Rolls-Royce

Rolls-Royce Engine Services-Oakland Inc.
7200 Earhart Road
Oakland, California 94621-4504

Tel: (510) 613-1000

June 4, 2012

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Rolls-Royce Engine Services Test Facility**
6701 Old Earhart Road
Oakland, California
Alameda County Site #RO0002606

I have reviewed the attached routine groundwater monitoring report dated June 4, 2012.

I agree with the conclusions and recommendation presented in the referenced report. The information is this report is accurate to the best of my knowledge. This report was prepared by Gettler-Ryan Incorporated, whose assistance and advice I have relied upon.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Dave Goldberg
Facilities HS&E Specialist

140193.11

GETTLER-RYAN INC.

June 4, 2012

Mr. Keith Nowell
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Ste. 250
Alameda, California 94502

Subject: **First Semi-Annual 2012 Event**
Groundwater Monitoring and Sampling Report
Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road, Oakland, California
Alameda County Site #RO0002606

Mr. Nowell,

On behalf of Rolls-Royce Engine Services-Oakland Inc. (R-R), Gettler-Ryan Inc. (GR) has prepared this First Semi-Annual 2012 Event, Groundwater Monitoring and Sampling Report for the site referenced above. This report describes the field and analytical methods, provides a summary of groundwater monitoring results, and presents conclusions and recommendations regarding groundwater conditions at the site.

SITE LOCATION AND DESCRIPTION

The subject site is located at 6701 Old Earhart Road, adjacent to the Metropolitan Oakland International Airport (MOIA)-North Field, Oakland, California (Figure 1). Topography in the vicinity of the subject site is relatively flat at an average elevation of approximately 7.5 feet above mean sea level. The closest surface water is within the tidal wetlands bordering the site to the east.

Pertinent site features consist of six engine test cells with auxiliary structures (sheds, pumphouse, waste water sumps, aboveground oil/water separator, control buildings, gas conditioning facility, air receivers, cooling towers, flare stack, etc), one 30,000-gallon aboveground liquefied petroleum fuel tank, one 10,000-gallon jet A fuel underground storage tank (UST) and two paired 8,000-gallon jet A fuel USTs. Pertinent site features and the location of the USTs are shown on Figure 2.

For site background and previous environmental investigation, please refer to GR report No. 25-948218.07, *Well Installation Report*, dated January 11, 2008.

GROUNDWATER MONITORING

On April 17, 2012, GR personnel conducted semi-annual groundwater monitoring of nineteen wells (MW-1 through MW-15, MW-17, MW-18, NPORD MW-3 and NPORD MW-4). Work at the site included measuring static groundwater levels, evaluating groundwater in the wells for the presence of petroleum hydrocarbons, and purging and sampling the wells for laboratory analysis. Groundwater monitoring and sampling were performed in accordance with GR Field Methods and Procedures, Groundwater Sampling (attached).

On April 17, 2012, GR collected depth to groundwater measurements in nineteen wells (MW-1 through MW-15, MW-17, MW-18, NPORD MW-3 and NPORD MW-4) and checked groundwater for the presence of Separate-Phase Hydrocarbons (SPH). Approximately 0.15 foot of SPH were observed in well MW-18. Approximately 0.08 gallon (300 milliliters) of SPH were bailed from well MW-18 and stored onsite in a 55-gallon DOT approved drum pending disposal. Water level data, groundwater elevations, and SPH thicknesses are presented in attached Table 1. SPH thicknesses and approximate SPH volumes purged are summarized in Table 3. Field data sheets for this event are attached.

Rolls-Royce personnel have been periodically removing SPH present in well MW-18 through the use of absorbent socks. SPH removal logs for the most recent and historic events are attached to this report.

Groundwater monitoring wells MW-1 through MW-15, MW-17, NPORD MW-3 and NPORD MW-4 were purged and sampled on the same date they were monitored. Well MW-18 was not sampled due to presence of 0.15 feet of SPH. Groundwater samples were submitted under chain-of-custody protocol to Kiff Analytical (NELAP #08263CA) of Davis, California. A copy of the laboratory analytical reports and chain-of-custody documents are attached. Purge water generated from the sampling activities was stored onsite in 55-gallon DOT approved drums pending disposal. GR understands that the disposal of water generated will be handled by R-R.

ANALYTICAL METHODS

Groundwater samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), Methyl-tert Butyl Ether (MtBE), and naphthalene by EPA Method 8260B, and for Total Petroleum Hydrocarbons as diesel (TPHd), Total Petroleum Hydrocarbons as motor oil (TPHmo), and Total Petroleum Hydrocarbons as jet fuel (TPHjf) by modified EPA Method 8015. Current and historic groundwater analytical results are presented in Tables 1 and 2.

RESULTS

Groundwater Gradient

On April 17, 2012, the groundwater flow direction varied with hydraulic gradients ranging from 0.01 to 0.03 ft/ft. A Potentiometric Map is presented as Figure 3.

Analytical Results

TPHd was detected in groundwater samples collected from twelve wells at concentrations ranging from 56 ppb in well MW-3 to 1,200 ppb in well MW-9. Concentrations of TPHmo were detected in fourteen wells at levels ranging from 110 ppb in well MW-13 to 2,600 ppb in well MW-7. TPHjf was detected in sixteen wells at concentrations ranging from 72 ppb in well MW-1 to 3,400 ppb in well MW-13.

TPHg was detected in the water sample collected from well MW-13 at a concentration of 310 parts per billion (ppb). Concentrations of TPHg were reported below the laboratory method detection limits in water samples collected from the remaining wells.

BTEX constituents were reported as below the laboratory method detection limits in all of the wells except for 1.0 ppb of benzene detected in MW-13 and 0.57 ppb and 0.69 ppb of Toluene detected in wells MW-5 and MW-14, respectively. MtBE was detected in wells MW-13 and MW-14 at concentrations of 2.6 ppb and 1.2 ppb, respectively. Naphthalene was detected in well MW-13 at a concentration of 1.4 ppb.

TPHg, TPHd, TPHmo, TPHjf, BTEX, MtBE and naphthalene were reported below the laboratory method detection limits well NPORD MW-3. TPHg, TPHd, TPHmo and TPHjf concentrations are presented on Figure 4.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this groundwater monitoring and sampling event, GR concludes and recommends the following:

- Concentrations of TPHd, TPHmo and TPHjf in groundwater samples were generally consistent with those observed during the previous monitoring and sampling events;
- Detectable concentrations of TPHg appear limited to the vicinity of well MW-13;
- Separate-phase hydrocarbons continue to be limited to the vicinity of MW-18;
- Petroleum hydrocarbons were not detected in well NPORD MW-3; and
- GR recommends the continuation of the current semi-annual monitoring and sampling program for the site. SPH will continue to be removed from well MW-18 on a periodic basis.

If you have any questions, please feel free to contact our Dublin office at (925) 551-7555.

Sincerely,
Gettler-Ryan Inc.

Douglas J. Lee
Project Manager, P.G. No. 6882

Attachments: Table 1, Groundwater Monitoring Results
Table 2, Field Measurements and Groundwater Analytical Results
Table 3, SPH Thickness and Volumes Purged - MW-18
Figure 1, Vicinity Map
Figure 2, Site Plan
Figure 3, Potentiometric Map
Figure 4, Concentration Map
GR Field Methods and Procedures
Field Data Sheets
SPH Removal Logs
Laboratory Analytical Report and Chain of Custody

CC: Mr. Dave Goldberg, Rolls-Royce Engine Services-Oakland
Ms. Colleen Liang, Port of Oakland

Table 1

Groundwater Monitoring Data and Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-1															
10/03/07	7.17	3.04	0.00	4.13	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	7.17	3.02	0.00	4.15	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	7.17	3.38	0.00	3.79	<50	<50	<100	51[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	7.17	3.03	0.00	4.14	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	7.17	2.82	0.00	4.35	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	7.17	3.30	0.00	3.87	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	7.17	2.57	0.00	4.60	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	7.17	3.08	0.00	4.09	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	7.17	2.21	0.00	4.96	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	7.17	2.95	0.00	4.22	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	7.17	2.31	0.00	4.86	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	7.17	2.94	0.00	4.23	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**7.17**	**3.00**	**0.00**	**4.17**	**<50**	**<50**	**280[23]**	**72[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-2															
10/03/07	7.03	2.80	0.00	4.23	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	7.03	2.94	0.00	4.09	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	7.03	3.32	0.00	3.71	<50	<50	<100	97[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	7.03	2.75	0.00	4.28	<50	<50	<100	410[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	7.03	2.54	0.00	4.49	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	7.03	3.15	0.00	3.88	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	7.03	2.52	0.00	4.51	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	7.03	2.87	0.00	4.16	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	7.03	2.15	0.00	4.88	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	7.03	2.79	0.00	4.24	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	7.03	1.92	0.00	5.11	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	7.03	2.70	0.00	4.33	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**7.03**	**2.41**	**0.00**	**4.62**	**<50**	**62[6]**	**340**	**170[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-3															
10/02/07	6.73	4.56	0.00	2.17	<50	<50	<100	410	<0.50	<0.50	<0.50	<0.50	1.6[4]	<0.50	NA
03/14/08	6.73	3.98	0.00	2.75	<50	<50	<100	120[9]	<0.50	<0.50	<0.50	<0.50	0.99	<0.50	NA
06/26/08	6.73	4.21	0.00	2.52	<50	<50	<100	610[7]	<0.50	1.7	<0.50	<0.50	0.93	<0.50	NA
09/25/08	6.73	4.25	0.00	2.48	<50	<50	<100	650[16]	<0.50	<0.50	<0.50	<0.50	1.2	<0.50	NA

Table 1
Groundwater Monitoring Data and Analytical Results
Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-3 (cont.)															
12/19/08	6.73	4.25	0.00	2.48	<50	<50	<100	520[18]	<0.50	<0.50	<0.50	<0.50	1.2	<0.50	NA
03/26/09	6.73	3.82	0.00	2.91	<50	<50	<100	400[18]	<0.50	<0.50	<0.50	<0.50	0.69	<0.50	NA
06/24/09	6.73	4.21	0.00	2.52	<50	<50	<100	460	<0.50	<0.50	<0.50	<0.50	0.80	<0.50	NA
09/24/09	6.73	4.33	0.00	2.40	<50	<50	<100	400	<0.50	<0.50	<0.50	<0.50	0.70	<0.50	NA
01/15/10	6.73	3.92	0.00	2.81	<50	<50	110	420[18]	<0.50	<0.50	<0.50	<0.50	0.70	<0.50	NA
09/09/10	6.73	4.52	0.00	2.21	<50	<50	<100	450	<0.50	<0.50	<0.50	<0.50	0.62	<0.50	NA
03/21/11	6.73	3.20	0.00	3.53	<50	<50	500	400	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	6.73	4.48	0.00	2.25	<50	70	340	590[18]	<0.50	<0.50	<0.50	<0.50	0.68	<0.50	NA
04/17/12	**6.73**	**3.66**	**0.00**	**3.07**	**<50**	**56[6]**	**870**	**680[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-4															
10/2/07[4]	9.79	5.81	0.00	3.98	<50	86	<100	280	<0.50	0.63	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	9.79	5.82	0.00	3.97	<50	3,300	2,400	3,400[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	9.79	6.08	0.00	3.71	<50	2,300	1,900	2,700[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	9.79	5.98	0.00	3.81	<50	1,600	1,400	2,100[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	9.79	5.93	0.00	3.86	<50	<50[19]	<100[19]	440[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	9.79	5.65	0.00	4.14	<50	720	550	1,000[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	9.79	5.72	0.00	4.07	<50	<50	<100	480[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	9.79	5.85	0.00	3.94	<50	1,300	1,100	1,700[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	9.79	4.86	0.00	4.93	<50	210	280	580[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10 - <50[21,22]
09/09/10	9.79	5.75	0.00	4.04	<50	380[6]	510	680[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	9.79	4.95	0.00	4.84	<50	<50	<100	220	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	9.79	5.76	0.00	4.03	<50	60	<100	490[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**9.79**	**4.98**	**0.00**	**4.81**	**<50**	**240[6]**	**920**	**1,000[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-5															
10/02/07	8.35	4.75	0.00	3.60	<50	5,600	11,000	5,300	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	8.35	4.40	0.00	3.95	<50	1,200[6]	1,700	1,100[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	8.35	4.68	0.00	3.67	<50	1,400[6]	3,200	2,000[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	8.35	4.52	0.00	3.83	<50	670[6]	1,200	940[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	8.35	4.43	0.00	3.92	<50	2,100[6]	4,100	1,900[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	8.35	4.25	0.00	4.10	<50	2,400[6]	5,500	2,600[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	8.35	4.38	0.00	3.97	<50	1,300[6]	2,700	990[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	8.35	4.47	0.00	3.88	<50	1,400[6]	3,000	1,400[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA

Table 1

Groundwater Monitoring Data and Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-5 (cont.)															
01/15/10	8.35	3.47	0.00	4.88	<50	450[6]	1,800	870[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	8.35	4.34	0.00	4.01	<50	890[6]	2,200	600[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	8.35	3.59	0.00	4.76	<50	670[6]	1,600	460[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	8.35	4.39	0.00	3.96	<50	310[6]	760	450[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**8.35**	**3.88**	**0.00**	**4.47**	**<50**	**450[6]**	**960**	**1,500[18]**	**<0.50**	**0.57**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-6															
10/02/07	9.51	5.90	0.00	3.61	<50	3,000[6]	7,700	2,500[7]	<0.50	<0.50	0.86	1.1	<0.50	0.53	NA
03/14/08	9.51	5.55	0.00	3.96	<50	3,600[10]	7,600	2,800[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	9.51	5.80	0.00	3.71	<50	3,200[10]	9,400	3,200[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	9.51	5.69	0.00	3.82	<50	3,500[10]	8,800	3,800[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	9.51	5.43	0.00	4.08	<50	1,500[10]	5,500	1,200[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	9.51	5.38	0.00	4.13	<50	2,400[6]	6,800	1,800[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	9.51	5.46	0.00	4.05	<50	490[6]	1,600	450[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	9.51	5.60	0.00	3.91	<50	1,100[10]	3,400	860[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	9.51	4.57	0.00	4.94	<50	450[6]	2,700	790[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10 - <50[21,22]
09/09/10	9.51	5.45	0.00	4.06	<50	620[6]	2,800	370[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	9.51	4.68	0.00	4.83	<50	<50	200	100[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	9.51	5.50	0.00	4.01	<50	310[6]	970	260[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**9.51**	**5.25**	**0.00**	**4.26**	**<50**	**62[1]**	**130[23]**	**650[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-7															
10/02/07	9.23	5.68	0.00	3.55	<50	12,000[6]	34,000	9,100[7]	<0.50	<0.50	<0.50	<0.50	<0.50	0.76	NA
03/14/08	9.23	5.32	0.00	3.91	<50	7,900[6]	20,000	5,500[11]	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	NA
06/26/08	9.23	5.56	0.00	3.67	<50	3,300[6]	10,000	3,300[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	9.23	5.46	0.00	3.77	<50	5,300[10]	13,000	6,000[16]	<0.50	<0.50	<0.50	<0.50	<0.50	0.98	NA
12/19/08	9.23	5.38	0.00	3.85	<50	<50[19]	<100[19]	350[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	9.23	5.11	0.00	4.12	<50	710[6]	2,300	790[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	9.23	5.22	0.00	4.01	<50	<50	<100	390	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	9.23	5.38	0.00	3.85	<50	950[6]	2,600	980[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	9.23	4.38	0.00	4.85	<50	910[6]	4,900	1,200[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10 - <50[21,22]
09/09/10	9.23	5.25	0.00	3.98	<50	1,800[6]	6,800	850[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA

Table 1

Groundwater Monitoring Data and Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-7 (cont.)															
03/21/11	9.23	4.49	0.00	4.74	<50	<50	160	240[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	9.23	5.28	0.00	3.95	<50	2,100[6]	6,200	1,200[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**9.23**	**4.78**	**0.00**	**4.45**	**<50**	**810[6]**	**2,600**	**2,200[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-8															
09/14/07	8.25	4.65	0.00	3.60	<50	790[3]	2,700	1,000[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland														
07/03/04	8.25	4.49	0.00	3.76	<50	1,200[6]	4,400	1,800[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	8.25	4.41	0.00	3.84	<50	<50	130	140[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	8.25	4.31	0.00	3.94	<50	160[6]	840	340[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	8.25	4.05	0.00	4.20	<50	470[3]	1,500	570[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	8.25	4.21	0.00	4.04	<50	<50	<100	650[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	8.25	4.32	0.00	3.93	<50	130[10]	330	340[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	8.25	3.57	0.00	4.68	<50	120[6]	640	410[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	8.25	4.17	0.00	4.08	<50	82[6]	430	260[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	8.25	3.38	0.00	4.87	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	8.25	4.22	0.00	4.03	<50	63[6]	<100	240[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**8.25**	**3.70**	**0.00**	**4.55**	**<50**	**69[6]**	**340**	**370[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-9															
10/03/07	9.44	5.81	0.00	3.63	<50	7,700	10,000	6,700	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50	NA
03/14/08	9.44	5.51	0.00	3.93	<50	6,400	8,000	4,000[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	9.44	5.72	0.00	3.72	<50	1,600[10]	1,800	1,800[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	9.44	5.59	0.00	3.85	<50	5,900[10]	9,300	6,300[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	9.44	5.43	0.00	4.01	<50	4,100[6]	8,500	4,000[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	9.44	5.26	0.00	4.18	<50	6,900[6]	9,700	5,600[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	9.44	5.42	0.00	4.02	<50	2,900[6]	5,200	1,800[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	9.44	5.53	0.00	3.91	<50	600[10]	1,100	720[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	9.44	4.69	0.00	4.75	<50	1,300[6]	3,100	1,600[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10 - <50[21,22]
09/09/10	9.44	5.43	0.00	4.01	<50	1,900[6]	4,500	960[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	9.44	4.58	0.00	4.86	<50	280[6]	780	460[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	9.44	5.39	0.00	4.05	<50	250[6]	500	700[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**9.44**	**4.85**	**0.00**	**4.59**	**<50**	**1,200[6]**	**2,500**	**2,700[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**

Table 1

Groundwater Monitoring Data and Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-10															
10/03/07	7.51	3.89	0.00	3.62	110	4,200	1,300	4,500	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50	NA
03/14/08	7.51	3.68	0.00	3.83	53	420	270	420[7]	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	NA
06/26/08	7.51	3.80	0.00	3.71	120	1,200	1,000	2,000	<0.50	<0.50	<0.50	<0.50	<0.50	5.0	NA
09/25/08	7.51	3.68	0.00	3.83	<50	3,100[10]	2,200	3,600	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	7.51	3.54	0.00	3.97	<50	1,700	1,200	1,900[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	7.51	3.36	0.00	4.15	53	1,500[8]	1,300	2,900	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	NA
06/24/09	7.51	3.54	0.00	3.97	<50	710[8]	750	1,400	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	7.51	3.61	0.00	3.90	<50	480[10]	600	1,100[18]	<0.50	<0.50	<0.50	0.69	<0.50	<0.50	NA
01/15/10	7.51	2.81	0.00	4.70	<50	180	210	500[18]	<0.50	<0.50	0.66	3.5	<0.50	3.4	<10 - <50[21,22]
09/09/10	7.51	3.48	0.00	4.03	<50	66[8]	<100	380[18]	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	NA
03/21/11	7.51	2.70	0.00	4.81	<50	<50	<100	610[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	7.51	3.51	0.00	4.00	<50	93	260[23]	890[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**7.51**	**2.97**	**0.00**	**4.54**	**<50**	**<50**	**<100**	**670[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-11															
10/03/07	7.60	4.01	0.00	3.59	80	250	490	610	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50	NA
03/14/08	7.60	3.71	0.00	3.89	61	410[6]	1,200	520[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	7.60	3.92	0.00	3.68	<50	2,700[10]	7,300	3,600[15]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	7.60	3.82	0.00	3.78	<50	2,800[10]	5,900	3,800[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	7.60	3.71	0.00	3.89	<50	1,500[6]	3,700	1,800[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	7.60	3.49	0.00	4.11	<50	2,300[6]	4,200	2,800[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	7.60	3.70	0.00	3.90	<50	1,100[6]	2,600	1,200[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	7.60	3.37	0.00	4.23	<50	1,400[10]	3,800	1,800[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	7.60	3.02	0.00	4.58	<50	260[6]	860	620[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10 - <50[21,22]
09/09/10	7.60	3.63	0.00	3.97	<50	510[10]	1,200	520[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	7.60	2.85	0.00	4.75	<50	83[6]	280	410[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	7.60	3.70	0.00	3.90	<50	470[6]	990	720[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**7.60**	**3.13**	**0.00**	**4.47**	**<50**	**95[6]**	**220**	**1,300[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.50**	**<0.50**	**NA**
MW-12															
10/03/07	7.32	3.61	0.00	3.71	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50	NA
03/14/08	7.32	3.35	0.00	3.97	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	7.32	3.60	0.00	3.72	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	7.32	3.50	0.00	3.82	<50	<50	<100	51[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA

Table 1

Groundwater Monitoring Data and Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-12 (cont.)															
12/19/08	7.32	3.09	0.00	4.23	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	7.32	3.13	0.00	4.19	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	7.32	3.21	0.00	4.11	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	7.32	3.38	0.00	3.94	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	7.32	2.80	0.00	4.52	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	7.32	3.39	0.00	3.93	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	7.32	2.30	0.00	5.02	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	7.32	3.36	0.00	3.96	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**7.32**	**2.72**	**0.00**	**4.60**	**<50**	**<50**	**<100**	**99[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-13															
10/03/07	6.10	2.86	0.00	3.24	160	70[8]	<100	660	<0.50	<0.50	<0.50	<0.50	1.2[4]	1.7	NA
03/14/08	6.10	1.96	0.00	4.14	350[12]	490	130[13]	1,200	0.89	<0.50	<0.50	<0.50	2.0	8.9	NA
06/26/08	6.10	2.57	0.00	3.53	720	200[8]	<100	4,100[15]	2.0	<0.50	<0.50	0.60	3.3	3.3	NA
09/25/08	6.10	2.48	0.00	3.62	600	<200[17]	130[13]	1,900[16]	1.2	<0.50	<0.50	<0.50	2.9	11	NA
12/19/08	6.10	2.68	0.00	3.42	280	130[8]	<100	1,300[18]	0.89	<0.50	<0.50	<0.50	1.7	4.8	NA
03/26/09	6.10	2.44	0.00	3.66	310	86	120[13]	1,800[18]	0.81	<0.50	<0.50	<0.50	1.7	2.2	NA
06/24/09	6.10	2.91	0.00	3.19	330	170[8]	<100	2,000[19]	1.0	<0.50	<0.50	<0.50	1.9	5.2	NA
09/24/09	6.10	2.81	0.00	3.29	380	180	130[13]	5,400[18]	1.5	<0.50	<0.50	<0.50	2.5	6.8	NA
01/15/10	6.10	1.58	0.00	4.52	230	140	<100	1,600[18]	0.58	<0.50	<0.50	<0.50	1.4	3.1	NA
09/09/10	6.10	2.20	0.00	3.90	230	180[8]	<100	1,400[18]	0.95	<0.50	<0.50	<0.50	2.3	3.6	NA
03/21/11	6.10	1.10	0.00	5.00	260	76[8]	<100	2,400[18]	1.0	<0.50	<0.50	<0.50	1.7	3.1	NA
09/02/11	6.10	2.23	0.00	3.87	380[12]	500	260	1,400[18]	<0.50	<0.50	<0.50	<0.50	1.4	1.4	NA
04/17/12	**6.10**	**1.50**	**0.00**	**4.60**	**310**	**190**	**110**	**3,400[18]**	**1.0**	**<0.50**	**<0.50**	**<0.50**	**2.6**	**1.4**	**NA**
MW-14															
10/02/07	6.42	2.40	0.00	4.02	67	300	870	1,400	<0.50	<0.50	<0.50	<0.50	1.4[4]	6.1	NA
03/14/08	6.42	2.44	0.00	3.98	50	250[6]	350	500[7]	<0.50	<0.50	<0.50	<0.50	1.7	5.0	NA
06/26/08	6.42	2.62	0.00	3.80	<50	570[10]	2,700	2,000[15]	<0.50	<0.50	<0.50	<0.50	1.4	3.1	NA
09/25/08	6.42	2.58	0.00	3.84	<50	510[10]	1,700	1,800[16]	<0.50	<0.50	<0.50	<0.50	1.0	<0.50	NA
12/19/08	6.42	2.14	0.00	4.28	<50	480[6]	2,100	1,200[18]	<0.50	<0.50	<0.50	<0.50	1.2	<0.50	NA
03/26/09	6.42	2.23	0.00	4.19	<50	79[6]	540	1,000[18]	<0.50	<0.50	<0.50	<0.50	0.89	<0.50	NA
06/24/09	6.42	2.33	0.00	4.09	<50	<50	290	1,100[18]	<0.50	<0.50	<0.50	<0.50	1.2	0.52	NA
09/24/09	6.42	2.47	0.00	3.95	<50	88[10]	350	1,200[18]	<0.50	<0.50	<0.50	<0.50	0.83	<0.50	NA

Table 1

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Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-14 (cont.)															
01/15/10	6.42	1.95	0.00	4.47	<50	60[6]	490	1,100[18]	<0.50	<0.50	<0.50	<0.50	1.0	<0.50	NA
09/09/10	6.42	2.52	0.00	3.90	<50	150[10]	500	890[18]	<0.50	<0.50	<0.50	<0.50	1.2	<0.50	NA
03/21/11	6.42	1.40	0.00	5.02	<50	<50	230	730[18]	<0.50	<0.50	<0.50	<0.50	1.3	<0.50	NA
09/02/11	6.42	2.49	0.00	3.93	<50	140[6]	550	900[18]	<0.50	<0.50	<0.50	<0.50	0.98	<0.50	NA
04/17/12	**6.42**	**1.83**	**0.00**	**4.59**	**<50**	**140[6]**	**800**	**2,400[18]**	**<0.50**	**0.69**	**<0.50**	**<0.50**	**1.2**	**<0.50**	**NA**
MW-15															
10/02/07	7.51	4.85	0.00	2.66	<50	99	<100	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	7.51	4.62	0.00	2.89	<50	<50	<100	88[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/26/08	7.51	4.81	0.00	2.70	<50	<50	<100	84[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	7.51	4.81	0.00	2.70	<50	<50	<100	53	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	7.51	4.67	0.00	2.84	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	7.51	4.45	0.00	3.06	<50	<50	<100	110[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	7.51	4.68	0.00	2.83	<50	<50	<100	59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	7.51	4.75	0.00	2.76	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	7.51	4.29	0.00	3.22	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	7.51	4.78	0.00	2.73	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	7.51	2.71	0.00	4.80	<50	<50	<100	200[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	7.51	4.77	0.00	2.74	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**7.51**	**3.65**	**0.00**	**3.86**	**<50**	**<50**	**120[23]**	**170[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-17															
09/14/07	0.04	4.10	0.00	-4.06	<50	<50	220	150[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland														
07/03/08	0.04	1.98	0.00	-1.94	<50	<50	<100	84[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
9/25/08[14]	0.04	4.77	0.00	-4.73	<50	<50	120	110[16]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	0.04	2.24	0.00	-2.20	<50	<50	<100	54	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	0.04	1.85	0.00	-1.81	<50	<50	<100	71[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	Not able to sample well-Oakland Airport security failed to provide access to well														
09/24/09	0.04	2.97	0.00	-2.93	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
1/15/10[14]	0.04	2.49	0.00	-2.45	<50	<50	<100	59[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	0.04	2.79	0.00	-2.75	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA

Table 1
Groundwater Monitoring Data and Analytical Results
Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
MW-17 (cont.)															
03/21/11	0.04	2.25	0.00	-2.21	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	0.04	2.69	0.00	-2.65	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**0.04**	**2.49**	**0.00**	**-2.45**	**<50**	**<50**	**<100**	**240[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
MW-18															
10/02/07	7.05	4.15	0.55	3.34**	Not developed or sampled due to presence of SPH										
03/14/08	7.05	3.62	0.63	3.93**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
06/26/08	7.05	4.11	1.14	3.85**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
09/25/08	7.05	3.77	0.56	3.73**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
12/19/08	7.05	3.30	0.36	4.04**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
03/26/09	7.05	3.28	0.55	4.21**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
06/24/09	7.05	3.53	0.48	3.90**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
09/24/09	7.05	3.57	0.46	3.85**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
01/15/10	7.05	3.02	0.66	4.56**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
09/09/10	7.05	3.18	0.10	3.95**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
03/21/11	7.05	1.99	0.15	5.18**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
09/02/11	7.05	3.49	0.51	3.97**	Not sampled due to presence of SPH				--	--	--	--	--	--	--
04/17/12	**7.05**	**2.52**	**0.15**	**4.65****	**Not sampled due to presence of SPH**				**--**	**--**	**--**	**--**	**--**	**--**	**--**
NPORD MW-3															
09/14/07	8.11	4.43	0.00	3.68	<50	<50	<100	64[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland														
07/03/08	8.11	3.96	0.00	4.15	<50	<50	<100	99[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	8.11	4.06	0.00	4.05	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	8.11	3.78	0.00	4.33	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	8.11	4.22	0.00	3.89	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	8.11	4.02	0.00	4.09	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	8.11	4.19	0.00	3.92	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	8.11	3.51	0.00	4.60	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	8.11	3.96	0.00	4.15	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	8.11	3.28	0.00	4.83	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	8.11	4.10	0.00	4.01	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**8.11**	**4.00**	**0.00**	**4.11**	**<50**	**<50**	**<100**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**

Table 1

Groundwater Monitoring Data and Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	SPHT (ft.)	GWE (msl)	TPH-G (µg/L)	TPH-D[1] (µg/L)	TPH-MO (µg/L)	TPH-JF (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Napthalene (µg/L)	SVOC (µg/L)
NPORD MW-4															
09/14/07	10.06	6.48	0.00	3.58	50	1,000[3]	1,400	2,000[2]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland														
07/03/08	10.06	6.26	0.00	3.80	<50	360[6]	700	960[7]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	10.06	6.28	0.00	3.78	<50	150[6]	240	820[16]	<0.50	<0.50	<0.50	<0.50	<0.50[4]	<0.50	NA
12/19/08	10.06	6.15	0.00	3.91	<50	320[10]	640	1,400[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	10.06	5.91	0.00	4.15	<50	95	160	520[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	10.06	6.10	0.00	3.96	<50	200[6]	100	1,000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	10.06	6.20	0.00	3.86	<50	200[10,20]	180[20]	500[18,20]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	10.06	5.45	0.00	4.61	<50	93	<100	770[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	10.06	6.06	0.00	4.00	<50	<50	<100	290[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	10.06	5.31	0.00	4.75	<50	<50	<100	270	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	10.06	6.11	0.00	3.95	<50	95	<100	320[18]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**10.06**	**5.58**	**0.00**	**4.48**	**<50**	**64**	**130[23]**	**940[18]**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**
QA															
09/14/07	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
10/02/07	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/14/08	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
6/26/08[14]	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
07/03/08	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/25/08	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
12/19/08	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/26/09	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
06/24/09	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/24/09	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
01/15/10	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/09/10	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
03/21/11	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
09/02/11	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA
04/17/12	**--**	**--**	**--**	**--**	**<50**	**NA**	**NA**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**

Table 2

Field Measurements and Groundwater Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	D.O. Pre-Purge (mg/L)	D.O. Post-Purge (mg/L)	ORP Pre-Purge (mV)	ORP Post-Purge (mV)	Ferric Iron (mg/L)	Ferrous Iron (mg/L)	Nitrate as NO_3 (mg/L)	Sulfate as SO_4 (mg/L)	Methane (µg/L)
MW-1									
09/09/10	0.00	0.74	-462.4	-124.7	3.2	0.81	<10	2,000	117
MW-2									
09/09/10	0.03	0.29	-261.9	-233.5	--	--	--	--	--
MW-3									
09/09/10	0.38	0.24	-149.2	-123.5	--	--	--	--	--
MW-4									
09/09/10	0.09	0.06	-295.2	-299.4	91	2.4	<2.5	8.6	6,590
MW-5									
09/09/10	0.84	0.05	-374	-459	68	12	<2.5	<2.5	4,760
MW-6									
09/09/10	0.22	0.20	-271.8	-273.5	40	<0.10	<2.5	540	3,280
MW-7									
09/09/10	0.07	0.09	-260.7	-257.4	340	18	<2.5	<2.5	6,350
MW-8									
09/09/10	0.14	0.11	-276	-281	23	2.1	<2.5	3.9	8,500
MW-9									
09/09/10	0.00	0.65	-548.1	-501.4	13	<0.10	<2.5	23	8,310
MW-10									
09/09/10	0.11	0.58	-333.3	-391.2	--	--	--	--	--
MW-11									
09/09/10	0.84	0.96	-399.4	-370.1	--	--	--	--	--
MW-12									
09/09/10	0.15	0.49	-340.1	-348.2	--	--	--	--	--
MW-13									
09/09/10	0.45	0.82	-142.9	-130.5	--	--	--	--	--
MW-14									
09/09/10	0.20	0.14	-264.6	-223.9	--	--	--	--	--

Table 2

Field Measurements and Groundwater Analytical Results

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

WELL ID/ DATE	D.O. Pre-Purge (mg/L)	D.O. Post-Purge (mg/L)	ORP Pre-Purge (mV)	ORP Post-Purge (mV)	Ferric Iron (mg/L)	Ferrous Iron (mg/L)	Nitrate as NO_3 (mg/L)	Sulfate as SO_4 (mg/L)	Methane (µg/L)
MW-15									
09/09/10	0.51	0.63	196.1	180.2	--	--	--	--	--
MW-17									
09/09/10	0.40	0.51	168.4	149.1	--	--	--	--	--
NPORD MW-3									
09/09/10	0.46	0.50	-208.2	-211.6	3.2	3.2	<10	1,200	27.8

Table 2

Field Measurements and Groundwater Analytical Results

Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, California

EXPLANATIONS:

ORP = Oxidation Reduction Potential
D.O. = Dissolved Oxygen
(mV) = Millivolts
(µg/L) = Micrograms per liter
(mg/L) = Milligrams per liter
-- = Not Measured

ANALYTICAL METHODS:

Nitratre as NO_3 and Sulfate as SO_3 by EPA Method 300.0
Ferric Iron by 200.7/SM 3500 Fe D
Ferrous Iron by SM 3500 Fe D
Methane by Method RSK-175M

Table 3

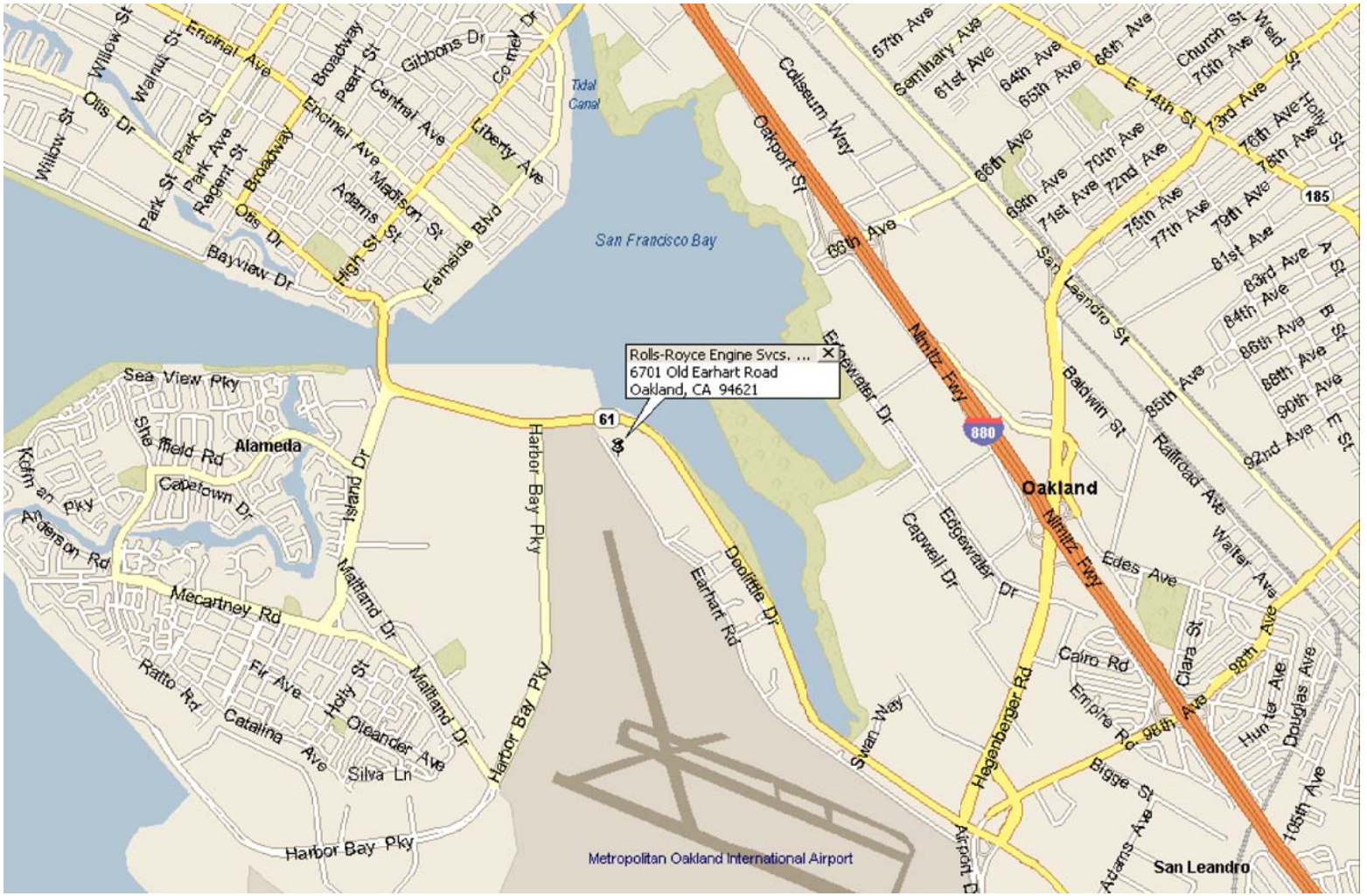
SPH Thickness and Volumes Purged - MW-18

Rolls-Royce Engine Services Test Facility

6701 Old Earhart Road

Oakland, California

Date	SPH Thickness (feet)	Depth To SPH From Top of Casing (feet)	Approximate Volume of Water Purged (gallons)	Approximate Volume of SPH Purged (gallons)
9/14/07	0.55	3.60	2.00	2.50
3/14/08	0.63	2.99	0.80	0.30
6/26/08	1.14	2.97	1.00	0.13
9/25/08	0.56	3.21	2.00	0.07
12/19/08	0.36	2.94	0.13	0.16
3/26/09	0.55	2.73	0.08	0.08
6/24/09	0.48	3.05	0.05	0.06
9/24/09	0.46	3.11	0.00	0.07
1/15/10	0.66	2.36	2.00	0.14
9/9/10	0.10	3.08	0.13	0.01
3/21/11	0.15	1.84	0.26	0.03
9/2/11	0.51	2.98	0.16	0.26
4/17/12	**0.15**	**2.37**	**0.05**	**0.08**
		Totals:	**8.66**	**3.88**



SITE LOCATION MAP
ROLLS–ROYCE ENGINE SERVICES TEST FACILITY
6701 OLD EARHART RD.
OAKLAND, CA

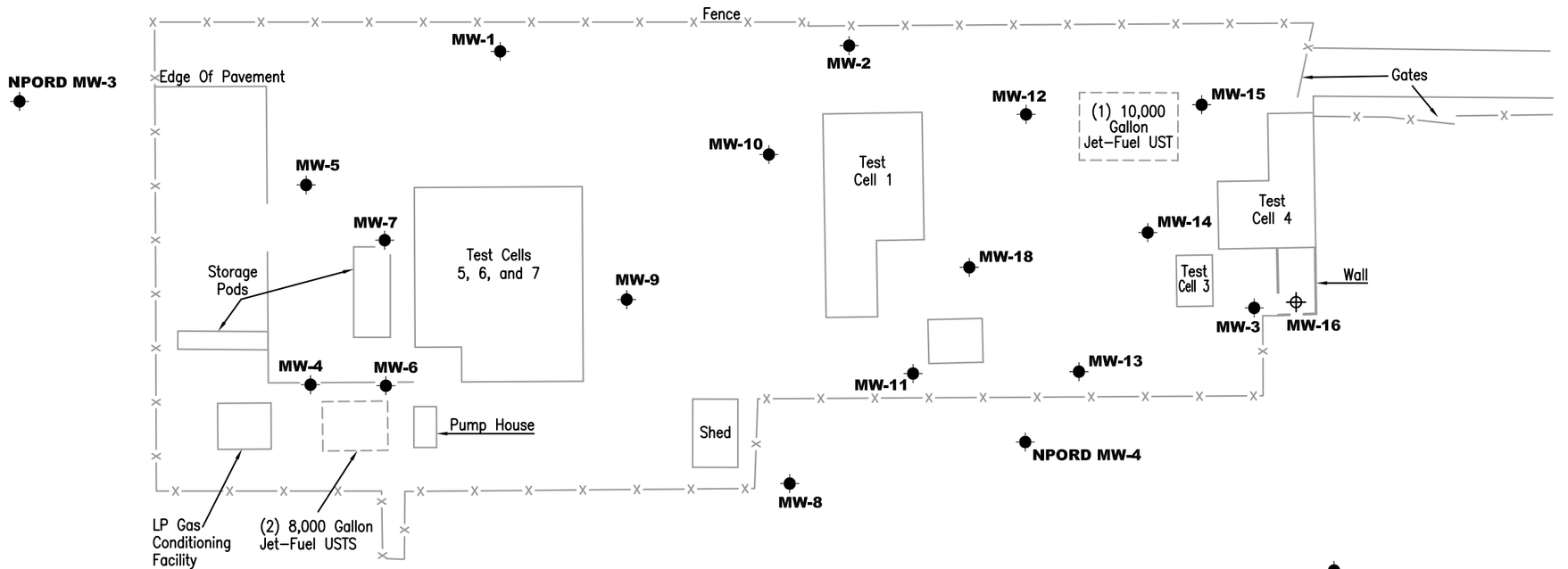
FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
25–948218.7		11/13/07	

FILE NAME: P:\Enviro\Rolls Royce\1–Site Location Map.dwg | Layout Tab: Vicinity Map

EXPLANATION

- Groundwater monitoring well
- Proposed monitoring well – not installed location inaccessible by drill rig



Source: Figure modified from drawing provided by Morrow Surveying, Dated: 10/8/07.

FIGURE 2

SITE PLAN
Rolls–Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, CA

REVISED DATE

GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551–7555

PROJECT NUMBER 948218.2

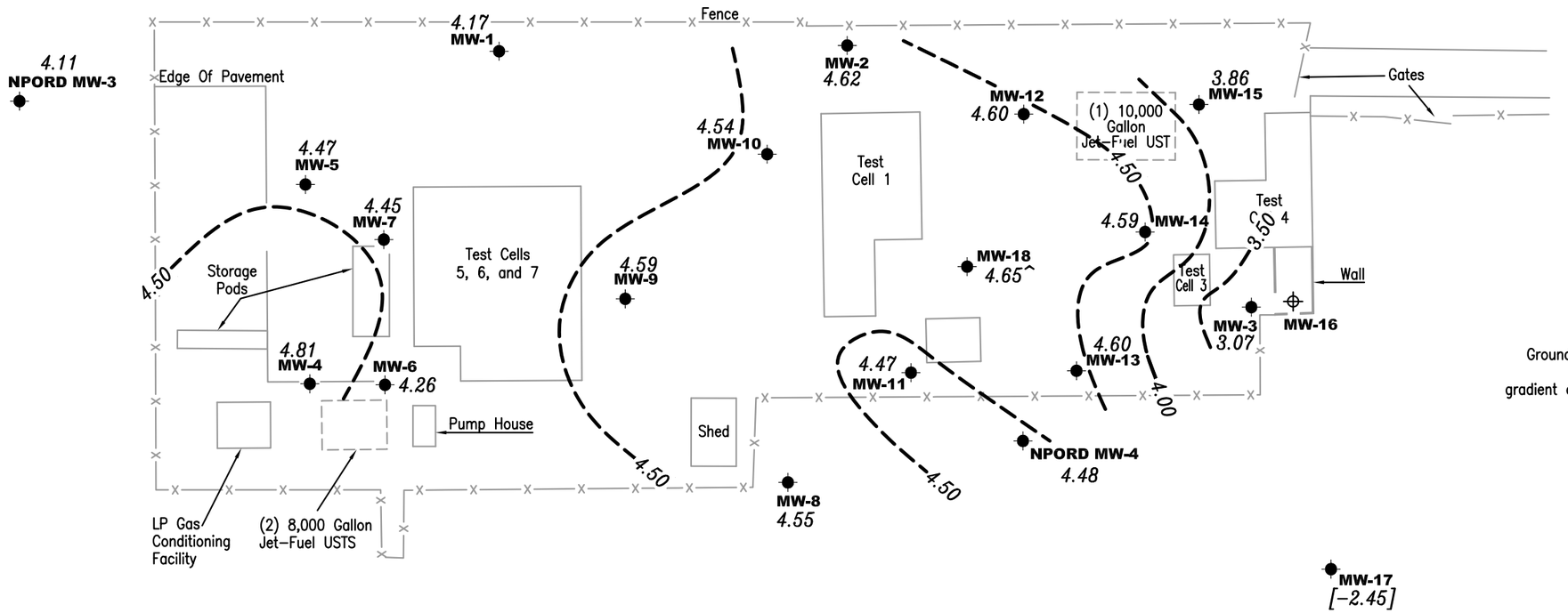
REVIEWED BY

DATE 11/07

FILE NAME: P:\Enviro\Rolls Royce\Q10–Rolls Royce.dwg | Layout Tab: Site Plan

EXPLANATION

- ● Groundwater monitoring well
- ⊕ Proposed monitoring well – not installed location inaccessible by drill rig
- *99.99* Groundwater elevation in feet referenced to Mean Sea Level
- -99.99- Groundwater elevation contour, dashed where inferred
- *[99.99]* Not used in contouring
- ^ Groundwater elevation corrected for the presence of separate-phase hydrocarbons



Source: Figure modified from drawing provided by Morrow Surveying, Dated: 10/8/07.

FIGURE 3

POTENTIOMETRIC MAP
Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, CA

REVISED DATE

DATE
April 17, 2012

REVIEWED BY

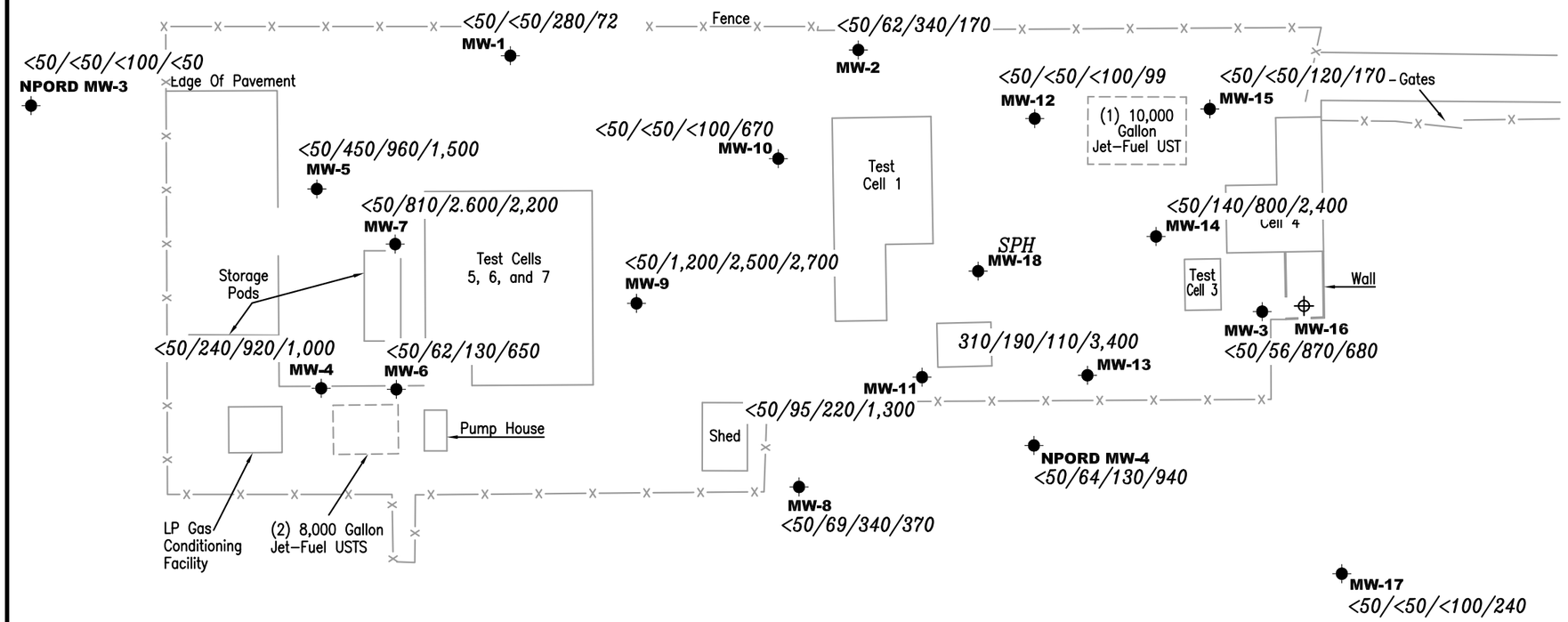
PROJECT NUMBER
948218.2

GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

FILE NAME: P:\Enviro\Rolls Royce\Q12-Rolls Royce.dwg | Layout Tab: Pot2

EXPLANATION

- ● Groundwater monitoring well
- ⊕ Proposed monitoring well – not installed location inaccessible by drill rig
- ***A/B/C/D*** Total Petroleum Hydrocarbons TPH as Gasoline/TPH as Diesel/ TPH as Motor Oil/TPH as Jet Fuel concentrations in ppb
- *NS* Not Sampled
- *SPH* Separate Phase Hydrocarbons



Source: Figure modified from drawing provided by Morrow Surveying, Dated: 10/8/07.

FIGURE **4**

CONCENTRATION MAP
Rolls-Royce Engine Services Test Facility
6701 Old Earhart Road
Oakland, CA

REVISED DATE

DATE
April 17, 2012

REVIEWED BY

PROJECT NUMBER
948218.2

GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

FILE NAME: P:\Enviro\Rolls Royce\Q12-Rolls Royce.dwg | Layout Tab: Con2

GR FIELD METHODS AND PROCEDURES - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

WELL CONDITION STATUS SHEET

1-3

Client/Facility #: **Rolls Royce Engine Test**
Site Address: **6701 Old Earhart Road**
City: **Oakland, CA**

Job #: **25-948218.1**
Event Date: 4-17-12
Sampler: AW

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-15	OK							N	N	Morrison /8"/2	
MW-12	OK										
MW-14	OK										
MW-3	OK	→	2M	2B	OK					BL/8"/3	
MW-13	OK									Morrison /12"/2	
MW-18	OK	→	2M	2B	OK					Morrison/8"/2	
MW-17	OK									↓	

Comments

2-3

WELL CONDITION STATUS SHEET

Client/Facility #: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job #: 25-948218.1
Event Date: 4 /17 /12
Sampler: HAIG KEVORK

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-8	OK			2-S	OK			N	N	MORRISON - 8" /2	NO
NPORDMW-4	OK	N/A	N/A	N/A	OK			N	N	MONUMENT BOX	NO
NPORDMW-3	OK	OK	OK	1-S	OK			N	N	MORRISON - 12" /2	NO
MW-1	OK			3-S	OK			N	N	BOART L. - 8" /3	NO
MW-10	OK							N	N	MORRISON - 8" /2	NO
MW-2	OK			3-S	OK			N	N	BOART L. - 8" /3	NO
MW-11	OK							N	N	MORRISON - 8" /2	NO

Comments

3-3

WELL CONDITION STATUS SHEET

Client/Facility #: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job #: 25-948218.1
Event Date: 4.17.12
Sampler: FT

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / (N)	REPLACE CAP Y / (N)	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / (No)
MW-4	OK		R=1	B=1	OK					Morrison/8"/2	
MW-5	OK										
MW-6	OK										
MW-7	OK										
MW-9	OK										

Comments

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test | Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road | Event Date: 4/17/12 (inclusive)
City: Oakland, CA | Sampler: MAIG K

Well ID MW-1 | Date Monitored: 4/17/12
Well Diameter (2)4 in.
Total Depth 8.48 ft.
Depth to Water 3.00 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

5.48 xVF 0.17 = 0.93 x3 case volume = Estimated Purge Volume: 2.79 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.09

Purge Equipment:
- Disposable Bailer: ✓
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: ✓
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1118
Sample Time/Date: 1135 / 4/17/12
Approx. Flow Rate: gpm.
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 3.04

Weather Conditions: CLOUDY
Water Color: CLEAR Odor: Y (N)
Sediment Description:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C) F	D.O (mg/L)	ORP (mV)
1121	1	7.40	>3999	16.8		
1123	2	7.34	OUT OF	17.0		
1126	3	7.31	RANGE	17.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Rolls Royce Engine Test** Job Number: **25-948218.1**
Site Address: **6701 Old Earhart Road** Event Date: 4/17/12 (inclusive)
City: **Oakland, CA** Sampler: HAIG K.

Well ID MW-2
Well Diameter (2)4 in.
Total Depth 11.75 ft.
Depth to Water 2.41 ft.
9.34 xVF 0.17 = 1.58 x3 case volume = Estimated Purge Volume: 4.7 gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.27

Date Monitored: 4/17/12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1222
Sample Time/Date: 1245/4/17/12
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 3.20

Weather Conditions: CLOUDY
Water Color: CLOUDY Odor: Y / (N)
Sediment Description: SAND/SILT

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C) / F	D.O (mg/L)	ORP (mV)
1226	1.5	7.21	73999	19.3		
1229	3	7.16	OUT OF	14.5		
1234	4.75	7.14	RANGE	14.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road Event Date: 4-17-12 (inclusive)
City: Oakland, CA Sampler: AW

Well ID MW-3
Well Diameter (2) 4 in.
Total Depth 12.10 ft.
Depth to Water 3.66 ft.
Date Monitored: 4-17-12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

8.44 xVF .17 = 1.43 x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.34

Purge Equipment:
- Disposable Bailer: ✓
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: ✓
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1100 Weather Conditions: Cloudy
Sample Time/Date: 1125 / 4-17-12 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: - gpm. Sediment Description: Cloudy
Did well de-water? N If yes, Time: - Volume: - gal. DTW @ Sampling: 5.07

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - DS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1105	1.5	7.74	840	16.9		
1110	3.0	7.80	876	17.1		
1115	4.5	7.83	912	17.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road Event Date: 4-17-12 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-4
Well Diameter (2)4 in.
Total Depth 10.08 ft.
Depth to Water 4.98 ft.
Date Monitored: 4-17-12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

5.10 xVF .17 = .86 x3 case volume = Estimated Purge Volume: 2.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.00

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Discrete Bailer	
Suction Pump		Peristaltic Pump	
Grundfos		QED Bladder Pump	
Peristaltic Pump		Other:	
QED Bladder Pump			
Other:			

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1210 Weather Conditions: CLOUDY / FOG
Sample Time/Date: 1230 / 4.17.12 Water Color: CLEAR Odor: (Y) N STRONG
Approx. Flow Rate: — gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 5.01

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1213	.75	7.75	1998	18.5		
1216	1.5	7.70	2242	18.5		
1219	2.5	7.66	2470	18.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: MORRISON 8" (1BF)

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: 2 (3/8")

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 4.17.12 (inclusive)
Sampler: FT

Well ID: MW-5
Well Diameter: ②/4 in.
Total Depth: 9.69 ft.
Depth to Water: 3.88 ft.

Date Monitored: 4.17.12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

5.81 xVF .17 = .98 x3 case volume = Estimated Purge Volume: 3.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.04

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1100
Sample Time/Date: 1120 / 4.17.12
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 3.90

Weather Conditions: CLOUDY
Water Color: GRY. Odor: Ⓨ/ N MODERATE
Sediment Description: S. SILTY

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (Ⓒ/ F)	D.O. (mg/L)	ORP (mV)
1103	1.0	7.71	2994	17.3		
1106	2.0	7.68	OFF SCALE	17.5		
1109	3.0	7.64	OFF SCALE	17.6		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: MORRISON 8" OK

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Rolls Royce Engine Test** Job Number: **25-948218.1**
Site Address: **6701 Old Earhart Road** Event Date: 4.17.12 (inclusive)
City: **Oakland, CA** Sampler: FT

Well ID MW-6
Well Diameter 2/4 in.
Total Depth 9.98 ft.
Depth to Water 5.25 ft.
4.73 xVF .17 = .80

Date Monitored: 4.17.12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: 20 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.19

Purge Equipment:
- Disposable Bailer ✓
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:
- Disposable Bailer ✓
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1135 Weather Conditions: CLOUDY | FOG
Sample Time/Date: 1155 / 4-17-12 Water Color: CLEAR Odor: (Y) / N SLIGHT
Approx. Flow Rate: — gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 5.28

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
1138	.75	7.71	2007	18.3		
1141	1.5	7.68	2156	18.1		
1144	2.0	7.64	2223	18.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: MORRISON 8" OK

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road Event Date: 4.17.12 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-7
Well Diameter 2 4 in.
Total Depth 10.10 ft.
Depth to Water 4.78 ft.
5.32 xVF .17 = .90

Date Monitored: 4.17.12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: 3.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.84

Purge Equipment:
- Disposable Bailer ✓
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:
- Disposable Bailer ✓
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1025 Weather Conditions: CLOUDY
Sample Time/Date: 1044 / 4.17.12 Water Color: CHANGEABLE Odor: (Y) / N STRONG
Approx. Flow Rate: — gpm. Sediment Description: SILTY
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 4.80

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1028	1.0	7.47	2,220	15.5		
1031	2.0	7.44	2456	15.6		
1034	3.0	7.41	2690	15.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: MORRISON 8" OK

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test | Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road | Event Date: 4/17/12 (inclusive)
City: Oakland, CA | Sampler: HAG K.

Well ID MW-8
Well Diameter (2) 4 in.
Total Depth 9.81 ft.
Depth to Water 3.70 ft.
Date Monitored: 4/17/12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.11 xVF 0.17 = 1.0 x3 case volume = Estimated Purge Volume: 3 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.92

Purge Equipment:
- Disposable Bailer ✓
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:
- Disposable Bailer ✓
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0920 | Weather Conditions: CLOUDY
Sample Time/Date: 0940 / 4/17/12 | Water Color: CLOUDY | Odor: Y / (N)
Approx. Flow Rate: — gpm. | Sediment Description:
Did well de-water? NO | If yes, Time: ____ | Volume: ____ gal. | DTW @ Sampling: 4.35

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0923	1	7.81	1806	15.5		
0926	2	7.76	1794	15.7		
0930	3	7.74	1779	15.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Rolls Royce Engine Test** Job Number: **25-948218.1**

Site Address: **6701 Old Earhart Road** Event Date: 4.17.12 (inclusive)

City: **Oakland, CA** Sampler: FT

Well ID MW-9

Well Diameter ②/4 in.

Total Depth 9.93 ft.

Depth to Water 4.85 ft.

Date Monitored: 4.17.12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

5.08 xVF .17 = .86 x3 case volume = Estimated Purge Volume: 2.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 5.86

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0945 Weather Conditions: CLOUDY

Sample Time/Date: 1005 / 4.17.12 Water Color: Gray Odor: Ⓨ / N STRONG

Approx. Flow Rate: — gpm. Sediment Description: SILTY

Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 4.88

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (Ⓒ / F)	D.O. (mg/L)	ORP (mV)
0948	.75	7.18	2002	18.8		
0951	1.5	7.15	2156	18.6		
0954	2.5	7.12	2210	18.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: MORRISON 8" OK

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA
Job Number: 25-948218.1
Event Date: 4/17/12 (inclusive)
Sampler: HAIG K.

Well ID MW-10
Well Diameter (2) 4 in.
Total Depth 10.12 ft.
Depth to Water 2.97 ft.
7.15 xVF 0.17 = 1.21 x3 case volume = Estimated Purge Volume: 3.64 gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.40

Date Monitored: 4/17/12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1147
Sample Time/Date: 1210 / 4/17/12
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 3.39

Weather Conditions: CLOUDY
Water Color: CLEAR Odor: (Y) / N SLIGHT
Sediment Description:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1152	1.5	7.51	3212	17.2		
1155	3	7.45	3194	17.5		
1159	3.75	7.43	3185	17.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA

Job Number: 25-948218.1
Event Date: 4/17/12 (inclusive)
Sampler: HAIG K.

Well ID: MW-11
Well Diameter: (2) 4 in.
Total Depth: 10.01 ft.
Depth to Water: 3.13 ft.

Date Monitored: 4/17/12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.88 xVF 0.17 = 1.16 x3 case volume = Estimated Purge Volume: 3.50 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.50

Purge Equipment:
- Disposable Bailer: ✓
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:
- Disposable Bailer: ✓
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1258
Sample Time/Date: 1320 / 4/17/12
Approx. Flow Rate: — gpm.
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 3.62

Weather Conditions: CLOUDY
Water Color: CLOUDY Odor: (Y) N MODERATE
Sediment Description:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O (mg/L)	ORP (mV)
1302	1.5	7.51	3646	17.6		
1305	2.5	7.45	3680	17.8		
1309	3.5	7.42	3692	17.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Rolls Royce Engine Test** Job Number: **25-948218.1**

Site Address: **6701 Old Earhart Road** Event Date: 4-17-12 (inclusive)

City: **Oakland, CA** Sampler: AW

Well ID MW-12 Date Monitored: 4-17-12

Well Diameter (2) 4 in.

Total Depth 9.90 ft.

Depth to Water 2.72 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.18 xVF .17 = 1.22 x3 case volume = Estimated Purge Volume: 4.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.16

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Discrete Bailer	
Suction Pump		Peristaltic Pump	
Grundfos		QED Bladder Pump	
Peristaltic Pump		Other:	
QED Bladder Pump			
Other:			

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Water Removed: _____
Product Transferred to: _____

Start Time (purge): 0950 Weather Conditions: Cloudy

Sample Time/Date: 1015 / 4-17-12 Water Color: Clear Odor: (Y) / N Slight

Approx. Flow Rate: — gpm. Sediment Description: Clear

Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 3.89

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0953	1.5	8.61	2571	17.6		
0956	3.0	8.55	2634	17.9		
1000	4.0	8.47	2677	18.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-12	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road Event Date: 4-17-12 (inclusive)
City: Oakland, CA Sampler: AW

Well ID: MW-13
Well Diameter: 2 (4) in.
Total Depth: 9.48 ft.
Depth to Water: 1.50 ft.
Date Monitored: 4-17-12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.98 xVF .66 = 5.26 x3 case volume = Estimated Purge Volume: 16.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.09

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump ✓
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1135 Weather Conditions: Cloudy
Sample Time/Date: 1200 / 4-17-12 Water Color: yellow Odor: Y / (N)
Approx. Flow Rate: 1.0 gpm. Sediment Description: Clear
Did well de-water? ✓ If yes, Time: — Volume: — gal. DTW @ Sampling: 2.62

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (US))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1140	5.0	7.73	3151	17.9		
1145	10.0	7.55	3226	18.1		
1151	16.0	7.51	3278	18.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW13	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Slight reaction w/ HCl

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Rolls Royce Engine Test** Job Number: **25-948218.1**
Site Address: **6701 Old Earhart Road** Event Date: 4-17-12 (inclusive)
City: **Oakland, CA** Sampler: AW

Well ID MW-14
Well Diameter 2 in.
Total Depth 10.02 ft.
Depth to Water 1.83 ft.
8.19 xVF .17 = 1.39 x3 case volume = Estimated Purge Volume: 4.5 gal.
Date Monitored: 4-17-12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.46

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1025
Sample Time/Date: 1050 / 4-17-12
Approx. Flow Rate: — gpm.
Did well de-water? N If yes, Time: — Volume: — gal.
Weather Conditions: Cloudy
Water Color: Cloudy Odor: Y (N)
Sediment Description: / Cloudy
DTW @ Sampling: 2.88

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1030	1.5	8.35	2297	17.1		
1035	3.0	8.19	2316	17.3		
1040	4.5	8.15	2339	17.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-14	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test | Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road | Event Date: 4-17-12 (inclusive)
City: Oakland, CA | Sampler: AW

Well ID: MW-15 | Date Monitored: 4-17-12
Well Diameter: (2) 4 in.
Total Depth: 9.98 ft.
Depth to Water: 3.65 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.33 xVF .17 = 1.07 x3 case volume = Estimated Purge Volume: 3.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.91

Purge Equipment:
- Disposable Bailer: ✓
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: ✓
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0915 | Weather Conditions: Cloudy
Sample Time/Date: 0940 / 4-17-12 | Water Color: Cloudy | Odor: Y / N
Approx. Flow Rate: — gpm. | Sediment Description: Cloudy
Did well de-water? N | If yes, Time: — Volume: — gal. | DTW @ Sampling: 4.66

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) (µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0920	1.5	8.36	1502	17.7		
0925	2.5	8.40	1536	17.9		
0930	3.5	8.41	1544	18.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-15	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test | Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road | Event Date: 4-17-12 (inclusive)
City: Oakland, CA | Sampler: AW

Well ID: MW-17 | Date Monitored: 4-17-12
Well Diameter: (2) 4 in.
Total Depth: 9.81 ft.
Depth to Water: 2.49 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.32 xVF .17 = 1.24 x3 case volume = Estimated Purge Volume: 4.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.95

Purge Equipment:
- Disposable Bailer: ✓
- Stainless Steel Bailer:
- Stack Pump:
- Suction Pump:
- Grundfos:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Sampling Equipment:
- Disposable Bailer: ✓
- Pressure Bailer:
- Discrete Bailer:
- Peristaltic Pump:
- QED Bladder Pump:
- Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 1230 | Weather Conditions: Cloudy / Sunny
Sample Time/Date: 1255 / 4-17-12 | Water Color: Yellow | Odor: Y / (N)
Approx. Flow Rate: — gpm. | Sediment Description: Clear
Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 3.63

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1235	1.5	8.81	3613	17.7		
1240	3.0	8.49	3644	18.1		
1245	4.0	8.36	3690	18.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-17	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Slight reaction w/ HCl

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Rolls Royce Engine Test** Job Number: **25-948218.1**

Site Address: **6701 Old Earhart Road** Event Date: 4-17-12 (inclusive)

City: **Oakland, CA** Sampler: AW

Well ID MW-18

Well Diameter (2) 4 in.

Total Depth 9.95 ft.

Depth to Water 2.52 ft.

7.43 xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Date Monitored: 4-17-12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

Purge Equipment:

- Disposable Bailer ✓
- Stainless Steel Bailer
- Stack Pump
- Suction Pump
- Grundfos
- Peristaltic Pump
- QED Bladder Pump
- Other:

Sampling Equipment:

- Disposable Bailer
- Pressure Bailer
- Discrete Bailer
- Peristaltic Pump
- QED Bladder Pump
- Other:

Time Started: 1305 (2400 hrs)
Time Completed: 1320 (2400 hrs)
Depth to Product: 2.37 ft
Depth to Water: 2.52 ft
Hydrocarbon Thickness: 0.15 ft
Visual Confirmation/Description: Dark oily
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: — gal
Amt Removed from Well: 300ml ~~gal~~
Water Removed: 200ml
Product Transferred to: Drum on site.

Start Time (purge): _____ Weather Conditions: Sunny

Sample Time/Date: _____ / _____ Water Color: _____ Odor: Y / N _____

Approx. Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: Sock in well.

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test
Site Address: 6701 Old Earhart Road
City: Oakland, CA
Job Number: 25-948218.1
Event Date: 4/17/12 (inclusive)
Sampler: HAG K.

Well ID NPORDMW-3
Well Diameter 2 (4) in.
Total Depth 16.46 ft.
Depth to Water 4.00 ft.
Date Monitored: 4/17/12

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

12.46 xVF 0.66 = 8.22 x3 case volume = Estimated Purge Volume: 24.6 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.49

Purge Equipment:
- Disposable Bailer: ____
- Stainless Steel Bailer: ____
- Stack Pump: ✓
- Suction Pump: ____
- Grundfos: ____
- Peristaltic Pump: ____
- QED Bladder Pump: ____
- Other: ____

Sampling Equipment:
- Disposable Bailer: ✓
- Pressure Bailer: ____
- Discrete Bailer: ____
- Peristaltic Pump: ____
- QED Bladder Pump: ____
- Other: ____

Time Started: ____ (2400 hrs)
Time Completed: ____ (2400 hrs)
Depth to Product: ____ ft
Depth to Water: ____ ft
Hydrocarbon Thickness: ____ ft
Visual Confirmation/Description: ____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ____ gal
Amt Removed from Well: ____ gal
Water Removed: ____
Product Transferred to: ____

Start Time (purge): 1037
Sample Time/Date: 1105 / 4/17/12
Approx. Flow Rate: 2 gpm.
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 5.88

Weather Conditions: CLOUDY
Water Color: CLEAR Odor: Y / (N)
Sediment Description: ____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1041	8	7.38	73999	16.5		
1045	16	7.35	OUT OF	16.4		
1050	25	7.31	RANGE	16.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORDMW-3	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: ____

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Rolls Royce Engine Test | Job Number: 25-948218.1
Site Address: 6701 Old Earhart Road | Event Date: 4/17/12 (inclusive)
City: Oakland, CA | Sampler: HAIG K.

Well ID NPORDMW-4 | Date Monitored: 4/17/12
Well Diameter (2) 4 in.
Total Depth 18.81 ft.
Depth to Water 5.58 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

13.23 xVF 0.17 = 2.24 x3 case volume = Estimated Purge Volume: 6.7 gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.22

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0957 | Weather Conditions: CLOUDY
Sample Time/Date: 1025 / 4/17/12 | Water Color: CLOUDY | Odor: (Y) N SLIGHT
Approx. Flow Rate: — gpm. | Sediment Description:
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 7.74

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1003	2.5	7.75	2118	15.9		
1008	5	7.68	2096	16.1		
1013	6.75	7.65	2085	16.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORDMW-4	7 x voa vial	YES	HCL	KIFF	TPH-JET FUEL/TPH-MO/TPH-DROw/sgc(8015)/ TPH-GRO/BTEX/MTBE/NAPHTHALENE(8260)

COMMENTS: TUBING IN WELL

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

BK weights
20.5 Grams

PES Environmental, Inc.
Engineering & Environmental Services

LOCATION: TEST Cell AR
PROJECT:
JOB NO.:

SEPARATE-PHASE HYDROCARBON REMOVAL LOG

Date	Time	Well ID	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness (feet)	Amount of Product Removed	Notes
4/11/12	6:24	MW18				410 Grams	
4/18/12	6:18	MW18				320	
4/25/12	0700	MW18				405 Grams	
5/2/12	0620	MW18				390 Grams	
5/7/12	0620	MW18				404 Grams	
5/11/12	0700	MW18				394 Grams	
5/16/12	6:06	MW18				359.5 Grams	
5/24/12	6:04	MW18				379.5 Grams	
5/30/12	6:15	MW18				351.5 Grams	

B/G WEIGHT
20.5 GRAMS

PES Environmental, Inc.
Engineering & Environmental Services

LOCATION: TEST CELL AR
PROJECT:
JOB NO.:

SEPARATE-PHASE HYDROCARBON REMOVAL LOG

Date	Time	Well ID	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness (feet)	Amount of Product Removed	Notes
01/15/12	6:20 AM	MW18				362.5 Grams	
1/26/12	1020	MW18				387 Grams	
02/03/12	8:01 AM	MW18				442.5 Grams	
2/9/12	1340	MW18				430 Grams	
2/16/12	1210	MW18				407 Grams	
2/23/12	0940	MW18				416 Grams	
3/1/12	1220	MW18				395 Grams	
3/7/12	6:15 AM	MW18				411 Grams	
3/14/12	6:15 AM	MW18				386.5 Grams	
3/22/12	1000	MW18				374 Grams	
3/28/12	6:30	MW18				419 Grams	
4/4/12	6:15	MW18				414 Grams	

Bag Weight 20.5 Grams

PES Environmental, Inc.
Engineering & Environmental Services

LOCATION:	Test-Cell 11
PROJECT:	
JOB NO.:	

SEPARATE-PHASE HYDROCARBON REMOVAL LOG

Date	Time	Well ID	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness (feet)	Amount of Product Removed	Notes
10/19/11	9:04	MW18				423.5 Grams	TC
10/26/11	1310	MW18				401 Grams	
11/02/11	0705	MW18				353.7	
11/8/11	1000	MW18				402 Grams	
11/16/11	1240	MW18				389 Grams	
11/25/11	1000	MW18				370 Grams	
12/1/11	1146	MW18				390 Grams	
12/8/11	1325	MW18				407 Grams	
12/13/11	0930	MW18				400 Grams	
12/20/11	1320	MW18				392 Grams	
1/3/12	1030	MW18				380 Grams	
1/11/12	625 Am	MW18				416 Grams	

BAG WEIGHTS 20.5 GRAMS

PES Environmental, Inc.
Engineering & Environmental Services

LOCATION: TEST CELL
PROJECT:
JOB NO.:

SEPARATE-PHASE HYDROCARBON REMOVAL LOG

Date	Time	Well ID	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness (feet)	Amount of Product Removed	Notes
7/19/11	1345	MW18				412 Grams	
7/27/11	1220	MW18				390 Grams	
8/4/11	1310	MW18				385 Grams	
8/10/11	1340	MW18				399 Grams	
8/17/11	0700	MW18				427 Grams	
8/25/11	0945	MW18				402 Grams	
9/2/11	0930	MW18				295 Grams	
9/7/11	10:29	MW18				326 Grams	TC
9/13/11	1145	MW18				308 Grams	
9/22/11	8:00	MW18				298 Grams	TC
9/30/11	1730	MW18				302 Grams	
10/7/11	1600	MW18				288 Grams	

BAG WEIGHT 20.5 GRAMS

PES Environmental, Inc.
Engineering & Environmental Services

LOCATION: TEST CELL RL
PROJECT:
JOB NO.:

SEPARATE-PHASE HYDROCARBON REMOVAL LOG

Date	Time	Well ID	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness (feet)	Amount of Product Removed	Notes
4/27/11	1030	MW18				390 GRAMS	
5/3/11	1340	MW18				402 GRAMS	
5/11/11	1240	MW18				408 GRAMS	
5/17/11	1345	MW18				395 GRAMS	
5/26/11	0925	MW18				380 GRAMS	
6/1/11	1310	MW18				405 GRAMS	
6/9/11	1400	MW18				390 GRAMS	
6/15/11	0640	MW18				406 GRAMS	
6/21/11	1345	MW18				399 GRAMS	
6/22/11	1230	MW18				412 GRAMS	
7/5/11	1320	MW18				400 GRAMS	
7/12/11	1140	MW18				392 GRAMS	

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Laboratory Results

Doug Lee
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, CA 94568

Subject : 19 Water Samples
Project Name : Rolls-Royce Engine Test Facility
Project Number : 25-948218.1

Dear Mr. Lee,

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. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **QA** Matrix : Water Lab Number : 81038-01
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 13:25
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 13:25
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 13:25
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 13:25
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 13:25
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/12 13:25
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 13:25
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	04/23/12 13:25
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	04/23/12 13:25
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	04/23/12 13:25

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-1** Matrix : Water Lab Number : 81038-02
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:41
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:41
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:41
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:41
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:41
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/20/12 20:41
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:41
1,2-Dichloroethane-d4 (Surr)	99.4		% Recovery	EPA 8260B	04/20/12 20:41
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	04/20/12 20:41
4-Bromofluorobenzene (Surr)	95.9		% Recovery	EPA 8260B	04/20/12 20:41
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/28/12 02:00
TPH as Jet Fuel	**72**	50	ug/L	M EPA 8015	04/26/12 16:50
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**280**	100	ug/L	M EPA 8015	04/26/12 16:50
(Note: Discrete peaks in Motor Oil range, atypical for Motor Oil.)					
Octacosane (Silica Gel Surr)	123		% Recovery	M EPA 8015	04/28/12 02:00
Octacosane (Diesel Surrogate)	118		% Recovery	M EPA 8015	04/26/12 16:50

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-2** Matrix : Water Lab Number : 81038-03
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:45
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:45
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:45
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:45
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:45
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/20/12 20:45
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/20/12 20:45
1,2-Dichloroethane-d4 (Surr)	99.5		% Recovery	EPA 8260B	04/20/12 20:45
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	04/20/12 20:45
4-Bromofluorobenzene (Surr)	94.8		% Recovery	EPA 8260B	04/20/12 20:45
TPH as Diesel (Silica Gel)	**62**	50	ug/L	M EPA 8015	04/27/12 23:38
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**170**	50	ug/L	M EPA 8015	04/26/12 17:25
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**340**	100	ug/L	M EPA 8015	04/26/12 17:25
Octacosane (Silica Gel Surr)	79.1		% Recovery	M EPA 8015	04/27/12 23:38
Octacosane (Diesel Surrogate)	80.1		% Recovery	M EPA 8015	04/26/12 17:25

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-3** Matrix : Water Lab Number : 81038-04
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 04:57
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 04:57
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 04:57
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 04:57
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 04:57
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/21/12 04:57
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 04:57
1,2-Dichloroethane-d4 (Surr)	99.5		% Recovery	EPA 8260B	04/21/12 04:57
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	04/21/12 04:57
4-Bromofluorobenzene (Surr)	96.0		% Recovery	EPA 8260B	04/21/12 04:57
TPH as Diesel (Silica Gel)	**56**	50	ug/L	M EPA 8015	04/27/12 18:44
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**680**	50	ug/L	M EPA 8015	04/26/12 18:00
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**870**	100	ug/L	M EPA 8015	04/26/12 18:00
Octacosane (Silica Gel Surr)	80.2		% Recovery	M EPA 8015	04/27/12 18:44
Octacosane (Diesel Surrogate)	97.1		% Recovery	M EPA 8015	04/26/12 18:00

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-4** Matrix : Water Lab Number : 81038-05
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 06:05
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 06:05
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 06:05
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 06:05
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 06:05
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/21/12 06:05
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/21/12 06:05
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	04/21/12 06:05
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	04/21/12 06:05
4-Bromofluorobenzene (Surr)	95.1		% Recovery	EPA 8260B	04/21/12 06:05
TPH as Diesel (Silica Gel)	**240**	50	ug/L	M EPA 8015	04/27/12 18:14
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**1000**	50	ug/L	M EPA 8015	04/26/12 18:35
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**920**	100	ug/L	M EPA 8015	04/26/12 18:35
Octacosane (Silica Gel Surr)	81.6		% Recovery	M EPA 8015	04/27/12 18:14
Octacosane (Diesel Surrogate)	95.5		% Recovery	M EPA 8015	04/26/12 18:35

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-5** Matrix : Water Lab Number : 81038-06
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:37
Toluene	**0.57**	0.50	ug/L	EPA 8260B	04/23/12 20:37
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:37
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:37
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:37
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/12 20:37
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:37
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	04/23/12 20:37
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	04/23/12 20:37
4-Bromofluorobenzene (Surr)	99.6		% Recovery	EPA 8260B	04/23/12 20:37
TPH as Diesel (Silica Gel)	**450**	50	ug/L	M EPA 8015	04/28/12 00:51
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**1500**	50	ug/L	M EPA 8015	04/26/12 19:10
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**960**	100	ug/L	M EPA 8015	04/26/12 19:10
Octacosane (Silica Gel Surr)	98.5		% Recovery	M EPA 8015	04/28/12 00:51
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	04/26/12 19:10

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-6** Matrix : Water Lab Number : 81038-07
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:33
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:33
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:33
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:33
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:33
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/12 20:33
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 20:33
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	04/23/12 20:33
Toluene - d8 (Surr)	98.5		% Recovery	EPA 8260B	04/23/12 20:33
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	04/23/12 20:33
TPH as Diesel (Silica Gel)	**62**	50	ug/L	M EPA 8015	05/01/12 10:57
TPH as Jet Fuel	**650**	50	ug/L	M EPA 8015	04/30/12 19:16
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**130**	100	ug/L	M EPA 8015	04/30/12 19:16
(Note: Discrete peaks in Motor Oil range, atypical for Motor Oil.)					
Octacosane (Silica Gel Surr)	107		% Recovery	M EPA 8015	05/01/12 10:57
Octacosane (Diesel Surrogate)	101		% Recovery	M EPA 8015	04/30/12 19:16

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-7** Matrix : Water Lab Number : 81038-08
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 12:35
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 12:35
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 12:35
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 12:35
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 12:35
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 12:35
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 12:35
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	04/24/12 12:35
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	04/24/12 12:35
4-Bromofluorobenzene (Surr)	96.2		% Recovery	EPA 8260B	04/24/12 12:35
TPH as Diesel (Silica Gel)	**810**	50	ug/L	M EPA 8015	04/27/12 18:27
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**2200**	50	ug/L	M EPA 8015	04/26/12 20:20
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**2600**	100	ug/L	M EPA 8015	04/26/12 20:20
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	04/27/12 18:27
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	04/26/12 20:20

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-8** Matrix : Water Lab Number : 81038-09
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:18
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:18
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:18
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:18
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:18
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/12 23:18
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:18
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	04/23/12 23:18
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	04/23/12 23:18
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	04/23/12 23:18
TPH as Diesel (Silica Gel)	**69**	50	ug/L	M EPA 8015	04/28/12 02:35
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**370**	50	ug/L	M EPA 8015	04/26/12 20:55
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**340**	100	ug/L	M EPA 8015	04/26/12 20:55
Octacosane (Silica Gel Surr)	91.8		% Recovery	M EPA 8015	04/28/12 02:35
Octacosane (Diesel Surrogate)	94.7		% Recovery	M EPA 8015	04/26/12 20:55

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-9** Matrix : Water Lab Number : 81038-10
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:51
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:51
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:51
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:51
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:51
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/12 23:51
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/12 23:51
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	04/23/12 23:51
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	04/23/12 23:51
4-Bromofluorobenzene (Surr)	99.1		% Recovery	EPA 8260B	04/23/12 23:51
TPH as Diesel (Silica Gel)	**1200**	50	ug/L	M EPA 8015	04/27/12 21:22
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**2700**	50	ug/L	M EPA 8015	04/26/12 21:30
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**2500**	100	ug/L	M EPA 8015	04/26/12 21:30
Octacosane (Silica Gel Surr)	97.2		% Recovery	M EPA 8015	04/27/12 21:22
Octacosane (Diesel Surrogate)	99.9		% Recovery	M EPA 8015	04/26/12 21:30

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-10** Matrix : Water Lab Number : 81038-11
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:23
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:23
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:23
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:23
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:23
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 00:23
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:23
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	04/24/12 00:23
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	04/24/12 00:23
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	04/24/12 00:23
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/27/12 21:57
TPH as Jet Fuel	**670**	50	ug/L	M EPA 8015	04/26/12 22:05
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/26/12 22:05
Octacosane (Silica Gel Surr)	96.7		% Recovery	M EPA 8015	04/27/12 21:57
Octacosane (Diesel Surrogate)	99.8		% Recovery	M EPA 8015	04/26/12 22:05

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-11** Matrix : Water Lab Number : 81038-12
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:56
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:56
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:56
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:56
Methyl-t-butyl ether (MTBE)	**0.50**	0.50	ug/L	EPA 8260B	04/24/12 00:56
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 00:56
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 00:56
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	04/24/12 00:56
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	04/24/12 00:56
4-Bromofluorobenzene (Surr)	99.5		% Recovery	EPA 8260B	04/24/12 00:56
TPH as Diesel (Silica Gel)	**95**	50	ug/L	M EPA 8015	04/27/12 17:10
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**1300**	50	ug/L	M EPA 8015	04/26/12 22:40
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**220**	100	ug/L	M EPA 8015	04/26/12 22:40
Octacosane (Silica Gel Surr)	94.3		% Recovery	M EPA 8015	04/27/12 17:10
Octacosane (Diesel Surrogate)	101		% Recovery	M EPA 8015	04/26/12 22:40

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-12** Matrix : Water Lab Number : 81038-13
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 01:28
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 01:28
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 01:28
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 01:28
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 01:28
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 01:28
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 01:28
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	04/24/12 01:28
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	04/24/12 01:28
4-Bromofluorobenzene (Surr)	96.7		% Recovery	EPA 8260B	04/24/12 01:28
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/27/12 16:36
TPH as Jet Fuel	**99**	50	ug/L	M EPA 8015	04/27/12 09:24
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/27/12 09:24
Octacosane (Silica Gel Surr)	97.2		% Recovery	M EPA 8015	04/27/12 16:36
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	04/27/12 09:24

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-13** Matrix : Water Lab Number : 81038-14
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**1.0**	0.50	ug/L	EPA 8260B	04/24/12 02:01
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:01
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:01
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:01
Methyl-t-butyl ether (MTBE)	**2.6**	0.50	ug/L	EPA 8260B	04/24/12 02:01
TPH as Gasoline	**310**	50	ug/L	EPA 8260B	04/24/12 02:01
Naphthalene	**1.4**	0.50	ug/L	EPA 8260B	04/24/12 02:01
1,2-Dichloroethane-d4 (Surr)	98.6		% Recovery	EPA 8260B	04/24/12 02:01
Toluene - d8 (Surr)	97.3		% Recovery	EPA 8260B	04/24/12 02:01
4-Bromofluorobenzene (Surr)	97.9		% Recovery	EPA 8260B	04/24/12 02:01
TPH as Diesel (Silica Gel)	**190**	50	ug/L	M EPA 8015	04/27/12 16:00
TPH as Jet Fuel	**3400**	50	ug/L	M EPA 8015	04/26/12 23:49
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**110**	100	ug/L	M EPA 8015	04/26/12 23:49
Octacosane (Silica Gel Surr)	73.4		% Recovery	M EPA 8015	04/27/12 16:00
Octacosane (Diesel Surrogate)	80.1		% Recovery	M EPA 8015	04/26/12 23:49

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-14** Matrix : Water Lab Number : 81038-15
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:33
Toluene	**0.69**	0.50	ug/L	EPA 8260B	04/24/12 02:33
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:33
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:33
Methyl-t-butyl ether (MTBE)	**1.2**	0.50	ug/L	EPA 8260B	04/24/12 02:33
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 02:33
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 02:33
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	04/24/12 02:33
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	04/24/12 02:33
4-Bromofluorobenzene (Surr)	98.4		% Recovery	EPA 8260B	04/24/12 02:33
TPH as Diesel (Silica Gel)	**140**	50	ug/L	M EPA 8015	04/28/12 01:25
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	**2400**	50	ug/L	M EPA 8015	04/27/12 00:24
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**800**	100	ug/L	M EPA 8015	04/27/12 00:24
Octacosane (Silica Gel Surr)	94.0		% Recovery	M EPA 8015	04/28/12 01:25
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	04/27/12 00:24

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-15** Matrix : Water Lab Number : 81038-16
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:06
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:06
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:06
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:06
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:06
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 03:06
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:06
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	04/24/12 03:06
Toluene - d8 (Surr)	98.1		% Recovery	EPA 8260B	04/24/12 03:06
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	04/24/12 03:06
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/28/12 00:16
TPH as Jet Fuel	**170**	50	ug/L	M EPA 8015	04/27/12 00:59
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**120**	100	ug/L	M EPA 8015	04/27/12 00:59
(Note: Discrete peaks in Motor Oil range, atypical for Motor Oil.)					
Octacosane (Silica Gel Surr)	91.9		% Recovery	M EPA 8015	04/28/12 00:16
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	04/27/12 00:59

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **MW-17** Matrix : Water Lab Number : 81038-17
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:38
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:38
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:38
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:38
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:38
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 03:38
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 03:38
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	04/24/12 03:38
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	04/24/12 03:38
4-Bromofluorobenzene (Surr)	99.1		% Recovery	EPA 8260B	04/24/12 03:38
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/27/12 22:31
TPH as Jet Fuel	**240**	50	ug/L	M EPA 8015	04/27/12 07:06
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/27/12 07:06
Octacosane (Silica Gel Surr)	94.4		% Recovery	M EPA 8015	04/27/12 22:31
Octacosane (Diesel Surrogate)	94.9		% Recovery	M EPA 8015	04/27/12 07:06

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **NPORDMW-3** Matrix : Water Lab Number : 81038-18
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:11
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:11
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:11
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:11
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:11
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 04:11
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:11
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	04/24/12 04:11
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	04/24/12 04:11
4-Bromofluorobenzene (Surr)	98.8		% Recovery	EPA 8260B	04/24/12 04:11
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	05/01/12 10:22
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	04/30/12 21:36
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/27/12 08:49
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	05/01/12 10:22
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	04/30/12 21:36

KIFF Analytical LLC

Report Number : 81038
Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**
Project Number : **25-948218.1**

Sample : **NPORDMW-4** Matrix : Water Lab Number : 81038-19
Sample Date :04/17/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:44
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:44
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:44
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:44
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:44
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/12 04:44
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/12 04:44
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	04/24/12 04:44
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	04/24/12 04:44
4-Bromofluorobenzene (Surr)	99.4		% Recovery	EPA 8260B	04/24/12 04:44
TPH as Diesel (Silica Gel)	**64**	50	ug/L	M EPA 8015	04/27/12 23:41
TPH as Jet Fuel	**940**	50	ug/L	M EPA 8015	04/27/12 08:14
(Note: HIgher boiling hydrocarbons present, atypical for Jet Fuel Fuel.)					
TPH as Motor Oil	**130**	100	ug/L	M EPA 8015	04/27/12 08:14
(Note: Discrete peaks in Motor Oil range, atypical for Motor Oil.)					
Octacosane (Silica Gel Surr)	96.1		% Recovery	M EPA 8015	04/27/12 23:41
Octacosane (Diesel Surrogate)	99.6		% Recovery	M EPA 8015	04/27/12 08:14

Report Number : 81038

Date : 05/01/2012

QC Report : Method Blank Data

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/26/2012
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	04/26/2012
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/26/2012
Octacosane (Diesel Surrogate)	91.4		%	M EPA 8015	04/26/2012
Octacosane (Silica Gel Surr)	86.4		%	M EPA 8015	04/26/2012
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	04/30/2012
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	04/30/2012
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/30/2012
Octacosane (Diesel Surrogate)	98.4		%	M EPA 8015	04/30/2012
Octacosane (Silica Gel Surr)	104		%	M EPA 8015	04/30/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/20/2012
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
1,2-Dichloroethane-d4 (Surr)	99.9		%	EPA 8260B	04/20/2012
4-Bromofluorobenzene (Surr)	96.8		%	EPA 8260B	04/20/2012
Toluene - d8 (Surr)	101		%	EPA 8260B	04/20/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/2012
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	04/23/2012
4-Bromofluorobenzene (Surr)	98.3		%	EPA 8260B	04/23/2012
Toluene - d8 (Surr)	99.5		%	EPA 8260B	04/23/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/2012
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
1,2-Dichloroethane-d4 (Surr)	99.9		%	EPA 8260B	04/23/2012
4-Bromofluorobenzene (Surr)	98.6		%	EPA 8260B	04/23/2012
Toluene - d8 (Surr)	99.4		%	EPA 8260B	04/23/2012

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 81038

Date : 05/01/2012

QC Report : Method Blank Data

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/23/2012
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/23/2012
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	04/23/2012
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	04/23/2012
Toluene - d8 (Surr)	98.2		%	EPA 8260B	04/23/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/24/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/24/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/24/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/24/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/24/2012
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/24/2012
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	04/24/2012
4-Bromofluorobenzene (Surr)	98.4		%	EPA 8260B	04/24/2012
Toluene - d8 (Surr)	99.2		%	EPA 8260B	04/24/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/20/2012
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	04/20/2012
1,2-Dichloroethane-d4 (Surr)	99.5		%	EPA 8260B	04/20/2012
4-Bromofluorobenzene (Surr)	95.2		%	EPA 8260B	04/20/2012
Toluene - d8 (Surr)	100		%	EPA 8260B	04/20/2012

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 81038

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

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	1030	939	ug/L	M EPA 8015	4/26/12	103	93.9	9.32	70-130	25
Benzene														
	81038-02	<0.50	40.0	40.0	38.1	34.4	ug/L	EPA 8260B	4/20/12	95.2	86.1	10.1	80-120	25
Ethylbenzene														
	81038-02	<0.50	40.0	40.0	39.7	36.1	ug/L	EPA 8260B	4/20/12	99.2	90.2	9.56	80-120	25
Methyl-t-butyl ether														
	81038-02	<0.50	40.0	40.0	40.3	37.2	ug/L	EPA 8260B	4/20/12	101	92.9	8.19	69.7-121	25
Naphthalene														
	81038-02	<0.50	40.0	40.0	40.0	37.0	ug/L	EPA 8260B	4/20/12	100	92.4	7.96	70.0-130	25
P + M Xylene														
	81038-02	<0.50	40.0	40.0	38.6	35.2	ug/L	EPA 8260B	4/20/12	96.5	88.1	9.11	76.8-120	25
Toluene														
	81038-02	<0.50	40.0	40.0	39.2	35.4	ug/L	EPA 8260B	4/20/12	98.1	88.5	10.4	80-120	25
Benzene														
	81056-02	<0.50	40.0	40.0	40.1	37.9	ug/L	EPA 8260B	4/23/12	100	94.7	5.64	80-120	25
Ethylbenzene														
	81056-02	<0.50	40.0	40.0	41.8	40.0	ug/L	EPA 8260B	4/23/12	104	100	4.48	80-120	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 81038

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

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
Methyl-t-butyl ether														
	81056-02	1.0	40.0	40.0	44.5	43.2	ug/L	EPA 8260B	4/23/12	109	105	3.04	69.7-121	25
Naphthalene														
	81056-02	<0.50	40.0	40.0	42.3	41.4	ug/L	EPA 8260B	4/23/12	106	104	2.06	70.0-130	25
P + M Xylene														
	81056-02	<0.50	40.0	40.0	41.3	39.5	ug/L	EPA 8260B	4/23/12	103	98.8	4.50	76.8-120	25
Toluene														
	81056-02	<0.50	40.0	40.0	40.6	38.3	ug/L	EPA 8260B	4/23/12	101	95.8	5.70	80-120	25
Benzene														
	81038-06	<0.50	40.0	40.0	38.0	36.9	ug/L	EPA 8260B	4/23/12	94.9	92.3	2.77	80-120	25
Ethylbenzene														
	81038-06	<0.50	40.0	40.0	39.6	38.4	ug/L	EPA 8260B	4/23/12	99.0	95.9	3.16	80-120	25
Methyl-t-butyl ether														
	81038-06	<0.50	40.0	40.0	41.4	40.8	ug/L	EPA 8260B	4/23/12	103	102	1.25	69.7-121	25
Naphthalene														
	81038-06	<0.50	40.0	40.0	39.0	38.9	ug/L	EPA 8260B	4/23/12	97.5	97.2	0.339	70.0-130	25
P + M Xylene														
	81038-06	<0.50	40.0	40.0	38.7	37.9	ug/L	EPA 8260B	4/23/12	96.8	94.7	2.22	76.8-120	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

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
Toluene														
	81038-06	0.57	40.0	40.0	39.1	37.5	ug/L	EPA 8260B	4/23/12	96.4	92.4	4.20	80-120	25
Benzene														
	81038-07	<0.50	40.0	40.0	39.9	39.3	ug/L	EPA 8260B	4/23/12	99.8	98.2	1.69	80-120	25
Ethylbenzene														
	81038-07	<0.50	40.0	40.0	41.7	41.1	ug/L	EPA 8260B	4/23/12	104	103	1.60	80-120	25
Methyl-t-butyl ether														
	81038-07	<0.50	40.0	40.0	45.7	46.4	ug/L	EPA 8260B	4/23/12	114	116	1.42	69.7-121	25
Naphthalene														
	81038-07	<0.50	40.0	40.0	43.0	43.4	ug/L	EPA 8260B	4/23/12	108	108	0.864	70.0-130	25
P + M Xylene														
	81038-07	<0.50	40.0	40.0	41.0	40.5	ug/L	EPA 8260B	4/23/12	102	101	1.26	76.8-120	25
Toluene														
	81038-07	<0.50	40.0	40.0	39.6	38.8	ug/L	EPA 8260B	4/23/12	99.1	97.0	2.19	80-120	25
Benzene														
	81063-02	<0.50	40.0	40.0	42.4	40.3	ug/L	EPA 8260B	4/24/12	106	101	4.92	80-120	25
Ethylbenzene														
	81063-02	<0.50	40.0	40.0	44.4	42.1	ug/L	EPA 8260B	4/24/12	111	105	5.37	80-120	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 81038

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

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
Methyl-t-butyl ether														
	81063-02	0.84	40.0	40.0	49.3	48.8	ug/L	EPA 8260B	4/24/12	121	120	1.03	69.7-121	25
Naphthalene														
	81063-02	<0.50	40.0	40.0	44.2	43.8	ug/L	EPA 8260B	4/24/12	111	110	0.975	70.0-130	25
P + M Xylene														
	81063-02	<0.50	40.0	40.0	43.8	41.5	ug/L	EPA 8260B	4/24/12	109	104	5.31	76.8-120	25
Toluene														
	81063-02	<0.50	40.0	40.0	42.3	39.9	ug/L	EPA 8260B	4/24/12	106	99.8	5.90	80-120	25
Benzene														
	81038-03	<0.50	40.0	40.0	40.0	39.1	ug/L	EPA 8260B	4/21/12	100	97.8	2.30	80-120	25
Ethylbenzene														
	81038-03	<0.50	40.0	40.0	37.2	36.9	ug/L	EPA 8260B	4/21/12	93.0	92.2	0.775	80-120	25
Methyl-t-butyl ether														
	81038-03	<0.50	40.0	40.0	40.8	39.9	ug/L	EPA 8260B	4/21/12	102	99.8	2.24	69.7-121	25
Naphthalene														
	81038-03	<0.50	40.0	40.0	37.5	37.6	ug/L	EPA 8260B	4/21/12	93.7	94.0	0.330	70.0-130	25
P + M Xylene														
	81038-03	<0.50	40.0	40.0	37.1	36.5	ug/L	EPA 8260B	4/21/12	92.8	91.2	1.66	76.8-120	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 81038

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 05/01/2012

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

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
Toluene														
	81038-03	<0.50	40.0	40.0	39.7	38.6	ug/L	EPA 8260B	4/21/12	99.3	96.4	2.96	80-120	25
TPH-D (Si Gel)														
	BLANK	<50	1000	1000	801	772	ug/L	M EPA 8015	4/26/12	80.1	77.2	3.61	70-130	25
TPH-D (Si Gel)														
	BLANK	<50	1000	1000	901	882	ug/L	M EPA 8015	4/30/12	90.1	88.2	2.13	70-130	25
TPH as Diesel														
	BLANK	<50	1000	1000	1040	1000	ug/L	M EPA 8015	4/30/12	104	100	4.14	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	39.8	ug/L	EPA 8260B	4/20/12	95.9	80-120
Ethylbenzene	39.8	ug/L	EPA 8260B	4/20/12	101	80-120
Methyl-t-butyl ether	39.8	ug/L	EPA 8260B	4/20/12	100	69.7-121
Naphthalene	39.8	ug/L	EPA 8260B	4/20/12	99.9	70.0-130
P + M Xylene	39.8	ug/L	EPA 8260B	4/20/12	98.5	76.8-120
TPH as Gasoline	506	ug/L	EPA 8260B	4/20/12	94.6	70.0-130
Toluene	39.8	ug/L	EPA 8260B	4/20/12	99.9	80-120
Benzene	40.1	ug/L	EPA 8260B	4/23/12	98.1	80-120
Ethylbenzene	40.1	ug/L	EPA 8260B	4/23/12	103	80-120
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	4/23/12	107	69.7-121
Naphthalene	40.1	ug/L	EPA 8260B	4/23/12	104	70.0-130
P + M Xylene	40.1	ug/L	EPA 8260B	4/23/12	102	76.8-120
TPH as Gasoline	507	ug/L	EPA 8260B	4/23/12	102	70.0-130
Toluene	40.1	ug/L	EPA 8260B	4/23/12	100	80-120
Benzene	40.0	ug/L	EPA 8260B	4/23/12	95.8	80-120
Ethylbenzene	40.0	ug/L	EPA 8260B	4/23/12	100	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	4/23/12	102	69.7-121
Naphthalene	40.0	ug/L	EPA 8260B	4/23/12	99.3	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	4/23/12	99.3	76.8-120
TPH as Gasoline	502	ug/L	EPA 8260B	4/23/12	95.5	70.0-130

QC Report : Laboratory Control Sample (LCS)

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	4/23/12	97.4	80-120
Benzene	39.9	ug/L	EPA 8260B	4/23/12	101	80-120
Ethylbenzene	39.9	ug/L	EPA 8260B	4/23/12	107	80-120
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	4/23/12	116	69.7-121
Naphthalene	39.9	ug/L	EPA 8260B	4/23/12	110	70.0-130
P + M Xylene	39.9	ug/L	EPA 8260B	4/23/12	105	76.8-120
TPH as Gasoline	502	ug/L	EPA 8260B	4/23/12	102	70.0-130
Toluene	39.9	ug/L	EPA 8260B	4/23/12	100	80-120
Benzene	40.0	ug/L	EPA 8260B	4/24/12	105	80-120
Ethylbenzene	40.0	ug/L	EPA 8260B	4/24/12	109	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	4/24/12	120	69.7-121
Naphthalene	40.0	ug/L	EPA 8260B	4/24/12	111	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	4/24/12	108	76.8-120
TPH as Gasoline	507	ug/L	EPA 8260B	4/24/12	106	70.0-130
Toluene	40.0	ug/L	EPA 8260B	4/24/12	106	80-120
Benzene	40.0	ug/L	EPA 8260B	4/20/12	98.4	80-120
Ethylbenzene	40.0	ug/L	EPA 8260B	4/20/12	97.1	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	4/20/12	102	69.7-121
Naphthalene	40.0	ug/L	EPA 8260B	4/20/12	101	70.0-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Project Name : **Rolls-Royce Engine Test Facility**

Project Number : **25-948218.1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
P + M Xylene	40.0	ug/L	EPA 8260B	4/20/12	96.2	76.8-120
TPH as Gasoline	504	ug/L	EPA 8260B	4/20/12	98.0	70.0-130
Toluene	40.0	ug/L	EPA 8260B	4/20/12	99.2	80-120

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

81038

Global ID #: T06019775776

☐ Yes
☐ No

Chain-of-Custody-Record

Direct Bill To:
Douglas Lee
Gettler-Ryan Inc.
6747 Sierra Court
Sutie J
Dublin, CA 94568

Facility: Rolls-Royce Engine Test Facility
Facility Address: 6701 Old Earhart Road, Oakland, CA
Consultant Project #: 25-948218.1
Consultant Name: GETTLER-RYAN INC.
Address: 6747 Sierra Court Suite J, Dublin, CA 94568
Project Contact: (Name) Douglas Lee
(Phone) 925-551-7444 x123 (e-mail) dlee@grinc.com

(Name) Douglas Lee
(Phone) 925-551-7444 x123
Laboratory Name: Kiff Analytical
Laboratory Service Order:
Laboratory Service Code:
Samples Collected by: (Name) Alex W., Haig K., Frank T.
Signature:

State Method: ☑ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT ☐ ID

Sample I.D.	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	TPH-Jet A Fuel (8015) (HCL)	TPH-MO (8015) (HCL)	TPH-DRO with Silica Gel Cleanup (8015) (HCL)	TPH-GRO/BTEX/MTBE/ Naphthalene (8260) (HCL)	TPH-Jet A Fuel (8015) (NP)	TPH-MO (8015) (NP)	TPH-DRO with Silica Gel Cleanup (8015) (NP)	TPH-GRO/BTEX/MTBE/ Naphthalene (8260) (NP)	Remarks: EDF NEEDED — Lab Sample No.
QA	2	W	4/17/12 / N/A									01
MW-1	7	W	4/17/12 / 1135									02
MW-2	7	W	4/17/12 / 1245									03
MW-3	7	W	4/17/12 / 1125									04
MW-4	7	W	4/17/12 / 1230									05
MW-5	7	W	4/17/12 / 1120									06
MW-6	7	W	4/17/12 / 1155									07
MW-7	7	W	4/17/12 / 1044									08
MW-8	7	W	4/17/12 / 0940									09
MW-9	7	W	4/17/12 / 1005									10
MW-10	7	W	4/17/12 / 1210									11
MW-11	7	W	4/17/12 / 1320									12
MW-12	7	W	4/17/12 / 1015									13
MW-13	7	W	4/17/12 / 1200									14

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	Gettler-Ryan	4-17-12 / 1515	GR Office		4-17-12 / 1515	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	G-K	4/19/12 1320				
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced (Y/N)
				Kiff Analytical LLC	041912/1320	Y

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

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81038

Global ID #: T06019775776

☐ Yes
☐ No

Chain-of-Custody-Record

Direct Bill To:
Douglas Lee
Gettler-Ryan Inc.
6747 Sierra Court
Sutie J
Dublin, CA 94568

Facility: Rolls-Royce Engine Test Facility
Facility Address: 6701 Old Earhart Road, Oakland, CA
Consultant Project #: 25-948218.1
Consultant Name: GETTLER-RYAN INC.
Address: 6747 Sierra Court Suite J, Dublin, CA 94568
Project Contact: (Name) Douglas Lee
(Phone) 925-551-7444 x123 (e-mail) dlee@grinc.com

(Name) Douglas Lee
(Phone) 925-551-7444 x123
Laboratory Name: Kiff Analytical
Laboratory Service Order:
Laboratory Service Code:
Samples Collected by: (Name) Alex W., Hayk G., Frank T.
Signature:

State Method: ☑ CA ☐ OR ☐ WA ☐ NW Series ☐ CO ☐ UT ☐ ID

Sample I.D.	Number of Containers	Matrix S=Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	TPH-Jet A Fuel (8015) (HCL)	TPH-MO (8015) (HCL)	TPH-DRO with Silica Gel Cleanup (8015) (HCL)	TPH-GRO/BTEX/MTBE/ Naphthalene (8260) (HCL)	TPH-Jet A Fuel (8015) (NP)	TPH-MO (8015) (NP)	TPH-DRO with Silica Gel Cleanup (8015) (NP)	TPH-GRO/BTEX/MTBE/ Naphthalene (8260) (NP)	Remarks / Lab Sample No.
MW-14	7	W	4-17-12/1050	X	X	X	X					15
MW-15	7	W	4-17-12/0940	X	X	X	X					16
MW-17	7	W	4-17-12/1255	X	X	X	X					17
NPOD MW-3	7	W	4-17-12/1105	X	X	X	X					18
NPOD MW-4	7	W	4-17-12/1025	X	X	X	X					19

EDF NEEDED

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	Gettler-Ryan	4-17-12/1515	CR office		4-17-12/1515	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)
	G-R	4/19/12 1528				
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	Iced (Y/N)
			Kiff Analytical LLC		041912/1320	Y

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
~~10 Days~~
As Contracted

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

RECEIVER: TJB (Initials)

SRG#: 81038 Date: 041912

Project ID: Rolls-Royce Engine Test Facility

Method of Receipt: [X] Courier [ ] Over-the-counter [ ] Shipper

COC Inspection

Is COC present?	[X] Yes	[ ] No		
Custody seals on shipping container?	[ ] Intact	[ ] Broken	[ ] Not present	[X] N/A
Is COC Signed by Relinquisher? [X] Yes [ ] No Dated?	[X] Yes	[ ] No		
Is sampler name legibly indicated on COC?	[X] Yes	[ ] No		
Is analysis or hold requested for all samples?	[X] Yes	[ ] No		
Is the turnaround time indicated on COC?	[X] Yes	[ ] No		
Is COC free of whiteout and uninitialed cross-outs?	[X] Yes	[ ] No, Whiteout	[ ] No, Cross-outs	

Sample Inspection

Coolant Present: [X] Yes [ ] No (includes water)

Temperature °C 3.3 Therm. ID# IR-4 Initial TJB Date/Time 041912/1728 [ ] N/A

Are there custody seals on sample containers?	[ ] Intact	[ ] Broken	[X] Not present	
Do containers match COC?	[X] Yes	[ ] No	[ ] No, COC lists absent sample(s)	[ ] No, Extra sample(s) present
Are there samples matrices other than soil, water, air or carbon?	[ ] Yes	[X] No		
Are any sample containers broken, leaking or damaged?	[ ] Yes	[X] No		
Are preservatives indicated? [ ] Yes, on sample containers	[X] Yes, on COC	[ ] Not indicated	[ ] N/A	
Are preservatives correct for analyses requested?	[X] Yes	[ ] No	[ ] N/A	
Are samples within holding time for analyses requested?	[X] Yes	[ ] No		
Are the correct sample containers used for the analyses requested?	[X] Yes	[ ] No		
Is there sufficient sample to perform testing?	[X] Yes	[ ] No		
Does any sample contain product, have strong odor or are otherwise suspected to be hot?	[ ] Yes	[X] No		

Receipt Details

Matrix WA	Container type VOA	# of containers received 128
Matrix	Container type	# of containers received
Matrix	Container type	# of containers received

Date and Time Sample Put into Temp Storage Date: 041912 Time: 1740

Quicklog

Are the Sample ID's indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If Sample ID's are listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	
Is the Project ID indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If project ID is listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	
Are the sample collection dates indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If collection dates are listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	
Are the sample collection times indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If collection times are listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	

COMMENTS: