorodifluoromethane (Freon 12)	98	(42 - 132)			SW846 8260B
	93	(42 - 132)	5.2	(0-26)	SW846 8260B
Trichlorofluoromethane (Freon 11)	110	(52 - 134)			SW846 8260B
	99	(52 - 134)	10	(0-30)	SW846 8260B
Chloromethane	100	(65 - 138)			SW846 8260B
	96	(65 - 138)	3.5	(0-22)	SW846 8260B
Vinyl chloride	94	(76 - 136)			SW846 8260B
	88	(76 - 136)	6.0	(0-24)	SW846 8260B
Bromomethane	110	(63 - 168)			SW846 8260B
	106	(63 - 168)	3.7	(0-67)	SW846 8260B
Chloroethane	108	(77 - 124)			SW846 8260B
	101	(77 - 124)	7.2	(0-34)	SW846 8260B
1,1-Dichloroethene	90	(70 - 120)			SW846 8260B
	82	(70 - 120)	9.2	(0-28)	SW846 8260B
Methylene chloride	92	(76 - 122)			SW846 8260B
	83	(76 - 122)	10	(0-22)	SW846 8260B
trans-1,2-Dichloroethene	91	(74 - 120)			SW846 8260B
	85	(74 - 120)	6.3	(0-22)	SW846 8260B
1,1-Dichloroethane	100	(78 - 133)			SW846 8260B
	93	(78 - 133)	7.9	(0-21)	SW846 8260B
2,2-Dichloropropane	91	(73 - 120)			SW846 8260B
	85	(73 - 120)	7.3	(0-25)	SW846 8260B
Bromochloromethane	91	(78 - 120)			SW846 8260B
	84	(78 - 120)	7.5	(0-22)	SW846 8260B
Chloroform	101	(80 - 123)			SW846 8260B
	91	(80 - 123)	10	(0-19)	SW846 8260B
1,1,1-Trichloroethane	102	(78 - 126)			SW846 8260B
	90	(78 - 126)	12	(0-22)	SW846 8260B
Carbon tetrachloride	98	(68 - 131)			SW846 8260B
	89	(68 - 131)	9.6	(0-24)	SW846 8260B
1,1-Dichloropropene	106	(80 - 120)			SW846 8260B
	97	(80 - 120)	9.2	(0-25)	SW846 8260B
Benzene	102	(80 - 122)			SW846 8260B
	94	(80 - 122)	8.5	(0-20)	SW846 8260B
1,2-Dichloroethane	103	(80 - 130)			SW846 8260B
	95	(80 - 130)	8.6	(0-19)	SW846 8260B

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**WATER, 8015 MOD,  
TPH Diesel**

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-041907-TR-001

GC Semivolatiles

Lot-Sample #...: G7D200388-001    Work Order #...: JVD4F1AC    Matrix.....: WG  
Date Sampled...: 04/19/07    Date Received...: 04/20/07  
Prep Date.....: 04/20/07    Analysis Date...: 04/24/07  
Prep Batch #...: 7110492  
Dilution Factor: 1    Method.....: SW846 8015 MOD

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
TPH (as Diesel)	ND	50	ug/L
Unknown Hydrocarbon	ND	50	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
o-Terphenyl	125	(66 - 135)

# QC DATA ASSOCIATION SUMMARY

G7D200388

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WG	SW846 8015 MOD		7110492	
	WG	SW846 8260B		7111219	
	WG	DHS CALUFT/GCMS V		7113320	
002	WQ	SW846 8260B		7111219	
	WQ	DHS CALUFT/GCMS V		7113320	

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: G7D200388  
MB Lot-Sample #: G7D200000-492

Work Order #...: JVEG51AA

Matrix.....: WATER

Analysis Date...: 04/24/07  
Dilution Factor: 1

Prep Date.....: 04/20/07

Prep Batch #...: 7110492

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
TPH (as Diesel)	ND	50	ug/L	SW846 8015 MOD
Unknown Hydrocarbon	ND	50	ug/L	SW846 8015 MOD

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
o-Terphenyl	129	(66 - 135)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE DATA REPORT**

**GC Semivolatiles**

Client Lot #...: G7D200388      Work Order #...: JVEG51AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: G7D200000-492      JVEG51AD-LCSD  
 Prep Date.....: 04/20/07      Analysis Date...: 04/24/07  
 Prep Batch #...: 7110492  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
TPH (as Diesel)	300	276	ug/L	92		SW846 8015 MOD
	300	264	ug/L	88	4.4	SW846 8015 MOD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
o-Terphenyl	148 *	(66 - 135)
	145 *	(66 - 135)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

\* Surrogate recovery is outside stated control limits.



**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**GC Semivolatiles**

Client Lot #...: G7D200388      Work Order #...: JVEG51AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: G7D200000-492      JVEG51AD-LCSD  
 Prep Date.....: 04/20/07      Analysis Date...: 04/24/07  
 Prep Batch #...: 7110492  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
TPH (as Diesel)	92	(54 - 129)			SW846 8015 MOD
	88	(54 - 129)	4.4	(0-47)	SW846 8015 MOD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
o-Terphenyl	148 *	(66 - 135)
	145 *	(66 - 135)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

\* Surrogate recovery is outside stated control limits.