



GETTLER-RYAN INC.



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Environmental Health

August 7, 2009

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

Subject: 2nd Quarter 2009 Groundwater Monitoring and Sampling Report
Rolls-Royce Engine Service Test Facility,
6701 Old Earhart Road, Oakland, California
Alameda County Site #RO0002606

Mr. Plunkett,

On behalf of Rolls-Royce Engine Services-Oakland Inc. (RR), Gettler-Ryan Inc. (GR) has prepared this second quarter 2009 groundwater monitoring and sampling report for the above-referenced property. 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 June 24, 2009, GR personnel conducted quarterly 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, Quarterly Groundwater Sampling (attached).

On June 24, 2009, GR collected depth to groundwater measurements in eighteen wells (MW-1 through MW-15, MW-18, NPORD MW-3 and NPORD MW-4) and checked groundwater for the presence of Separate-Phase Hydrocarbons (SPH). MW-17 was not monitored or sampled as access was not provided by Oakland Airport security personnel. Approximately 0.48 ft of SPH were observed in well MW-18.

Approximately 0.062 gallon (235 milliliters) of SPH and 0.053 gallon (200 milliliters) of water were bailed from well MW-18 and were 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. Field data sheets for this event are attached.

Groundwater monitoring wells MW-1 through MW-15, MW-18, 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 0.48 feet of SPH. Groundwater samples were submitted under chain-of-custody protocol to Kiff Analytical (ELAP #2236) 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 RR.

Results

Groundwater Gradient

On June 24, 2009, the groundwater flow direction varied with hydraulic gradients ranging between 0.003 ft/ft to 0.03 ft/ft. A Potentiometric Map is presented as Figure 3.

Analytical Results

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. Groundwater chemical analytical results for this event are presented in Table 1.

Concentrations of TPHg, TPHd, TPHmo, TPHjf, BTEX, MtBE and naphthalene were reported below the laboratory method detection limits in groundwater samples collected from wells MW-1, MW-2, MW-12, and NPORD MW-3.

TPHg was detected in the water sample collected from well MW-13 at a concentration of 330 parts per billion (ppb). Concentrations of TPHg were reported below the laboratory method detection limits in water samples collected from the remaining wells.

TPHd was detected in seven wells at concentrations ranging from 170 ppb in well MW-13 to 2,900 ppb in well MW-9. Concentrations of TPHmo were detected in seven wells at levels ranging from 100 ppb in well NPORD MW-4 to 5,200 ppb in well MW-9. TPHjf was detected in thirteen wells at concentrations ranging from 59 ppb in well MW-15 to 2,000 ppb in well MW-13.

BTEX constituents were reported as below the laboratory method detection limits in all of the wells, except for benzene detected in well MW-13 at a concentration of 1.0 ppb.

MtBE was detected in wells MW-3, MW-13, MW-14 at concentrations of 0.80 ppb, 1.9 ppb, and 1.2 ppb, respectively. Naphthalene was detected in wells MW-13 and MW-14 at concentrations of 5.2 ppb and 0.52 ppb, respectively. 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:

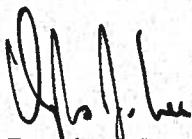
- Non-detectable concentrations of dissolved petroleum hydrocarbons were present in wells MW-1, MW-2, MW-12 and NPORD MW-3 located along the northeast edge of the site;
- Detectable dissolved concentrations of TPHg appear limited to the areas in the vicinity of well MW-13;
- Separate-phase hydrocarbons continue to be limited to the vicinity of MW-18;
- Detectable dissolved concentrations of TPHd, TPHmo and TPHjf were present in a majority of the site wells. The highest concentrations have been detected in the northwest portion of the site in the vicinity of Test Cells 1, 5, 6, and 7;
- GR recommends continuing groundwater monitoring and sampling of all wells to further evaluate groundwater flow direction, groundwater quality and plume stability over time; and
- Based upon GR's review of State Water Resources Control Board (SWRCB) Resolution No. 2009-0042 recently adopted by the SWRCB, GR recommends the reduction of the monitoring and sampling frequency of all site wells to a semi-annual basis.

If you have any questions, please feel free to contact our Rancho Cordova office at (916) 631-1300.

Sincerely,
Gettler-Ryan Inc.



Geoffrey D. Risse
Staff Geologist



Douglas J. Lee
Senior Geologist, P.G. No. 6882



Attachments: Table 1, Groundwater Monitoring Results
 Figure 1, Vicinity Map
 Figure 2, Site Plan
 Figure 3, Potentiometric Map
 Figure 4, Concentration Map
 GR Field Methods and Procedures
 Field Data Sheets
 Laboratory Analytical Report and Chain of Custody

CC: Dave Goldberg, Rolls-Royce Engine Services-Oakland Inc
 Dale Klettke, Port of Oakland

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Sample ID	Sample Date	SPH													
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)
MW-1	10/3/07	7.17	3.04	0.00	4.13	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	7.17	3.02	0.00	4.15	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	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
	9/25/08	7.17	3.03	0.00	4.14	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	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
	3/26/09	7.17	3.30	0.00	3.87	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/24/09	7.17	2.57	0.00	4.60	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-2	10/3/07	7.03	2.80	0.00	4.23	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	7.03	2.94	0.00	4.09	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	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
	9/25/08	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
	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
	3/26/09	7.03	3.15	0.00	3.88	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/24/09	7.03	2.52	0.00	4.51	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-3	10/2/07	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
	3/14/08	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
	6/26/08	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

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		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)
MW-3 (con't)	9/25/08	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
	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
	3/26/09	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
	6/24/09	6.73	4.21	0.00	2.52	<50	<50	<100	460	<0.50	<0.50	<0.50	<0.50	0.80	<0.50
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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	9.79	5.72	0.00	4.07	<50	<50	<100	480¹⁸	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-5	10/2/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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

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MW-5 (con't)	6/24/09	8.35	4.38	0.00	3.97	<50	1,300⁶	2,700	990¹⁸	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-6	10/2/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	9.51	5.46	0.00	4.05	<50	490⁶	1,600	450¹⁸	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-7	10/2/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	9.23	5.22	0.00	4.01	<50	<50	<100	390	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-8	9/14/07	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

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Sample ID	Sample Date	SPH													
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)
MW-8	3/14/08	Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
(con't)	7/3/04	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	8.25	4.21	0.00	4.04	<50	<50	<100	650²	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-9	10/3/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	9.44	5.42	0.00	4.02	<50	2,900⁶	5,200	1,800¹⁸	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-10	10/3/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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

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Sample ID	Sample Date	SPH						TPHd ¹	TPHmo	TPHjf	B	T	E	X	MtBE	Naphthalene
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)									
MW-10 (con't)	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	<0.50
	3/26/09	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	<0.50	1.8
	6/24/09	7.51	3.54	0.00	3.97	<50	710⁸	750	1,400	<0.50						
MW-11	10/3/07	7.60	4.01	0.00	3.59	80	250	490	610	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	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	<0.50
	6/26/08	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	<0.50
	9/25/08	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	<0.50
	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	<0.50
	3/26/09	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	<0.50
	6/24/09	7.60	3.70	0.00	3.90	<50	1,100⁶	2,600	1,200¹⁸	<0.50						
MW-12	10/3/07	7.32	3.61	0.00	3.71	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	7.32	3.35	0.00	3.97	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08	7.32	3.60	0.00	3.72	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	9/25/08	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	<0.50
	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	<0.50
	3/26/09	7.32	3.13	0.00	4.19	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/24/09	7.32	3.21	0.00	4.11	<50	<50	<100	<50	<0.50						

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Sample ID	Sample Date	SPH													
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)
MW-13	10/3/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	6.10	2.91	0.00	3.19	330	170⁸	<100	2,000¹⁹	1.0	<0.50	<0.50	<0.50	1.9	5.2
MW-14	10/2/07	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
	3/14/08	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
	6/26/08	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
	9/25/08	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
	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
	3/26/09	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
	6/24/09	6.42	2.33	0.00	4.09	<50	<50	290	1,100¹⁸	<0.50	<0.50	<0.50	<0.50	1.2	0.52
MW-15	10/2/07	7.51	4.85	0.00	2.66	<50	99	<100	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	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
	6/26/08	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

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Sample ID	Sample Date	SPH														
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)	
MW-15 (con't)	9/25/08	7.51	4.81	0.00	2.70	<50	<50	<100	53	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	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	
	3/26/09	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	
	6/24/09	7.51	4.68	0.00	2.83	<50	<50	<100	59	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-17	9/14/07	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	
	3/14/08				Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland											
	7/3/08	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	<0.50
	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	<0.50
	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	<0.50
	3/26/09	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	<0.50
MW-18	10/2/07	7.05	4.15	0.55	3.34**				Not developed or sampled due to presence of SPH							
	3/14/08	7.05	3.62	0.63	3.93**				Not sampled due to presence of SPH							
	6/26/08	7.05	4.11	1.14	3.85**				Not sampled due to presence of SPH							
	9/25/08	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							
	3/26/09	7.05	3.28	0.55	4.21**				Not sampled due to presence of SPH							

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Sample ID	Sample Date	SPH																
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)			
MW-18 (con't)	6/24/09	7.05	3.53	0.48	3.90**	Not sampled due to presence of SPH												
NPORD MW-3	9/14/07	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	<0.50	<0.50	
	3/14/08				Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
	7/3/08	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	<0.50	<0.50	
	9/25/08	8.11	4.06	0.00	4.05	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	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	<0.50	<0.50	
	3/26/09	8.11	4.22	0.00	3.89	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	6/24/09	8.11	4.02	0.00	4.09	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
NPORD MW-4	9/14/07	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	<0.50	<0.50	
	3/14/08				Not able to sample well-no access agreement between Rolls-Royce and Port of Oakland													
	7/3/08	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	<0.50	<0.50	
	9/25/08	10.06	6.28	0.00	3.78	<50	150 ⁶	240	820 ¹⁶	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50 ⁴	<0.50	<0.50	
	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	<0.50	<0.50	
	3/26/09	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	<0.50	<0.50	
	6/24/09	10.06	6.10	0.00	3.96	<50	200⁶	100	1,000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
QA	9/14/07	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Sample ID	Sample Date	SPH													
		TOC (feet)	DTW (feet)	Thickness (feet)	GWE (feet)	TPHg (ppb)	TPHd ¹ (ppb)	TPHmo (ppb)	TPHjf (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MtBE (ppb)	Naphthalene (ppb)
QA (con't)	10/2/07	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/14/08	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/26/08 ¹⁴	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	7/3/08	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	9/25/08	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/19/08	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	3/26/09	--	--	--	--	<50	<50	<100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	6/24/09	--	--	--	--	<50	NA	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Explanation:

TOC = Top of Casing Elevation

DTW = Depth to Water

GWE = Groundwater Elevation

ft = feet

SPH = Separate Phase Hydrocarbons

ppb = parts per billion ($\mu\text{g/L}$)

NA = Not Analyzed

-- = Not Applicable

QA = Trip Blank

TPHg = Total Petroleum Hydrocarbons as gasoline

Analytical Laboratory:

Kiff Analytical LLC (ELAP # 2236)

Analytical Methods:

TPHg/BTEX/MtBE/Naphthalene by EPA Method 8260B

TPHd/TPHmo/TPHjf by modified EPA Method 8015

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Explanation: (con't)

TPHd = Total Petroleum Hydrocarbons as diesel

TPHmo = Total Petroleum Hydrocarbons as motor oil

TPHjf = Total Petroleum Hydrocarbons as jet fuel

B = Benzene

T = Toluene

E = Ethylbenzene

X = total xylenes

MtBE = Methyl tert-Butyl Ether

** = GWE corrected for the presence of SPH [(TOC-DTW) + (SPH thickness x SPH specific gravity)]. Specific gravity of SPH is assumed to be 0.8.

Notes:

TOC elevations surveyed relative to mean sea level by Morrow Surveying (PLS #5161) on October 8, 2007

¹ With Silica Gel Cleanup

² Discrete peaks, higher boiling hydrocarbons present in sample that are atypical for Jet Fuel

³ Discrete peaks, higher boiling hydrocarbons present in sample that are atypical for Diesel Fuel

⁴ Matrix spike/matrix spike duplicate results associated with these samples for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

⁵ Due to the formation of an emulsion in this sample, the sample was centrifuged and decanted prior to extraction.

⁶ Hydrocarbons present in this sample are higher-boiling than typical Diesel Fuel.

⁷ Hydrocarbons present in this sample are higher-boiling than typical Jet Fuel.

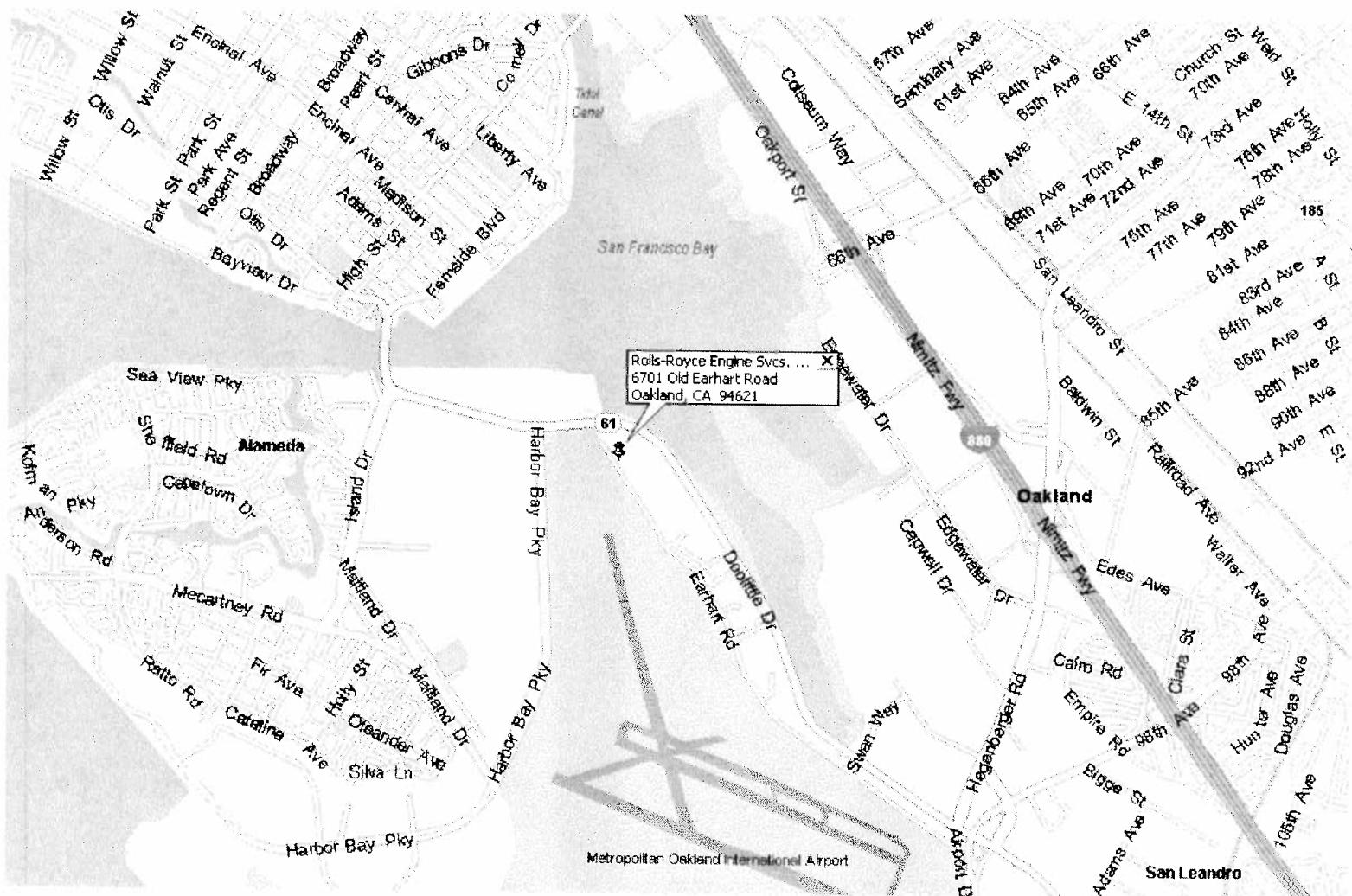
⁸ Lower boiling hydrocarbons are present in this sample that are atypical for Diesel Fuel.

⁹ Discrete peaks present in this sample that are atypical for Jet Fuel.

Table 1
Groundwater Monitoring Results
Rolls-Royce Engine Service Test Facility
6701 Old Earhart Road
Oakland, California

Notes: (con't)

- ¹⁰ Some lower-boiling hydrocarbons than Diesel and some higher-boiling hydrocarbons than Diesel are present in this sample.
- ¹¹ Both lower-boiling and higher-boiling hydrocarbons than Jet Fuel are present in this sample.
- ¹² Sample contained primarily compounds not found in typical Gasoline.
- ¹³ Hydrocarbons present in this sample are lower-boiling than typical Motor Oil
- ¹⁴ Sample was analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4-inch in diameter
- ¹⁵ Lower boiling hydrocarbons are present in this sample that are atypical for Jet Fuel.
- ¹⁶ Chromatographic pattern not typical for Jet Fuel.
- ¹⁷ Diesel method reporting limit for this sample was increased due to interference from Gasoline range hydrocarbons.
- ¹⁸ Higher-boiling hydrocarbons are present in this sample that are atypical for Jet Fuel.
- ¹⁹ Laboratory confirmed results



GETTLER - RYAN INC.

6747 Sierra Court, Suite J
Dublin, CA 94568

(925) 551-7555

PROJECT NUMBER
25-948218.7

REVIEWED BY

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

DATE
11/13/07

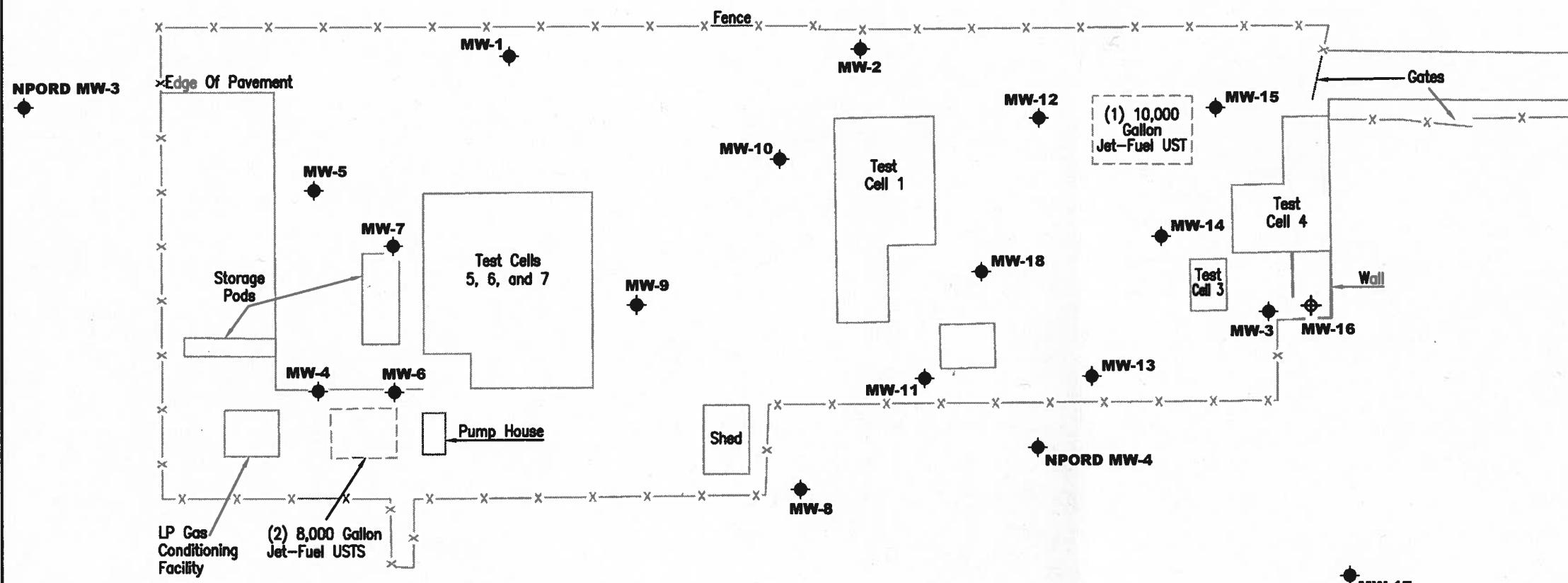
REVISED DATE

1

FIGURE

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.

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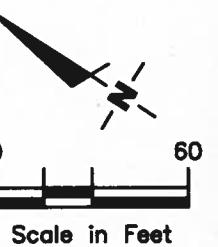
6747 Sierra Court, Suite J
Dublin, CA 94568 (925) 551-7555

PROJECT NUMBER 948218.2
FILE NAME: P:\Enviro\Rolls Royce\007-Rolls Royce.dwg | Layout Tab: Site Plan

SITE PLAN
Rolls-Royce Engine Services Test Facility
6701 Old Elkhart Road
Oakland, CA

DATE 11/07

REVISED DATE



POTENSIOMETRIC MAP
Rolls-Royce Engine Services Test Facility
6701 Old Earthart Road
Oakland, CA

REVISED DATE

June 24, 2009

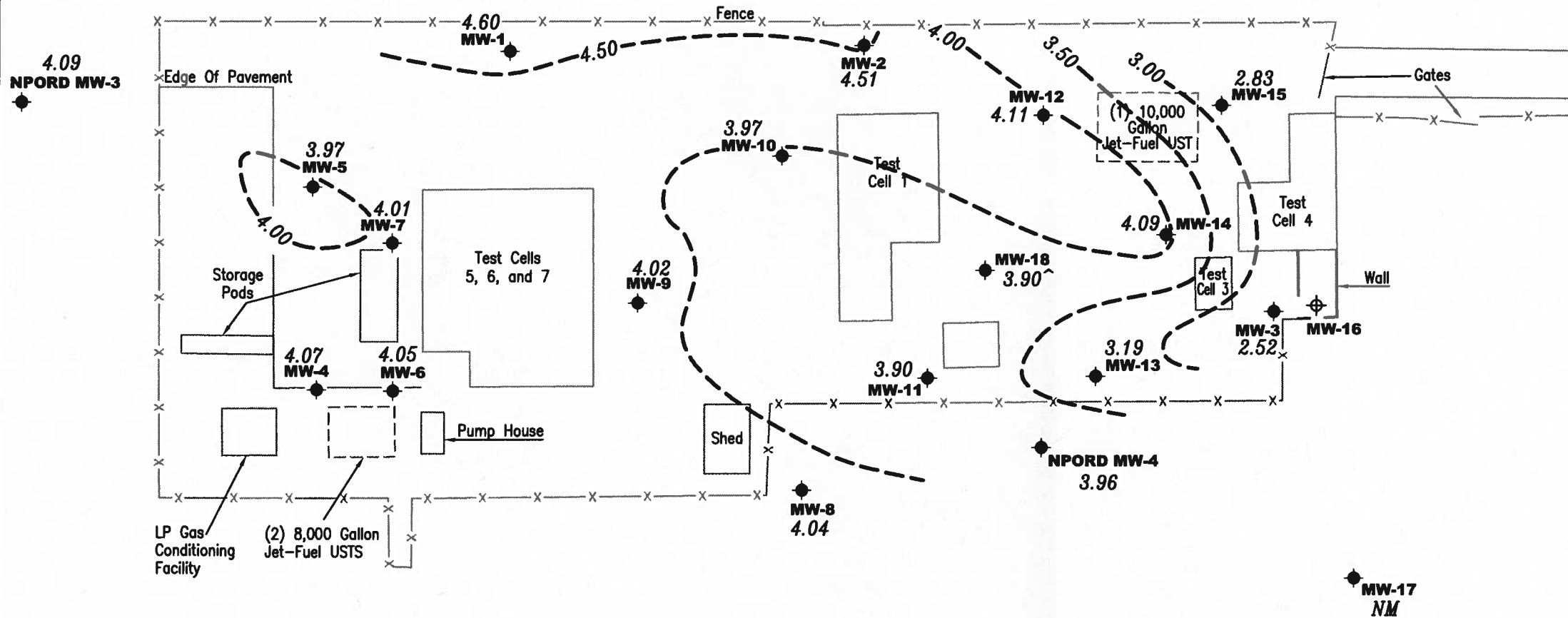
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6747 Sierra Court, Suite J
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(925) 551-7555

REVIEWED BY

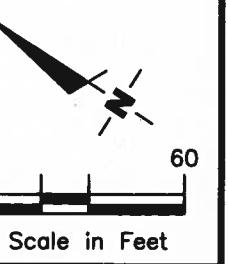
FILE NAME: P:\Enviro\Rolls Royce\Q09-Rolls Royce.dwg | Layout Tab: Plot2

PROJECT NUMBER
948218.2**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
- Groundwater elevation corrected for the presence of separate-phase hydrocarbons
- NM Not Monitored



Groundwater flow direction
varies at a
gradient of 0.003 to 0.03 Ft./Ft.



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

GETTLER - RYAN Inc.

6747 Sierra Court, Suite J
 Dublin, CA 94568
 (925) 561-7555

REVIEWED BY

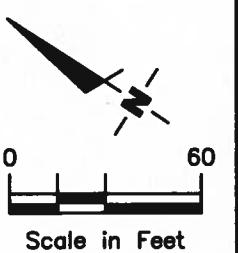
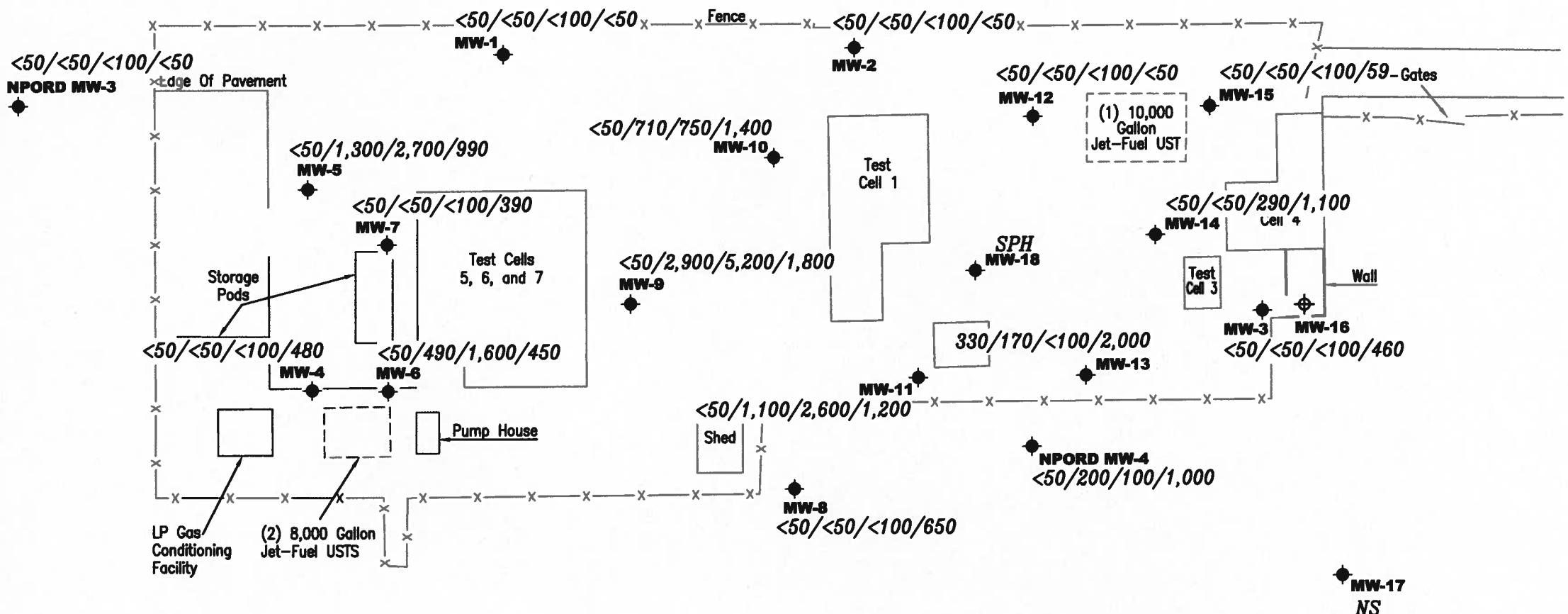
Rolls-Royce, Inc.

PROJECT NUMBER

848218.2

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



STANDARD OPERATING PROCEDURE - QUARTERLY GROUNDWATER SAMPLING

Gettler-Ryan field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analyses by the analytical laboratory. Prior to sample collection, the type of analyses to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analyses is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is recorded in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH, and electrical conductivity are measured a minimum of three times during purging. 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 possible. 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. The samples are labeled to include job number, sample identification, collection date and time, analyses, preservative (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 delivery to the laboratory.

The chain of custody includes the job number, type of preservation, if any, analyses 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. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

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: 6/24/09
Sampler: 38

Comments _____

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: **6-24-09**
Sampler: **311**

Comments _____

WELL CONDITION STATUS SHEET

Client/Facility #: Rolls Royce Engine Test

Job # **25-948218.1**

Site Address: **6701 Old Earhart Road**

Event Date: 6. 24. 09

City: **Oakland, CA**

Sampler: 44

Comments



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: **6-24-09** (inclusive)
 Sampler: **SH**

Well ID **MW-1**
 Well Diameter **2 1/4** in.
 Total Depth **7.46** ft.
 Depth to Water **2.57** ft.

Date Monitored: **6-24-09**

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

Check if water column is less than 0.50 ft.
4.89 xVF **.17** = **.81** x3 case volume = Estimated Purge Volume: **3** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **3.55**

Purge Equipment:
 Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:
 Disposable Bailer **X**
 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): **1021**
 Sample Time/Date: **1050 6-24-09**
 Approx. Flow Rate: **10** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **3.21**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - VS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1025	1	6.93	out of range	20.1		
1030	2	6.89	"	20.2		
1034	3	6.86	"	19.9		

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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218.1**
 Event Date: **6-24-09** (inclusive)
 Sampler: **SLC**

Well ID **MW-2**Date Monitored: **6-24-09**Well Diameter **2 4** in.

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

Total Depth **11.78** ft.**2.52**Depth to Water **2.52** ft.

Check if water column is less than 0.50 ft.

9.26 xVF **.17** = **1.57** x3 case volume = Estimated Purge Volume: **5** gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **4.37****Purge Equipment:**

Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X**
 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): **1103** **(1125)**Weather Conditions: **Clear**Sample Time/Date: **1125** **6-24-09**Water Color: **Grey**Odor: **Y/N**Approx. Flow Rate: **—** gpm.Sediment Description: **heavy**Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **3.02**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm - DS)	Temperature (C F)	D.O. (mg/L)	ORP (mV)
110	2	6.13	out of range	20.6		
116	4	6.07	11	20.4		
120	5	6.06	11	20.4		

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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218.1**
 Event Date: **6-24-09** (inclusive)
 Sampler: **pw**

Well ID: **Mw-3**
 Well Diameter: **2 1/4** in.
 Total Depth: **12.06** ft.
 Depth to Water: **4.21** ft.
7.85 x VF **.17** = **1.33** x3 case volume = Estimated Purge Volume: **4.0** gal.

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **5.78**

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): **1140**
 Sample Time/Date: **12-15 / 6-24-09**
 Approx. Flow Rate: **gpm.**
 Did well de-water? **N** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **5.60**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm ²⁵)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
1145	1.5	7.52	Out of Range	61 F	19.8	
1150	3.0	7.59		20.2		
1155	4.0	7.66	✓	20.6		

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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218.1**
 Event Date: **6/24/09** (inclusive)
 Sampler: **JH**

Well ID	MW-4	Date Monitored:	6/24/09	
Well Diameter	3 1/4 in.	Volume	3/4" = 0.02 1" = 0.04 2" = 0.17 3" = 0.38	
Total Depth	5.89 ft.	Factor (VF)	4" = 0.66 5" = 1.02 6" = 1.50 12" = 5.80	
Depth to Water	5.72 ft.	<input type="checkbox"/> Check if water column is less than 0.50 ft. $4.17 \text{ xVF } .17 = .70$ x3 case volume = Estimated Purge Volume: 2.12 gal.		
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.55				
Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Stainless Steel Bailer _____ Stack Pump _____ Suction Pump _____ Grundfos _____ Peristaltic Pump _____ QED Bladder Pump _____ Other: _____		Sampling Equipment: Disposable Bailer <input checked="" type="checkbox"/> 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): **1350**
 Sample Time/Date: **1415 / 6/24/09**
 Approx. Flow Rate: _____ gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **6.90**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm}$) (μS)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
1353	.76	7.05	795	22.6		
1356	1.5	7.02	806	22.1		
1359	2.25	6.97	814	22.0		

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: _____

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: **6-24-09** (inclusive)
 Sampler: **SH**

Well ID: **MW-5**
 Well Diameter: **(2) 4** in.
 Total Depth: **9.87** ft.
 Depth to Water: **4.38** ft.
5.49 xVF **.17** = **1**

Date Monitored:

6-24-09

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
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Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **5.48**

Purge Equipment:
 Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X**
 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): **0937**
 Sample Time/Date: **1010 / 6-24-09**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **5.03**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm / µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0941	1	6.37	CUT OF RANGE	20.2		
0944	2	6.41	11	19.9		
0950	3	6.32	11	19.8		

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: _____

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: **6/24/09** (inclusive)
 Sampler: **JH**

Well ID: **MW-6**
 Well Diameter: **② 14** in.
 Total Depth: **16.00** ft.
 Depth to Water: **5.46** ft.

Date Monitored:

6/24/09

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
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Check if water column is less than 0.50 ft.

4.54 xVF **.17** = **.77** x3 case volume = Estimated Purge Volume: **2.31** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **6.36**

Purge Equipment:

Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X**
 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): **1310**Weather Conditions: **clear**Sample Time/Date: **1335 16/24/09**Water Color: **cloudy** Odor: **Y/N**Approx. Flow Rate: **—** gpm.Sediment Description: **1.317**Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **6.20**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm} - \mu\text{s}$)	Temperature ($^{\circ}\text{C} / ^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
1312	.75	7.34	2489	21.9		
1315	1.5	7.20	2460	21.7		
1318	2.25	7.18	2431	21.4		

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: _____

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: **6/24/09** (inclusive)
 Sampler: **JH**

Well ID **MW-7**

Date Monitored: **6/24/09**

Well Diameter **(2) 4** in.

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
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Total Depth **10.00** ft.

Depth to Water **5.22** ft.

Check if water column is less than 0.50 ft.

4.78 xVF **.17** = **.81** x3 case volume = Estimated Purge Volume: **2.43** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **6.17**

Purge Equipment:

Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X**
 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:

Sample Time/Date: **1230 / 6/24/09**

Water Color: **cloudy** Odor: **Y/N**

Approx. Flow Rate: **—** gpm.

Sediment Description: **1.5 HZ**

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **6.00**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C} / ^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
1232	.75	7.25	891	21.7		
1235	1.5	7.21	905	21.6		
1238	2.5	7.17	936	21.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-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: **6/24/05** (inclusive)
 Sampler: **JH**

Well ID **MW-8**

Date Monitored: **6/24/05**

Well Diameter **2 1/4** in.

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

Total Depth **9.98** ft.

Depth to Water **4.21** ft.

Check if water column is less than 0.50 ft.

5.77 xVF **.17** = **.98** x3 case volume = Estimated Purge Volume: **2.94** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **5.36**

Purge Equipment:

Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X**
 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): **0950**

Weather Conditions: **clear**

Sample Time/Date: **1015 / 6/24/05**

Water Color: **clay**

Odor: **Y/N**

Approx. Flow Rate: _____ gpm.

Sediment Description: **1,1/4"**

Did well de-water? **N** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **5.00**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm - 15)	Temperature (0 / F)	D.O. (mg/L)	ORP (mV)
0953	1	7.33	1822	21.4		
0956	2	7.29	1857	20.9		
1000	3	7.25	1861	20.6		

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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218.1**
 Event Date: **6-24-09** (inclusive)
 Sampler: **SH**

Well ID: **MW-9**
 Well Diameter: **2 1/4** in.
 Total Depth: **9.98** ft.
 Depth to Water: **5.42** ft.
4.56 x VF **.17** = **1** x3 case volume = Estimated Purge Volume: **3** gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **6.33**

Purge Equipment:
 Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:
 Disposable Bailer **X**
 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): **1309**
 Sample Time/Date: **1345 16-24-09**
 Approx. Flow Rate: **~** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **5-21**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm}$ - US)	Temperature ($^{\circ}\text{C}$ $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
1314	1	7.01	3577	21.3		
1320	2	7.13	3517	20.9		
1326	3	7.16	3506	20.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	1 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: 6-24-09 (inclusive)
 Sampler: SH

Well ID: MW-10
 Well Diameter: 214 in.
 Total Depth: 10.11 ft.
 Depth to Water: 3.54 ft.

Date Monitored: 6-24-09

Volume Factor (VF)	3/4"= 0.02 4"= 0.66	1"= 0.04 5"= 1.02	2"= 0.17 6"= 1.50	3"= 0.38 12"= 5.80
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Check if water column is less than 0.50 ft.

6.57 xVF .17 = 1.12 x3 case volume = Estimated Purge Volume: 3.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.85

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

Sampling Equipment:

Disposable Bailer X
 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): 1141
 Sample Time/Date: 1210 / 6-24-09
 Approx. Flow Rate: 1 gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 9-72

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - TDS)	Temperature (C F)	D.O. (mg/L)	ORP (mV)
<u>1145</u>	<u>1</u>	<u>6.31</u>	<u>out of Range</u>	<u>21.0</u>		
<u>1149</u>	<u>2</u>	<u>6.27</u>	<u>1</u>	<u>20.8</u>		
<u>1153</u>	<u>3.5</u>	<u>6.23</u>	<u>11</u>	<u>20.9</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-10</u>	<u>7</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>KIFF</u>	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: **6-24-09** (inclusive)
 Sampler: **51T**

Well ID **MW-11**
 Well Diameter **(2) 4** in.
 Total Depth **10.00** ft.
 Depth to Water **3.70** ft.
6.30 xVF **.17** = **1.07**

Date Monitored: **6-24-09**

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 than 0.50 ft.
x3 case volume = Estimated Purge Volume: **3.5** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **4.96**

Purge Equipment:
 Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:
 Disposable Bailer **X**
 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): **1223**
 Sample Time/Date: **1255 / 6-24-09**
 Approx. Flow Rate: _____ gpm.
 Did well de-water? **no** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **4.32**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - mS)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
1227	1	6.98	out of range	19.6		
1231	2	7.03	"	19.3		
1237	3.5	7.04	"	19.4		

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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218.1**
 Event Date: **6-24-09** (inclusive)
 Sampler: **AW**

Well ID: **MW-12**
 Well Diameter: **2 1/4** in.
 Total Depth: **9.86** ft.
 Depth to Water: **3.21** ft.

Date Monitored: **6-24-09**

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 than 0.50 ft.

$$6.65 \text{ xVF } .17 = 1.13$$
 x3 case volume = Estimated Purge Volume: **3.5** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **4.54**

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): **1015**
 Sample Time/Date: **1040 / 6-24-09**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **4.45**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - AS)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
1020	1.0	7.65	Out of range	21.9		
1025	2.0	7.76		22.1		
1029	3.5	7.75	V	22.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-12	1 x 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: 6-24-09 (inclusive)
 Sampler: AW

Well ID MW-13
 Well Diameter 2 1/4 in.
 Total Depth 9.50 ft.
 Depth to Water 2.91 ft.
6.59 xVF .66 = 4.35

Date Monitored:

6-24-09

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

 Check if water column is less than 0.50 ft.x3 case volume = 4.25 Estimated Purge Volume: 13.0 gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.25

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): 1225
 Sample Time/Date: 1245 / 6-24-09
 Approx. Flow Rate: 1 - 2 gpm.
 Did well de-water? Y If yes, Time: 1234 Volume: ~9.0 gal. DTW @ Sampling: 4.20

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
1229	4.0	7.47	0	71.0		
1233	6.0	7.65	0	71.3		
	13.0					

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-13	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: **6-24-09** (inclusive)
 Sampler: **AV**

Well ID	MW-14	Date Monitored:	6-24-09
Well Diameter	214 in.	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
Total Depth	1004 ft.		
Depth to Water	2.33 ft.	<input type="checkbox"/> Check if water column is less than 0.50 ft.	
	7.71	x VF .17	= 1.31 x3 case volume = Estimated Purge Volume: 4.0 gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.87			
Purge Equipment:		Sampling Equipment:	
Disposable Bailer	<input checked="" type="checkbox"/>	Disposable Bailer	<input checked="" type="checkbox"/>
Stainless Steel Bailer	<input type="checkbox"/>	Pressure Bailer	<input type="checkbox"/>
Stack Pump	<input type="checkbox"/>	Discrete Bailer	<input type="checkbox"/>
Suction Pump	<input type="checkbox"/>	Peristaltic Pump	<input type="checkbox"/>
Grundfos	<input type="checkbox"/>	QED Bladder Pump	<input type="checkbox"/>
Peristaltic Pump	<input type="checkbox"/>	Other:	<input type="checkbox"/>
QED Bladder Pump	<input type="checkbox"/>		
Other:	<input type="checkbox"/>		
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: **1130 / 6-24-09**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **N** If yes, Time: **—** Volume: **—** gal. DTW @ Sampling: **3.69**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm 48)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
1105	1.5	8.20	0	21.0		
1110	3.0	8.19	↓	21.2		
1115	4.0	8.03	↓	21.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-14	1 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: **6-24-09** (inclusive)
 Sampler: **pw**

Well ID: **MW-15**
 Well Diameter: **2 4** in.
 Total Depth: **9.95** ft.
 Depth to Water: **4.68** ft.

Date Monitored: **6-24-09**

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 than 0.50 ft.
 $5.27 \times VF .17 = 0.89$ x3 case volume = Estimated Purge Volume: **3.0** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **5.73**

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): **0940**
 Sample Time/Date: **1005 / 6-24-09**
 Approx. Flow Rate: **—** gpm.
 Did well de-water? **✓** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **5.44**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{mhos}/\text{cm}$)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
0943	1.0	7.60	out of range	22.0		
0946	2.0	7.73		22.1		
0950	3.0	7.78	↓	22.3		

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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218.1**
 Event Date: **6-24-09** (inclusive)
 Sampler: **pw**

Well ID: **Mw-17**
 Well Diameter: **2 1/4** in.
 Total Depth: **9.79** ft.
 Depth to Water: **N/A** ft.

Date Monitored: **6-24-09**

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

Check if water column is less than 0.50 ft.

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

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

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): _____
 Sample Time/Date: _____ / _____
 Approx. Flow Rate: _____ gpm.
 Did well de-water? _____ If yes, Time: _____

Weather Conditions: _____
 Water Color: _____ Odor: Y / N _____
 Sediment Description: _____
 Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μ mhos/cm - μ S)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

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

COMMENTS: **Inaccessible - Oakland airport escort no show.**

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: **6-24-09** (inclusive)
 Sampler: **AW**

Well ID **MW-18**

Date Monitored: **6-24-09**

Well Diameter **12 1/4** in.

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

Total Depth **9.92** ft.

Depth to Water **3.53** ft.

Check if water column is less than 0.50 ft.

6.39 x VF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

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

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: 1300	(2400 hrs)
Time Completed: 1325	(2400 hrs)
Depth to Product: 3.05	ft
Depth to Water: 3.53	ft
Hydrocarbon Thickness: 0.48	ft
Visual Confirmation/Description: Dark oily	
Skimmer / Absorbant Sock (circle one)	<input checked="" type="checkbox"/>
Amt Removed from Skimmer: 215 ml	gal
Amt Removed from Well: 235 ml	gal
Water Removed: 200 ml	
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 ($\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES	
					x voa vial	YES
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

COMMENTS: **SPI - Skimmer 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: **6/24/05** (inclusive)
 Sampler: **JH**

Well ID **NPORD MW.3**

Date Monitored: **6/24/05**

Well Diameter **2 1/4** in.

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

Total Depth **16.38** ft.

Depth to Water **4.02** ft.

Check if water column is less than 0.50 ft.

7.25 xVF **.66** = **4.81** x3 case volume = Estimated Purge Volume: **14.44** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **5.47**

Purge Equipment:

Disposable Bailer _____
 Stainless Steel Bailer **X** _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X** _____
 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): **1125**

Weather Conditions:

clear

Sample Time/Date: **1200 / 6/24/05**

Water Color: **Cloudy**

Odor: **(Y) N**

Approx. Flow Rate: **1** gpm.

Sediment Description:

1512

Did well de-water? **No**

If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **5.40**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm - 15)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1130	5	7.87	2849	22.4		
1135	10	7.66	2870	22.2		
1140	15	7.49	2905	21.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
NPORD 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**
 Site Address: **6701 Old Earhart Road**
 City: **Oakland, CA**

Job Number: **25-948218,1**
 Event Date: **6/24/09** (inclusive)
 Sampler: **JH**

Well ID **NPord mw-4**

Date Monitored: **6/24/09**

Well Diameter **2 1/4** in.

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

Total Depth **18.20** ft.

Depth to Water **6.10** ft.

Check if water column is less than 0.50 ft.

$$12.10 \text{ xVF } .17 = 2.05 \quad \text{x3 case volume} = \text{Estimated Purge Volume: } 6.17 \text{ gal.}$$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **8.52**

Purge Equipment:

Disposable Bailer **X**
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Peristaltic Pump _____
 QED Bladder Pump _____
 Other: _____

Sampling Equipment:

Disposable Bailer **X**
 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): **1030**

Weather Conditions:

Clear

Sample Time/Date: **1105 / 6/24/09**

Water Color: **clay**

Odor: **ODIN**

1,1L

Approx. Flow Rate: **—** gpm.

Sediment Description: **1,1L**

Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **8.20**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - ¹ NS)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)
1036	2	7.62	2381	22.7		
1042	4	7.49	2398	22.4		
1048	6	7.40	2405	21.9		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<i>MnCl4</i>	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: _____



Report Number : 69078

Date : 07/06/2009

Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr. Suite 170
Rancho Cordova, CA 95670

Subject : 18 Water Samples
Project Name : Rolls-Royce Engine Test Facility
Project Number : 25-948218.1

Dear Mr. Risse,

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

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

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff".

Joel Kiff



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : QA

Matrix : Water

Lab Number : 69078-01

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	06/29/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-1

Matrix : Water

Lab Number : 69078-02

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.9		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	96.4		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	91.1		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	06/30/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	06/30/2009
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	06/30/2009
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	06/30/2009
Octacosane (Silica Gel Surr)	99.6		% Recovery	M EPA 8015	06/30/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-2

Matrix : Water

Lab Number : 69078-03

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.9		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	96.0		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	90.8		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/01/2009
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	94.6		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-3

Matrix : Water

Lab Number : 69078-04

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	0.80	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.5		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	90.9		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	06/30/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	06/30/2009
TPH as Jet Fuel	460	50	ug/L	M EPA 8015	06/30/2009
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	06/30/2009
Octacosane (Silica Gel Surr)	94.6		% Recovery	M EPA 8015	06/30/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-4

Matrix : Water

Lab Number : 69078-05

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.9		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	91.8		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	06/30/2009
TPH as Jet Fuel	480	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	100		% Recovery	M EPA 8015	06/30/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-5

Matrix : Water

Lab Number : 69078-06

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.9		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	96.3		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	91.5		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	2700	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	1300	50	ug/L	M EPA 8015	07/01/2009
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	990	100	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	115		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	115		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-6

Matrix : Water

Lab Number : 69078-07

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	94.4		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	91.0		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	1600	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	490	50	ug/L	M EPA 8015	06/30/2009
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	450	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	97.4		% Recovery	M EPA 8015	06/30/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-7

Matrix : Water

Lab Number : 69078-08

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	96.2		% Recovery	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	96.3		% Recovery	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	92.8		% Recovery	EPA 8260B	06/29/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	390	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-8

Matrix : Water

Lab Number : 69078-09

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	96.1		% Recovery	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	96.2		% Recovery	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	92.4		% Recovery	EPA 8260B	06/29/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	650	50	ug/L	M EPA 8015	07/01/2009
(Note: Discrete peaks, higher boiling hydrocarbons present, atypical for Jet Fuel.)					
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	98.4		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-9

Matrix : Water

Lab Number : 69078-10

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	06/29/2009
TPH as Motor Oil	5200	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	2900	100	ug/L	M EPA 8015	07/01/2009
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	1800	100	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	92.3		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-10

Matrix : Water

Lab Number : 69078-11

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	06/29/2009
TPH as Motor Oil	750	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	710	50	ug/L	M EPA 8015	07/01/2009
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel)					
TPH as Jet Fuel	1400	50	ug/L	M EPA 8015	07/01/2009
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	103		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-11

Matrix : Water

Lab Number : 69078-12

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	06/29/2009
TPH as Motor Oil	2600	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	1100	50	ug/L	M EPA 8015	07/01/2009
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	1200	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	98.1		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	86.9		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-12

Matrix : Water

Lab Number : 69078-13

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	96.9		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	96.3		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	90.5		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/01/2009
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-13

Matrix : Water

Lab Number : 69078-14

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1.0	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	1.9	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	330	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	5.2	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.4		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	97.2		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	90.1		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	170	50	ug/L	M EPA 8015	07/01/2009
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel)					
TPH as Jet Fuel	2000	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	96.9		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-14

Matrix : Water

Lab Number : 69078-15

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	1.2	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	0.52	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	95.6		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	91.6		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	290	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	1100	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	99.4		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : MW-15

Matrix : Water

Lab Number : 69078-16

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	96.4		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	96.0		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	90.8		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	59	50	ug/L	M EPA 8015	07/01/2009
(Note: Higher boiling hydrocarbons present, atypical for Jet Fuel)					
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	103		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : NPORD MW-3

Matrix : Water

Lab Number : 69078-17

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	97.1		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	96.0		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	90.9		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/01/2009
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	07/01/2009



Report Number : 69078

Date : 07/06/2009

Project Name : Rolls-Royce Engine Test Facility

Project Number : 25-948218.1

Sample : NPORD MW-4

Matrix : Water

Lab Number : 69078-18

Sample Date : 06/24/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	06/30/2009
TPH as Motor Oil	100	100	ug/L	M EPA 8015	07/01/2009
TPH as Diesel (w/ Silica Gel)	200	50	ug/L	M EPA 8015	07/01/2009
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
TPH as Jet Fuel	1000	50	ug/L	M EPA 8015	07/01/2009
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	98.4		% Recovery	M EPA 8015	07/01/2009

Report Number : 69078

Date : 07/06/2009

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 (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	06/30/2009
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	06/30/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	06/30/2009
Octacosane (Diesel Surrogate)	111		%	M EPA 8015	06/30/2009
Octacosane (Silica Gel Surr)	105		%	M EPA 8015	06/30/2009
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Jet Fuel	< 50	50	ug/L	M EPA 8015	07/01/2009
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	07/01/2009
Octacosane (Diesel Surrogate)	106		%	M EPA 8015	07/01/2009
Octacosane (Silica Gel Surr)	117		%	M EPA 8015	07/01/2009
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	104		%	EPA 8260B	06/29/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	99.6		%	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	99.3		%	EPA 8260B	06/29/2009
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/30/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2009
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	06/30/2009
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	06/30/2009
Toluene - d8 (Surr)	98.7		%	EPA 8260B	06/30/2009

KIFF ANALYTICAL, LLC

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

Report Number : 69078

Date : 07/06/2009

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	06/29/2009
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/29/2009
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	06/29/2009
1,2-Dichloroethane-d4 (Surr)	95.7		%	EPA 8260B	06/29/2009
4-Bromofluorobenzene (Surr)	91.4		%	EPA 8260B	06/29/2009
Toluene - d8 (Surr)	95.8		%	EPA 8260B	06/29/2009

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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KIFF ANALYTICAL, LLC

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

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-D (Si Gel)	BLANK	<50	1000	1000	811	873	ug/L	M EPA 8015	6/30/09	81.1	87.3	7.36	70-130	25
TPH as Diesel	BLANK	<50	1000	1000	1030	1030	ug/L	M EPA 8015	6/30/09	103	103	0.390	70-130	25
TPH-D (Si Gel)	BLANK	<50	1000	1000	761	914	ug/L	M EPA 8015	7/1/09	76.1	91.4	18.3	70-130	25
TPH as Diesel	BLANK	<50	1000	1000	811	952	ug/L	M EPA 8015	7/1/09	81.1	95.2	16.1	70-130	25
Benzene	69099-03	<0.50	40.6	40.6	39.4	38.7	ug/L	EPA 8260B	6/29/09	97.0	95.3	1.79	70-130	25
Methyl-t-butyl ether	69099-03	<0.50	40.7	40.7	38.1	37.3	ug/L	EPA 8260B	6/29/09	93.7	91.6	2.30	70-130	25
Toluene	69099-03	<0.50	40.1	40.1	41.8	40.7	ug/L	EPA 8260B	6/29/09	104	102	2.49	70-130	25
Benzene	69076-04	0.71	40.6	40.6	41.3	40.4	ug/L	EPA 8260B	6/29/09	99.9	97.7	2.17	70-130	25
Methyl-t-butyl ether	69076-04	52	40.7	40.7	89.7	89.8	ug/L	EPA 8260B	6/29/09	93.4	93.6	0.143	70-130	25
Toluene	69076-04	<0.50	40.1	40.1	41.1	40.6	ug/L	EPA 8260B	6/29/09	102	101	1.22	70-130	25
Benzene	69094-11	<0.50	40.6	40.6	40.6	40.3	ug/L	EPA 8260B	6/30/09	100	99.3	0.661	70-130	25
Methyl-t-butyl ether	69094-11	5.9	40.7	40.7	46.4	46.4	ug/L	EPA 8260B	6/30/09	99.5	99.4	0.0216	70-130	25
Toluene	69094-11	<0.50	40.1	40.1	41.6	41.4	ug/L	EPA 8260B	6/30/09	104	103	0.418	70-130	25
Benzene	69099-02	<0.50	40.6	40.6	41.1	40.5	ug/L	EPA 8260B	6/29/09	101	99.7	1.55	70-130	25
Methyl-t-butyl ether	69099-02	<0.50	40.7	40.7	39.8	39.8	ug/L	EPA 8260B	6/29/09	97.7	97.6	0.0807	70-130	25
Toluene	69099-02	<0.50	40.1	40.1	40.3	39.6	ug/L	EPA 8260B	6/29/09	100	98.8	1.77	70-130	25

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	40.2	ug/L	EPA 8260B	6/29/09	99.2	70-130
Methyl-t-butyl ether	40.9	ug/L	EPA 8260B	6/29/09	107	70-130
Toluene	40.2	ug/L	EPA 8260B	6/29/09	107	70-130
Benzene	40.2	ug/L	EPA 8260B	6/29/09	103	70-130
Methyl-t-butyl ether	40.9	ug/L	EPA 8260B	6/29/09	97.1	70-130
Toluene	40.2	ug/L	EPA 8260B	6/29/09	104	70-130
Benzene	39.9	ug/L	EPA 8260B	6/30/09	99.1	70-130
Methyl-t-butyl ether	40.6	ug/L	EPA 8260B	6/30/09	98.8	70-130
Toluene	39.9	ug/L	EPA 8260B	6/30/09	102	70-130
Benzene	39.9	ug/L	EPA 8260B	6/29/09	99.9	70-130
Methyl-t-butyl ether	40.6	ug/L	EPA 8260B	6/29/09	95.8	70-130
Toluene	39.9	ug/L	EPA 8260B	6/29/09	99.0	70-130

69078

Yes
 No

Chain-of-Custody-Record

Direct Bill To: Geoffrey Risse Gettler-Ryan Inc. 3140 Gold Camp Dr. Rancho Cordova, CA 95670		Facility <u>Rolls-Royce Engine Test Facility</u> Facility Address: <u>6701 Old Earhart Road, Oakland, CA</u> Consultant Project #: <u>25-948218.1</u> Consultant Name: <u>GETTLER-RYAN INC.</u> Address: <u>3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA 95670</u> Project Contact: (Name) <u>Geoffrey Risse</u> e-mail <u>grisse@grinc.com</u> (Phone) <u>916-631-1300x12</u> (Fax) <u>916-631-1317</u>		(Name) <u>Geoffrey Risse</u> (Phone) <u>916-631-1300x12</u> Laboratory Name: <u>Kiff Analytical</u> Laboratory Service Order: Laboratory Service Code: Samples Collected by: (Name) <u>Jim Heppen</u> Signature: <u>[Signature]</u>	
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Sample I.D.	Number of Containers	Matrix S= Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	State Method:								Remarks
				<input checked="" type="checkbox"/> CA	<input type="checkbox"/> OR	<input type="checkbox"/> WA	<input type="checkbox"/> NW	<input type="checkbox"/> Series	<input type="checkbox"/> CO	<input type="checkbox"/> UT	<input type="checkbox"/> ID	
QA	2	W	6/24/09									16 FL
Mw-1	7		1050		X							01
Mw-2			1125		X							02
Mw-3			1215		X							03
Mw-4			1415		X							04
Mw-5			1010		X							05
Mw-6			1335		X							06
Mw-7			1250		X							07
Mw-8			1015		X							08
Mw-9			1345		X							09
Mw-10			1210		X							10
Mw-11			1255		X							11
Mw-12			1040		X							12
Mw-13			1245		X							13

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced (Y/N)	Turn Around Time (Circle Choice)
	Gettler-Ryan	6/25/09 1800		GR INC	06-26-09 1500		
	GR INC	6-26-09 1500		Organization	Date/Time	Iced (Y/N)	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	Iced (Y/N)	
			 Kiff Analytical		06/26/09 1500		

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

69078

Yes
 No

Chain-of-Custody-Record

Direct Bill To: Geoffrey Risse Gettler-Ryan Inc. 3140 Gold Camp Dr. Rancho Cordova, CA 95670		<p>Facility <u>Rolls-Royce Engine Test Facility</u> Facility Address: <u>6701 Old Earhart Road, Oakland, CA</u> Consultant Project #: <u>25-948218.1</u> Consultant Name: <u>GETTLER-RYAN INC.</u> Address: <u>3140 Gold Camp Dr., Suite 170, Rancho Cordova, CA 95670</u> Project Contact: (Name) <u>Geoffrey Risse</u> e-mail <u>grisse@grinc.com</u> (Phone) <u>916-631-1300x12</u> (Fax) <u>916-631-1317</u></p>						<p>(Name) <u>Geoffrey Risse</u> (Phone) <u>916-631-1300x12</u> Laboratory Name: <u>Kiff Analytical</u> Laboratory Service Order: Laboratory Service Code: Samples Collected by: (Name) <u>Jim Herzer</u> Signature: <u>[Signature]</u></p>								
Sample I.D.	Number of Containers	Matrix S= Soil A=Air W=Water C=Charcoal	DATE/SAMPLE COLLECTION TIME	State Method:						Series	<input type="checkbox"/> CO	<input type="checkbox"/> UT	<input type="checkbox"/> ID	Remarks <i>20F2</i>		
				<input checked="" type="checkbox"/> CA	<input type="checkbox"/> OR	<input type="checkbox"/> WA	<input type="checkbox"/> NW									
MW-14	7	W	6/21/09 1130	TPH-Jet A Fuel (8015) (HCL)	TPH-MO (8015) (HCL)	TPH-DRO with Silica Gel Cleanup (8015) (HCL)	X	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)				
MW-15	1	W	6/21/09 1005			X										15
NPORDMW-3	1	W	6/21/09 1200		X											16
NPORDMW-1	1	W	6/21/09 1105		X											17
																18
Relinquished By (Signature)		Organization	Date/Time	Received By (Signature)			Organization	Date/Time	Iced (Y/N)	Turn Around Time (Circle Choice)						
<u>Gettler-Ryan</u>		Gettler-Ryan	6/21/09 1800	<u>GR INC</u>												
Relinquished By (Signature)		Organization	Date/Time	Received By (Signature)			Organization	Date/Time	Iced (Y/N)							
				<u>GR INC</u>												
Relinquished By (Signature)		Organization	Date/Time	Received For Laboratory By (Signature)			Organization	Date/Time	Iced (Y/N)							
<u>GR INC</u>		GR INC	06-26-09 1500	<u>GR INC</u>												

SAMPLE RECEIPT CHECKLIST

SRG#:

69078Date: 062609Project ID: Rolls-Royce Engine Test FacilityMethod of Receipt: Courier Over-the-counter Shipper**COC Inspection**

Is COC present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Custody seals on shipping container?	<input type="checkbox"/> Intact	<input checked="" type="checkbox"/> Broken	<input type="checkbox"/> Not present	<input checked="" type="checkbox"/> N/A
Is COC Signed by Relinquisher? <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Is sampler name legibly indicated on COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is analysis or hold requested for all samples	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is the turnaround time indicated on COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is COC free of whiteout and uninitialed cross-outs?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No, Whiteout	<input type="checkbox"/> No, Cross-outs	

Sample Inspection

Coolant Present: <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No (includes water)	Date/Time <u>062609 11840</u>	<input type="checkbox"/> N/A
Temperature °C <u>5.2</u>	Therm. ID# <u>IP-S</u>	Initial <u>LTR</u>	
Are there custody seals on sample containers?	<input type="checkbox"/> Intact	<input type="checkbox"/> Broken	<input checked="" type="checkbox"/> Not present
Do containers match COC? <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No, COC lists absent sample(s)	<input type="checkbox"/> No, Extra sample(s) present
Are there samples matrices other than soil, water, air or carbon?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Are any sample containers broken, leaking or damaged?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Are preservatives indicated? <input checked="" type="checkbox"/> Yes, on sample containers	<input checked="" type="checkbox"/> Yes, on COC	<input type="checkbox"/> Not indicated	<input type="checkbox"/> N/A
Are preservatives correct for analyses requested?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are samples within holding time for analyses requested?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Are the correct sample containers used for the analyses requested?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Is there sufficient sample to perform testing?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Does any sample contain product, have strong odor or are otherwise suspected to be hot?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

Receipt Details

Matrix <u>WA</u>	Container type <u>Voa</u>	# of containers received <u>121</u>
Matrix _____	Container type _____	# of containers received _____
Matrix _____	Container type _____	# of containers received _____

Date and Time Sample Put into Temp Storage Date: 062609 Time: 1851**Quicklog**

Are the Sample ID's indicated:	<input type="checkbox"/> On COC	<input type="checkbox"/> On sample container(s)	<input checked="" type="checkbox"/> On Both	<input type="checkbox"/> Not indicated
If Sample ID's are listed on both COC and containers, do they all match?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Is the Project ID indicated:	<input type="checkbox"/> On COC	<input type="checkbox"/> On sample container(s)	<input checked="" type="checkbox"/> On Both	<input type="checkbox"/> Not indicated
If project ID is listed on both COC and containers, do they all match?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Are the sample collection dates indicated:	<input type="checkbox"/> On COC	<input type="checkbox"/> On sample container(s)	<input checked="" type="checkbox"/> On Both	<input type="checkbox"/> Not indicated
If collection dates are listed on both COC and containers, do they all match?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Are the sample collection times indicated:	<input type="checkbox"/> On COC	<input type="checkbox"/> On sample container(s)	<input checked="" type="checkbox"/> On Both	<input type="checkbox"/> Not indicated
If collection times are listed on both COC and containers, do they all match?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	

COMMENTS:
