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Hope all is SEMI-ANNUAL GROUNDWATER well with you. MONITORING EVENT APRIL 2002

ARROW RENTALS

They dropaged LIVERMORE, CALIFORNIA thus report by
yesterday (Friday)
so wented to get the out to you right Telk to you soon

> Prepared for: Don-Sul, Inc. 187 North L Street Livermore, California 94550

Date Prepared: May 31, 2002

May 29, 2002 971275

Rita Sullins Don-Sul, Inc. 187 North L Street Livermore, CA 94550

Subject: Se

Semiannual Groundwater Monitoring, April 2002

187 North L Street, Livermore, California

Dear Ms. Sullins:

This report presents the results of semiannual groundwater monitoring conducted in April 2002 at the Arrow Rentals site, located at 187 North L Street in Livermore, California. Included are discussions of measurement and sampling procedures, hydrogeologic data, and analytical data.

#### MEASUREMENT AND SAMPLING PROCEDURES

On April 30, 2002, groundwater monitoring was performed at the site by Environmental Sampling Services of Martinez, California. The locations of the groundwater monitoring wells are illustrated on Figure 1. Sampling procedures and measurements are described in the field activity report, included in Appendix A.

Prior to sampling, the depth to groundwater was measured in all four wells (W-1s, W-3s, W-Bs, and W-Es) to the nearest 0.01 foot using an oil-water interface probe. The interface probe was washed with a Liqui-Nox® detergent solution, rinsed with tap water, and rinsed with distilled water. The depth measurements, groundwater elevation data, and product thicknesses are listed in Table 1. A summary of groundwater elevation and product thickness data is presented in Table 2.

In November 2001, 0.14 foot of floating product was measured in well W-1s. Floating product had not been detected previously in well W-1s, and has not been detected in the other three monitoring wells. On January 25, 2002, Eva Chu of Alameda County Health Care Services Agency (Alameda County) requested that well W-1s be checked for the presence of floating product on a monthly basis. The well was checked in February, March, and April 2002. No floating product has been detected in well W-1s since November 2001.

On April 30, 2002, groundwater samples were collected from three of the four wells (W-1s, W-3s, and W-Bs). Prior to sampling, each well was purged using a dedicated submersible pump to ensure that fresh formation water entered the casing. Each well was purged dry twice, and less than three casing volumes of water were removed. The purge water from the monitoring wells was stored in 55-gallon drums.

Water quality parameters (temperature, pH, specific conductance, turbidity, color, and odor) were recorded at regular intervals during well purging. Water quality parameters for the three wells were recorded in the sampling logs. Copies of the sampling logs are included in the Field Activity Report in Appendix A.

Groundwater samples were collected from the wells using a disposable bailer or submersible pump set to the minimum possible pumping rate. Groundwater samples were collected in clean bottles supplied by the analytical laboratory. The bottles were sealed, labeled, stored on ice in a cooler, and transported under chain-of-custody protocol within 24 hours of collection to McCampbell Analytical, a California-certified laboratory in Pacheco, California. A travel blank was prepared by the laboratory and accompanied the groundwater samples for quality assurance purposes.

The groundwater samples were analyzed for total petroleum hydrocarbons quantified as gasoline (TPH-gasoline) by EPA Method 8015 Modified; total petroleum hydrocarbons quantified as diesel (TPH-diesel) by EPA Method 8015 Modified with a silica gel cleanup; benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA Method 8020; and methyl tertiary butyl ether (MTBE) by EPA Method 8020 Modified. The travel blank was analyzed for TPH-gasoline by EPA Method 8015 Modified, BTEX by EPA Method 8020, and MTBE by EPA Method 8020 Modified.

#### HYDROGEOLOGIC DATA EVALUATION

On April 30, 2002, groundwater elevations in the four monitoring wells ranged from 437.09 feet in well W-Es to 441.80 feet in well W-1s. The elevations were used to construct a potentiometric surface map, as shown on Figure 2. The potentiometric surface shows that groundwater generally flows to the southwest. The hydraulic gradient is approximately 0.038 ft/ft.

#### ANALYTICAL DATA EVALUATION

Analytical data for groundwater samples collected in April 2002 are summarized in Table 3. The laboratory report and chain-of-custody documentation are included in Appendix B.

TPH-gasoline, TPH-diesel, and BTEX were detected in the groundwater samples collected from all three wells. TPH-gasoline was detected at concentrations ranging from 1,400 µg/L in well

W-3s to 66,000 µg/L in well W-1s. TPH-diesel was detected at concentrations ranging from 490 µg/L in well W-3s to 8,200 µg/L in well W-1s. However, the laboratory indicated that a significant amount of the reported diesel was due to gasoline in the sample. Benzene was detected at concentrations ranging from 320 µg/L in well W-3s to 6,000 µg/L in well W-1s. The Maximum Contaminant Level (MCL) for benzene is 1 µg/L. Toluene (up to 2,700 µg/L), ethylbenzene (up to 2,300 µg/L), and xylenes (up to 11,000 µg/L) were also detected in the samples. The concentrations of toluene, ethylbenzene, and xylenes in the sample collected from well W-1s exceeded their corresponding MCLs. MTBE was not detected in the groundwater samples. TPH-gasoline, BTEX, and MTBE were not detected in the travel blank.

#### SUMMARY AND CONCLUSIONS

A summary of analytical data for the four groundwater monitoring wells is presented in Table 4. High levels of TPH-gasoline, TPH-diesel, BTEX, and MTBE have been consistently detected in groundwater samples collected from wells W-1s and W-Bs. Lower levels of TPH-gasoline, TPH-diesel, BTEX, and MTBE have also been detected in samples collected from well W-3s and W-Es.

In November 2001, a small amount (0.14 foot) of floating product was measured on the water column in well W-1s. Floating product was not been detected in well W-1s during any prior monitoring event. Well W-1s was checked monthly from February to April 2002, and no floating product was present. None of the other wells (W-Bs, W-3s, and W-Es) have ever contained measurable floating product.

In April 2002, the direction of groundwater flow beneath the site was southwest. Fluctuations in the concentrations of petroleum hydrocarbons may be related to seasonal variations in groundwater elevations and the groundwater flow direction.

Based upon analytical data collected to date, the contaminant plume beneath the site appears to be stable and/or degrading. The concentrations of petroleum hydrocarbons in samples collected from well W-Bs have steadily decreased over time, indicating that the contamination is attenuating naturally. This trend would be expected, since the sources of contamination (e.g., the underground fuel tanks) have been removed.

#### **HUMAN HEALTH RISK ASSESSMENT**

On April 30, 2001, we submitted our "Revised Human Health Risk Assessment" for the site. In the assessment, we calculated the health risk associated with current residual contamination under various scenarios. We used representative concentrations of contaminants present in the source area of the plume. Based upon the results of the assessment, we concluded the following:

- Contamination at the site is not impacting any known water supply wells.
- The baseline health risk to offsite receptors is within acceptable limits (less than 1x10<sup>-5</sup> for carcinogenic risk and less than 1.0 for non-carcinogenic risk).
- The baseline health risk to onsite receptors due to outdoor air inhalation is within acceptable limits.
- The baseline health risks to onsite receptors due to indoor air inhalation and groundwater ingestion potentially exceed acceptable limits. (However, groundwater at the site is not used.)

The risk assessment demonstrated that various remediation scenarios, combined with institutional controls, can yield acceptable limits of potential human health risk.

#### RECOMMENDATIONS

On January 25, 2002, Eva Chu of Alameda County requested that we submit our recommendations concerning remediation at the site. Our recommendations are based upon current analytical data and the results of the Human Health Risk Assessment.

Analytical data obtained since April 2001 show that the contaminant plume is stable and/or degrading. Therefore, we believe that the recommendations presented in the risk assessment are still appropriate. One alternative included the implementation of institutional controls and annual groundwater monitoring to track natural attenuation. These recommendations from the Revised Human Health Risk Assessment are restated below.

- Place a restriction on the deed that prohibits the use of groundwater beneath the site for agricultural, domestic, commercial, industrial, or municipal purposes.
- Place a notification on the deed and on file with the Livermore Building Department. The
  purpose of the notification is to alert City and County personnel if redevelopment of the
  site is planned and to illustrate the location of residual contamination. This will enable
  Alameda County Environmental Health to evaluate a proposed project with respect to
  potential exposure to residual contamination.
- Collect groundwater samples from monitoring wells W-1s, W-3s, W-Bs, and W-Es
  annually for laboratory analysis to ensure that contaminant concentrations continue to
  decrease. Annual monitoring of the four wells should continue until remediation goals
  have been reached or until the concentrations stabilize. When concentrations reach
  remediation goals, the case should be closed.

A summary of the remediation goals for various scenarios is presented in Table 5. Only the concentrations of contaminants in groundwater samples collected from well W-1s exceed remediation goals. With the exception of benzene, the representative (or average) concentrations of contaminants in the source area meet the remediation goals for a residential or commercial/industrial site with a restriction on groundwater usage. We recommend that the concentrations of contaminants be monitored on an annual basis to track the attenuation of the plume. When the representative concentrations reach the appropriate remediation goal (residential or commercial/industrial), the case should be closed.

We look forward to your approval of the reduction in frequency of groundwater monitoring. Please call us if you have any questions concerning this report.

President

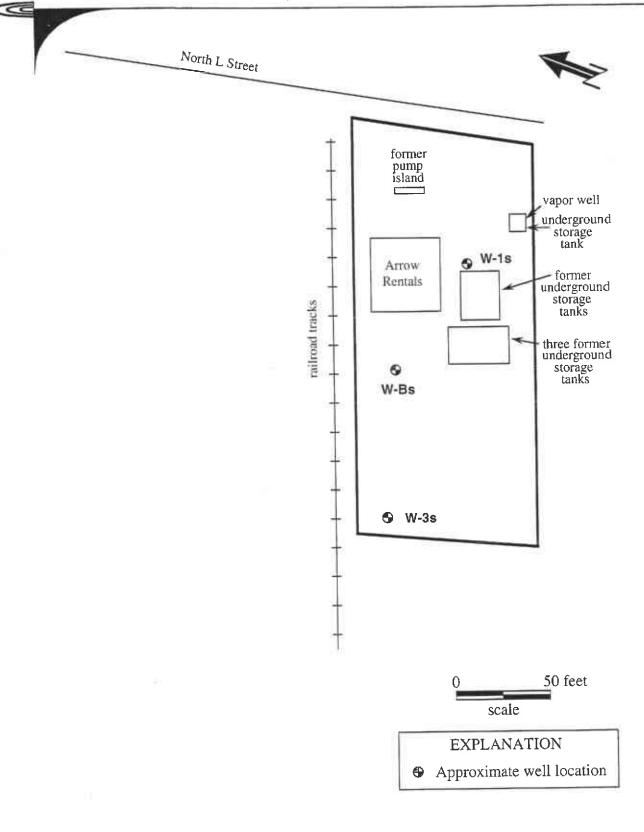
Respectfully yours,

Thomas E. Neely, REA

Hydrogeologist

Attachments

REBECCA A. STERBENTZ
No. 4119



W-Es **⑤** 

Figure 1. SITE MAP 187 North L Street, Livermore, California

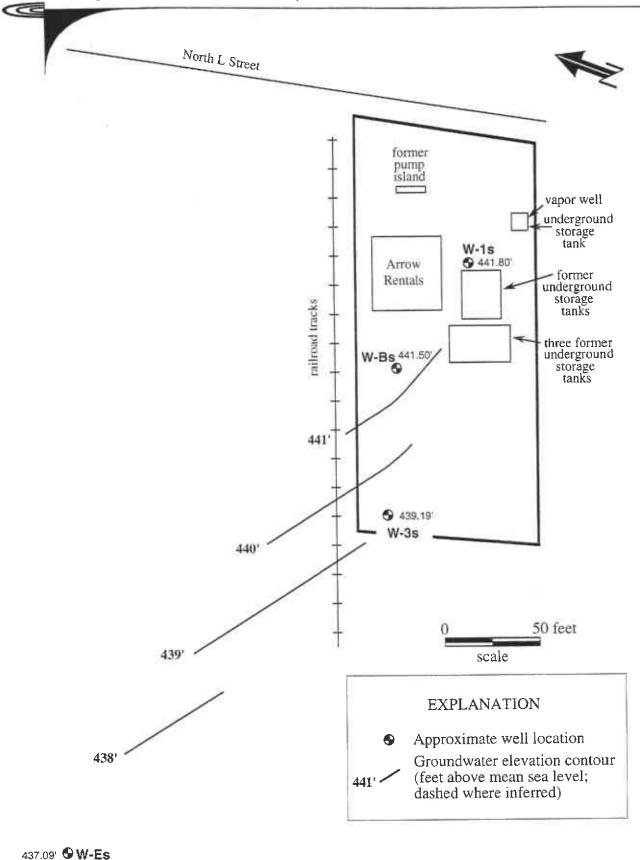
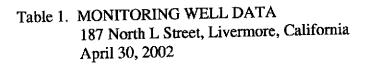


Figure 2. POTENTIOMETRIC SURFACE MAP (4/30/02) 187 North L Street, Livermore, California



Well Identification	Top-of-Casing Elevation (feet above MSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet above MSL)	Product Thickness (feet)
			441.00	0.00
W-1s	479.09	37.29	441.80	0.00
W-3s	476.98	37.79	439.19	0.00
W-Bs	478.82	37.32	441.50	0.00
W-Es	474.66	37.57	437.09	0.00

MSL = mean sea level (elevations based on City of Livermore datum)

TOC = top of well casing



	Crou	ndwater El	evation Da	ta*	Pr	oduct Thic	kness Data	
Date	Well W-1s (feet)	Well W-3s (feet)	Well W-Bs (feet)	Well W-Es (feet)	Well W-1s (feet)	Well W-3s (feet)	Well W-Bs (feet)	Well W-Es (feet)
Date			449.20	443.20	0.00	0.00	0.00	0.00
7/15/97	448.68	447.81	449.20	437.98	0.00	0.00	0.00	0.00
10/29/97	442.64	441.53	459.96	455.39	0.00	0.00	0.00	0.00
4/27/98	460.48	457.25	439.50	440.16	0.00	0.00	0.00	0.00
10/23/98	445.11	444.01		447.25	0.00	0.00	0.00	0.00
4/9/99	453.14	451.02	452.78	441.47	0.00	0.00	0.00	0.00
10/5/99	446.66	445.20	446.72	448.04	0.00	0.00	0.00	0.00
4/5/00	453.12	451.96	453.77	442.43	0.00	0.00	0.00	0.00
10/26/00	447.91	446.50	448.14	442.43	0.00	0.00	0.00	0.00
4/18/01	447.80	446.51	446.89		0.14	0.00	0.00	0.00
11/13/01	435.69	433.32	443.59	431.05	0.00	NM	NM	NM
2/15/02	442.46	NM	NM	NM	0.00	NM	NM	NM
3/15/02	441.32	NM	NM	NM	0.00	NM	ŃМ	NM
4/16/02	441.79	NM	NM	NM	0.00	0.00	0.00	0.00
4/30/02	441.80	439.19	441.50	437.09	0,00	0.00		

NM = not measured

<sup>\*</sup> All groundwater elevations were surveyed relative to a City of Livermore mean sea level datum.

Table 3. ANALYTICAL DATA FOR GROUNDWATER 187 North L Street, Livermore, California April 30, 2002

Well Identification	TPH- gasoline (µg/L)	TPH- diesel (µg/L)	TPH- motor oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	2-Methyl- naphthalene (µg/L)
		0 200±	NA	6,000	2,700	2,300	11,000	< 1,200	NA	NA
W-1s	66,000*	8,200†		320	5.5	24	5.0	< 25	NA	NA
W-3s	1,400*	490†‡	NA		38	660	360	< 170	NA	NA
W-Bs	13,000*	2,300†	NA	1,000		NS	NS	NS	NS	NS
W-Es	NS	NS	NS	NS	NS	< 0.5	< 0.5	< 5	NA	NA
Travel Blank	< 50	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5			
RL MCL	50 NE	50 NE	 NE	0.5 1	0.5 150	0.5 700	0.5 1,750	5 - 1,200 5	NE	NE

pg/L = micrograms per liter [parts per billion (ppb)]

NA = not analyzed

NE = none established

NS = not sampled

TPH-gasoline = total petroleum hydrocarbons quantified as gasoline

TPH-diesel = total petroleum hydrocarbons quantified as diesel

TPH-motor oil = total petroleum hydrocarbons quantified as motor oil

MTBE = methyl tertiary butyl ether

RL = reporting limit

MCL = Maximum Contaminant Level, February 2000

\* Unmodified or weakly modified gasoline is significant.

† Gasoline range compounds are significant.

‡ Oil range compounds are significant.

Table 4. SUMMARY OF ANALYTICAL DATA FOR GROUNDWATER 187 North L Street, Livermore, California

Well	Date	TPH-gasoline	TPH- diesel (µg/L)	TPH- motor oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Lead (µg/L)	Naphthalene (µg/L)	2-Methyl- naphthalene (µg/L)
Identification	Sampled	(µg/L)	(µg/L)				85	1,100	< 500	NA	NA	NA
W-1s	3/22/96	6,400	NA	NA	580	470 18,000	3,500	18,000	< 10,000	NA	NA	NA
W-1s	11/22/96	170,000	NA	NA	13,000	12,000	2,600	16,000	< 800	NA	NA	NA
W-1s	7/15/97	140,000	38,000*	3,000	12,000	19,000	7,800	35,000	< 3,000	NA	NA	NA
W-1s	10/29/97	650,000	180,000	1,600	14,000	250	7,800	870	< 30	< 5	NA	NA
W-1s	4/27/98	6,700	2,200†	NA	410	9,400	1,800	11,000	< 600	NA	NA	NA
W-1s	10/23/98	99,000	18,000†	NA	9,800	7,000	1,800	8,900	360	NA	330	< 50
W-1s	4/9/99	70,000	24,000	NA	6,500 5,500	4,500	2,500	14,000	< 300	NA	510	280
W-1s	10/5/99	82,000	60,000‡	NA	5,500	2,300	1,500	6,100	170	NA	330	110
W-1s	4/5/00	47,000	15,000‡	NA 500	4,300	1,800	1,700	7,600	< 50	NA	350	180
W-1s	10/26/00	50,000	1,200	< 500	3,800	1,800	1,500	7,000	< 330	NA	NA	NA
W-1s	4/18/01	54,000§	6,800**	NA	5,200 9,500	7,800	7,200	33,000	< 2,000	NA	NA	NA
W-1s	11/13/01	750,000§	NΛ	NA	6,000	2,700	2,300	11,000	< 1,200	NA	NA	NA
W-1s	4/30/02	66,000§	8,200**	NA	6,000	2,700	2,500	~- <b>,</b>	·			
				374	13	6.9	5.3	14	< 5	NA	, NA	NA
W-3s	3/22/96	100	NA	NA	270	29.0		100	< 100	NA	NA	NA
W-3s	11/22/96	3,200	NA 0.40*	na 740	230	7	33	51	< 20	NA	NA	NA
W-3s	7/15/97	2,100	340*	740 88	630	31	71	69	< 30	NA	NA	NA
W-3s	10/29/97	2,800	750	oo NA	< 0.5	< 0.5		< 0.5	< 3	NA	NA	NA
W-3s	4/27/98	< 50	< 50	NA NA	500	28		37	35	NA	NA	NA
W-3s	10/23/98	3,800	1,000†	NA NA	240	4		3	< 12	NA	NA	NA
W-3s	4/9/99	980	430	NA NA	290	9.5		9.8	< 6	NA	NA	NA
W-3s	10/5/99	1,500	1,000‡,††	NA NA	150	3.0		5.7	< 5	NA	< 5	< 5
W-3s	4/5/00	810	320‡	140	83	3.5		1.2	< 5	NA	NA	NA
W-3s	10/26/00	310	120		320	8.0		7.0	< 20	NA	NA	NA
W-3s	4/18/01	2,300§	1,600**,‡‡	NA NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3s	11/13/01	NS	NS 100tt ±		320				< 25	NA	NA	NA
W-3s	4/30/02	1,400§	490**,‡‡	NA	JLU	<b></b>			•			
		<. nca	***	NA	9,800	8,000	2,200	11,000	< 5,000	NA	NA	NA
W-Bs	3/22/96	61,000	NA	NA NA	5,100	•			< 2,500	NA	NA	NA
W-Bs	11/22/96	47,000	NA	490	7,800				< 600	NA	NA	NA
W-Bs	7/15/97	66,000	17,000*		6,000	•		-	380	NA	NA	NA
W-Bs	10/29/97	44,000	27,000	4,000	0,000	. 500	, 1,500	- ,				

Table 4 (continued). SUMMARY OF ANALYTICAL DATA FOR GROUNDWATER 187 North L Street, Livermore, California

Well	Date Sampled	TPH- gasoline (µg/L)	TPH- diesel (µg/L)	TPH- motor oil (µg/L)	Benzene (µg/L)	Toluene (μg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (pg/L)	Lead (µg/L)	Naphthalene (µg/L)	2-Methyl- naphthalene (µg/L)
Identification					(100	5,400	1,900	9,100	< 600	NA	NA	NA
W-Bs	4/27/98	63,000	17,000†	NA	6,100 6,700	1,200	1,500	6,200	< 300	NA	NA	NA
W-Bs	10/23/98	48,000	9,600†	NA	4,100	1,200	1,400	5,600	< 300	NA	NA	NA
W-Bs	4/9/99	39,000	12,000	NA	3,800	390	1,600	5,900	< 60	NA	NA	NA
W-Bs	10/5/99	38,000	7,300‡	NA	3,500	1,200	1,400	4,700	< 150	NA	280	68
W-Bs	4/5/00	34,000	9,600‡	NA . 50	2,500	210	1,100	2,600	150	NA	260	88
W-Bs	10/26/00	23,000	650	< 50	2,400	180	880	1,800	< 20	NA	NA	NA
W-Bs	4/18/01	20,000§	2,500**	NA	2,000	130	1,100	1,700	< 150	NA	NA	NA
W-Bs	11/13/01	17,000§	3,600**	NA	1,000	38	660	360	< 170	NA	NA	NA
W-Bs	4/30/02	13,000§	2,300**	NA	1,000	20	000					
		~^		<b>S</b> TA	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA
W-Es	3/22/96	< 50	NA	NA NA	24	0.6	1.8	2.2	< 5	NA	NA	NA
W-Es	11/22/96	280	NA NO	NA NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	7/15/97	NS	NS	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	10/29/97	NS	NS	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	4/27/98	NS	NS	NA NA	< 0.5	0.8	< 0.5	0.8	4	NA	NA	NA
W-Es	10/23/98	82	69†	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	4/9/99	NS	NS	NA NA	< 0.5	< 0.5	< 0.5	< 1.0	4	NA	NA	NA
W-Es	10/5/99	68	88‡	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	4/5/00	NS	NS 150	< 50	0.7	< 0.5	< 0.5	< 1.0	< 5	NA	NA	NA
W-Es	10/26/00	110	< 50	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	4/18/01	NS	NS	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	11/13/01	NS	NS	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	4/30/02	NS	NS	L49	110	1.0						
		<b>50</b>	5.14	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA
Travel Blank		< 50	NA	NA NA	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA
Travel Blank		< 50	NΛ	NA NA	< 0.5	< 0.5	< 0.5	< 0.5	< 3	NA	NA	NA
Travel Blank		< 50	NA	NA NA	< 0.5	< 0.5	< 0.5	< 0.5	< 3	NA	NA	NA
Travel Blank		< 50	NA		< 0.5	< 0.5	< 0.5	< 0.5	< 3	NA	NA	NA
Travel Blanl		< 50	NA	NA NA	< 0.5	< 0.5	< 0.5	< 0.5	< 3	NA	NA	NA
Travel Blanl		< 50	NA		< 0.5	< 0.5	< 0.5	< 0.5	< 3	NA	NA	NA
Travel Blani		< 50	NA	NA NA	< 0.5	< 0.5	< 0.5	< 1.0	< 3	NA	NA	NA
Travel Blanl	k 10/5/99	< 50	NA	NA	₹ 0.5	~ 0.5	. 0,5	<b>-</b>				

# Table 4 (continued). SUMMARY OF ANALYTICAL DATA FOR GROUNDWATER 187 North L Street, Livermore, California

Well Identification	Date Sampled	TPH- gasoline (µg/L)	TPH- diesel (µg/L)	TPH- motor oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (μg/L)	Lead (µg/L)	Naphthalene (µg/L)	2-Methyl- naphthalene (µg/L)
				NYA	1.8	< 0.5	< 0.5	< 1.0	< 5	NA	NA	NA
Travel Blank	4/5/00	< 50	NA	NA	< 0.5	< 0.5	< 0.5	< 1.0	< 5	NA	NA	NA
Travel Blank	10/26/00	< 50	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
Travel Blank	4/18/01	< 50	NA	NA		< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
Travel Blank	11/13/01	< 50	NA	NA	< 0.5		< 0.5	< 0.5	< 5	NA	NΛ	NA
Travel Blank	4/29/02	< 50	NA	NA	< 0.5	< 0.5	< 0.5	<b>\ U.</b> J	\2	1,1.		
				NTP	1	150	700	1,750	5	50	NE	NE
MCL		NE	NE	NE	1		NE.	NE	35	15	NE	NE
AL		NE	NE	NE	NE	NE	NE	1415	20			

pg/L = micrograms per liter [parts per billion (ppb)]

NA = not analyzed

NE = none established

NS = not sampled

TPH-gasoline = total petroleum hydrocarbons quantified as gasoline

1PH-diesel = total petroleum hydrocarbons quantified as diesel

MTBE = methyl tertiary butyl ether

MCL = Maximum Contaminant Level, February 2000

AL = Action Level, February 2000

- \* The method blank contained heavy oil at 120 µg/L.
- † The chromatogram does not match the typical diesel pattern.
- The sample contained a lower boiling point mixture of hydrocarbons quantitated as diesel.
- § Unmodified or weakly modified gasoline is significant.
- \*\* Gasoline range compounds are significant.
- †† The sample contained a higher boiling point hydrocarbon mixture quantitated as diesel.
- ‡‡ Oil range compounds are significant.

Table 5. SUMMARY OF REMEDIATION GOALS 187 North L Street, Livermore, California

	Represe Concent		Remediatio Commercia	I	Remediatio Residentia		Commercia	n Goals for al Scenario la restriction	Residentia	n Goals for all Scenarion I restriction
Chemical	Soil (mg/kg)	GW (μg/L)	Soil (mg/kg)	GW (µg/L)	Soil (mg/kg)	GW (µg/L)	Soil (mg/kg)	GW (µg/L)	Soil (mg/kg)	GW (μg/L)
Benzene Toluene Ethylbenzene Total Xylenes MTBE Naphthalene		5,000 4,200 1,900 9,000 260 350	0.32 11* 12* 72* NA NA	75 2,500 1,500 9,000* 260* 350*	0.32 11* 12* 72* NA NA	15 1,000 500 5,500 75 350*	0.5 11* 12* 72* NA NA	2,000 4,200* 1,900* 9,000* 260* 350*	0.5 11* 12* 72* NA NA	500 4,200* 1,900* 9,000* 260* 350*

NA = not applicable

MTBE = methyl tertiary butyl ether

GW = groundwater

<sup>\*</sup> These values represent current representative concentrations.

### APPENDIX A

FIELD ACTIVITY REPORT

## FIELD ACTIVITY REPORT FOR ARROW RENTALS LIVERMORE, CALIFORNIA

SEMI ANNUAL GROUNDWATER SAMPLING MONITORING APRIL 2002

> Prepared for: Don Sulf Inc. 180 North D Street Livermore, California 94550

> Date Prepared: May 10/2002



#### FIELD ACTIVITY REPORT

# SEMI-ANNUAL GROUNDWATER MONITORING EVENT ARROW RENTALS LIVERMORE, CALIFORNIA

ESS Personnel: Jacqueline Lee and Stephen Penman

Date of Activities: April 30, 2002

#### **Decontamination Procedures**

All downhole equipment was cleaned with a solution of Liqui-Nox® laboratory-grade detergent and potable water, rinsed with potable water, followed by a final rinse with distilled water.

#### **Groundwater Level Measurements**

A total of four monitoring wells were measured for static water level. All readings were performed with an Oil/Water Interface meter (Table 1). Groundwater level measurements were referenced to the surveyor's mark (a black mark on the top of well casing).

Prior to measuring, monitoring wells were allowed to equilibrate with the atmosphere. Depth to groundwater was determined by lowering the interface probe into the well and obtaining three successive readings that agree to within one-hundredth of a foot. The presence of oil was not detected in the four monitoring wells.

#### Field Equipment Calibration

All field measurements were performed in accordance with the instruments' calibration and operating procedures. Field measurements included: pH, Specific Conductance, Turbidity, and Temperature. Physical characteristic such as color and odor were also noted.

#### Well Purging and Sampling Methods

A Grundfos® Redi-Flow submersible pump and dedicated tubing were used for well purging at monitoring wells: W-1s, W-3s, and W-Bs. All wells were purged to dryness twice prior to sample collection. A minimum of 1.5 hours was allowed for well recovery. The wells were sampled for the following analyses: EPA Method 8015M (TPH (Gasoline)/BTEX, and MTBE), and TPH as Diesel. Monitoring well, W-1s was sampled with a new disposable bailer. Monitoring wells, W-3s and W-Bs, were sampled with the submersible pump set at the slowest pump speed.



#### Laboratory, Sample Containers & Preservation

McCampbell Analytical Laboratories of Pacheco, California supplied all sample containers and performed all required analyses. All samples were properly preserved according to analysis.

Gasoline, BTEX, and MTBE samples were contained in two, 40-ml glass containers preserved with hydrochloric acid.

Diesel samples were contained in a non-preserved, 1-liter amber glass container.

#### QA/QC

Trip blanks for EPA Method 8015M were supplied and remained in the cooler containing all sample containers. No other QA/QC samples were required nor requested.

#### Comments

All work was performed under satisfactory workmanship and according to the Alameda County Health and Care Services' directive, dated October 8, 1997, March 15, 1999, January 10, 2000, April 18, 2001, and January 25, 2002.

Jacqueline Lee

President

Attachment

Table 1: Summary of Groundwater Level Measurements and Sample Time

Water Sample Log Sheets

Chain of Custody



Table 1: Summary of Groundwater Level Measurements and Sample Time

Project Name: Arrow Rentals, Livermore, California

Project Task: Semi-Annual Groundwater Level Monitoring Event, April 2002

LOCATION	Date of Measurement	Time of Measurement	Depth to Groundwater (ft.)	Sample Date	Sample Time	QA/QC
W-ls	4/30/2002	10:34	37.29	4/30/2002	14:03	None
W-3s	4/30/2002	10:28	37.79	4/30/2002	13:45	None
W-Bs	4/30/2002	10:31	37.32	4/30/2002		None
W-Es	4/30/2002	10:10	37.57	NA	NA.	NA

NA = Not Applicable



A/ATED /	יבו ואו וי	/ CAMPLE L	10 eus		WELL IDENT	IFICATIO	N: W-1s	DATE: 4/20/02
		SAMPLE LO					<u> </u>	
		w Rentals - Li			,			water Monitoring
					Conditions:C			
Well Desc	ription: 2	3" 4" 5" (	Othe الاق	er:	Well Type: P			
		es No Bolt S	Size	116	Type of lock /	Lock num	Der: I Valst	ter-unknown
Observation							D O.I.	and the call found
								er: Gandfos Sub-Rump
•		lew / Cleaned	_		Bailer Line: N			*
	_				Tap Water DI			
f .	-			<i></i>	Tap Water D			
								Peristaltic Pump
					Spec. Cond. M			
Date/Time	e Calibrat	ed: <b>4 30@:[0:3</b> (	<u>_</u> @Ø@@	[ <b>9</b> )@ 25°C	Spec.Cond. M	eter Calib	ration: Self	Test Other:
								A ppm @ Well Head
								10.890 13:58
					[0,7 (Gais./C)			
"K"= 0	).163(2" W	ell) "K" = 0.65	3(4" well	) "K" = 1.	02(5" well) <b>(</b> K	" = 1.46(6"	well)) "k" =	= 2.61(8" well)
			FIELD V	NATER Q	UALITY PARA	METERS		
					Specific			
Date	Time	Discharge	pН	Temp.	Conductance		Color	Comments
		(galions)		(°C)	ms (us)	(NTU's)	claudy	Strong Petroleum Odor
4/20/02	11:53	5	6.82	18.9	101.5	27.7	ut. Bon.	ľ
	11:59	10	6.78	20,0	120.6	24.3	4	strong Pet. adar Dry & 10.5 gals.
V	12:21	14					->	want day @ 14 Gallers
	13:58	_	_	-	_	~		₹ = 40.89
<del></del>			-					
	1		-					
<u> </u>								
Total Dia	charge: _	14 as	ilons	<u> </u>	Casing Volun	les Remo	veq.	1.3
1				55 Galler			<del></del>	System Other:
	•							TPHgas/BTEX. MTBE.
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					amber, non-pre		Me/Men	Lab Split Field Blank
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Sample	ı by. <u>Jac</u> l	ki Lee and Ste	pitett Pe	ııııları Əl	mature(S).			



WATER (	QUALITY	SAMPLE LO	G SHE	ET \	WELL IDENT	FICATIO	N: W-3s	DATE: 4/30/02							
Project Na	me: Arro	w Rentals - Liv	ermore,	CA F				water Monitoring							
_aboratory	: McCan	npbell Analytic	al, Inc.	Weather C	Conditions: Me	oothy Cla	udy and	(00)							
Well Desci	ription: 2	" 3" 4" 5"	6" Othe	ŗ:	Well Type PV	Stain	less Steel	Other:							
		es/No <u>Bolt</u> S			Type of lock / I	Lock numl	per: <u>ง่อ 1</u>	ask							
Observatio	ons / Com	ments:						/ 10 11 0							
Purge Met	hod: Tef	ion/PVC Dispo	sable Ba	ailer Centr	ifugal Pump F	eristaltic l	oump Othe	er: Grand fes sub framp							
Pump Line	es: NA N	lew / Cleaned /	Dedicat	ted)	Bailer Line: NA	(New) C	ileaned / De	edicated							
					Tap Water DI										
Method of	Cleaning	Bailer: NA A	lconox	Liqui-nox	Tap Water DI	Rinse Ot	her:								
Sampling	Method:	Disp, Teflon B	ailer Q	sp. PVC E	Bailer GrundFo	os Redi-flo	ow Pump	Peristaltic Pump							
pH Meter	Serial No	.: 217254 /	330089	?	Spec. Cond. M	leter Seria	No.: (96H	0203ABV AE							
Date/Time	e Calibrat	ed: <u>4/30 € 10:36</u>	470	'9)@ 25°C	Spec.Cond. M	eter Calibr	ation: (Self	Test Other:							
Method to	Measure	: Water Level:	Solinst	Serial No.:	Jio Ind.	_ P.I.D. Re	eading: <u>N</u>	A ppm @ Well Head							
Water Lev	vel at Sta	rt (DTW):	37.79	2 10:28 V	Vater Level Pri	or To San	npling:	9.32 <del>012:40e</del>							
TD = <u>44.76</u>	3 <b>7.79</b>	(DTW) = 6.97	(ft.of wa	ter) x "K" =	4.6 (Gais./C)	V) x <u>3</u> (N	o. of CV) = _	(3.8 (Gals.)							
"K"= 0	).163(2" w				02(5" well) "K		weii) K -	2.01(6 WBII)							
			FIELD V	VATER Q		METERS									
	FIELD WATER QUALITY PARAMETERS  Specific  Date Time Discharge pH Temp. Conductance Turbidity Color Comments														
Date	Time	Discharge (gallons)	pH	Temp. (°C)	ms (us)	(NTU's)	Coloi	Comments							
4/30/02	10:43	2.0	7,03	19.7	78.7	200	(1000) 14.701	Show in Aurya waster?							
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	10:49	6.0	6.82	20,6	101.7	5.11	Clear								
	10:52		6.80	20.7	100.8	2.29	1.1								
	10:55	10.0	6.84		101.6	5.70	11	Dry @ 10 Gallons							
	11:27	12.4	6.85		102.7	35.3	Cloud-	Dry @ 13 Gallons							
4/30/02		19.4	-	-	_	_	-	¥=39.3Z							
77002	13.40														
	1	10 4	<u>.</u>	<u> </u>	O = ain =: 1/a1 ::	Don Done		2.8							
Total Dis	scharge:	<b>13.0</b> ga	allons	65.6 "	Casing Volum										
Method	of dispos	al of discharge - مواديا بر	d water:	55 Gallor	Drum(s) Po	iy ⊦ank :	Teaunent (	System Other:							
							A CONTROLLED	TPHgas/BTEX, MTBE,							
			sel (1, 1	inter glass	amber, non-pr	eservea)	Me/Mer	) Lab Split Field Blank							
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WATER	QUALIT	/ SAMPLE LO	OG SHE	ET	WELL IDENT	IFICATIO	N: W-Bs	DATE: 4/30/02
Project Na	me: <u>Arro</u>	w Rentals - Li	vermore	<u>, CA</u> 1	Project Task: <u>.</u>	Semi-Ann	ual Ground	water Monitoring
Laboratory	y: <u>McCar</u>	npbell Analytic	al, inc.	Weather (	Conditions: <u>0</u>	vereast.	and cool	
Well Desc	ription: 2	." 3" 4" 5" <b>(</b>	6 Othe	er:	Well Type:			
ls Well Se	cured?(Ý	es/No Bolts	Size <u>15</u>	/16"	Type of lock /	Lock num	ber: Masi	ler-unknown
		nments:				<u> </u>		
Purge Me	thod: Tef	ion/PVC Dispo	sable B	ailer Centi	rifugal Pump F	Peristaltic	Pump Other	er: 60mblos Sub-Romp
Pump Line	es: NA N	lew / Cleaned	Dedica	ted	Bailer Line: N	A New/C	Cleaned / Do	edicated
Method of	f Cleaning	j Pump: NA A	viconox (	Liqui-nox	Tap Water DI	Rinse O	her:	
	-			-	Tap Water DI			
								Peristaltic Pump
					Spec. Cond. M			
Date/Time	e Calibrat	ed: 4/20 & 10:3	<u>ෙ</u> @එඉ	<b>10</b> @ 25°C	Spec.Cond. M	eter Calib	ration: Self	Test Other:
								A ppm @ Well Head
								12.70 @ 13:50
					10.4 (Gals./C)			
"K"= C	),163(2" w	***			02(5" well) ("K			2.61(8" well)
			FIELD V	NATER Q	UALITY PARA	METERS		
					Specific			_
Date	Time	Discharge	рН	Temp.	Conductance mS (uS)		Color	Comments
<i>11.</i> /		(gallons)		(°C)		(NTU's)		Slight Potroleum ader
4/30/02	11:11	5	6.67	19.2	90.8	6.97	Cleur	No Sheem
	मध्य	10	6.65	19.8	98.2	3.16	ù e	Strony Odor
	11:17	15	6.71	19.8	102.0	3.94	1 (	" " 11 mul 6 18 60k
J	12:03	≥0	6.83	19.7	109.0	48.4	Cloudy Let. Boo.	Dry @ 20.5 gallons
	13:50	_	_	-	_	-	-	Z = 42.70
	13.30							7 12.70
-	<u> </u>				<u> </u>			
						<u> </u>		
1			ļ					
Total Dis	charge:	20.5 ga	llons	<u> </u>	Casing Volun	nes Remo	veq.	197
1				55 Gallon	<del></del> -			System Other:
								TPHgas/BTEX, MTBE,
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_		PACHECO	), CA 9455	3-556	ብ	ax: (	925)	798	8-16	22													RU	SH		24 F	IR		8 H			HR	nents
	e: (925) 798-	1040	Bi	ii To	So	me.	<i>t</i> 1	. 4	Re	Dec	<del>}</del> 7	o: <u>*</u>						Ana	iysi	s R	equ	est	Т	1			{	-	Oth	<u>rer</u>	+	Com	Hems
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Report 10: Jac) Company: Environ 6680 Mac Tele: ( ) 925-3	Guari	94553	3										MTB	7	E&L	$\subseteq$	Ì	}	į	!		ļ	831			į							
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Sampler Signatur	e:		X	<u> </u>	<u> </u>					N	ETI	IOD	(§62	5)	88	ydro	Ì	A 60		B	3260		EP.			239.				Vity			
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				Containers	Type Containers						j		E S	csel	olem	olem	EPA 601 / 8010	7	808/	/80	EPA 624 / 8240 / 8260	HPA 625 / 8270	N.	CAM-17 Metals	LUFT 5 Metals	40/7				Specific Conductivity			
SAMPLE ID	LOCATION		75.	13	Ö	_		٥				یا ک	33	is Di	Petra	Petti	60	Ô	809	608	624	625	1/1	4-17	1.5	1 (72				eific			
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### APPENDIX B

LABORATORY REPORT

AND

CHAIN-OF-CUSTODY DOCUMENTATION

3 6 60 1 10 4 1 2 1 4	110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
McCampbell Analytical Inc.	Telephone: 925-798-1620 Fax: 925-798-1622
*	http://www.mccampbell.com E-mail: main@mccampbell.com

Environmental Sampling Services	Client Project ID: Arrow Rentals	Date Sampled:	04/29/02
6680 Alhambra Ave. #102		Date Received:	04/30/02
Matinez, CA 94553	Client Contact: Jacki Lee	Date Reported:	05/07/02
ividentez, Ozi 74333	Client P.O.:	Date Completed:	05/07/02

May 07, 2002

Dear Jacki:

Enclosed are:

- 1). the results of 4 samples from your Arrow Rentals project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Angela Rydelius, Lab Manager

### McCampbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Environmental Sampling Services	Client Project ID: Arrow Rentals	Date Sampled: 04/29/02					
6680 Alhambra Ave. #102		Date Received: 04/30/02					
Matinez, CA 94553	Client Contact: Jacki Lee	Date Extracted: 05/01/02-05/02/02					
	Client P.O.:	Date Analyzed: 05/01/02-05/02/02					

#### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

xtraction m	ethod: SW5030B			Analytical m	ethods: SW802	B/8015Cm			Work Orde	r: 020448
ab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Trip Blank	w	ND	ND	ND	ND	ND	ND	1	102
002A	W-3s	w	1400,a	ND<25	320	5.5	24	5.0	5	116
003A	W-Bs	w	13000,a,i	ND<170	1000	38	660	360	33	107
004A	W-1s	w	66000,a,h	ND<1200	6000	2700	2300	11000	250	104
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	g Limit for DF =1;		50	5	0.5	0.5	0.5	0.5		ug/L
	ns not detected at one reporting limit	S	1	0.05	0.005	0.005	0.005	0.005	n	ng/Kg

<sup>\*</sup>water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in ug/wipe, and TCLP extracts in ug/L.

DF = dilution factor.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) no recognizable pattern.



#### 110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 McCampbell Analytical Inc. Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com Date Sampled: 04/30/02 **Environmental Sampling Services** Client Project ID: Arrow Rentals Date Received: 04/30/02 6680 Alhambra Ave. #102 Date Extracted: 04/30/02 Client Contact: Jacki Lee Matinez, CA 94553 Client P.O.: Date Analyzed: 05/01/02 Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel with Silica Gel Clean-Up\* Work Order: 0204480 Analytical methods: SW8015C Extraction method: SW3510C TPH(d) % SS Client ID Lab ID Matrix 103 1 490,d,g 002BW-3s W 2 ---# 2300,d,i 003B W-Bs W 1 86.3 W 8200,d,h 004B W-1s

Reporting Limit for DF =1;	W	50	μg/L			
ND means not detected at or above the reporting limit	S	NA NA	NA			
* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in						

<sup>#</sup> cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

<sup>+</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

BatchID: 1588

Matrix: W

WorkOrder: 0204480

EPA Method: SW80	21B/8015Cm E	xtraction:	SW5030E	3	Ext. Date:	4/30/02	s	piked Sampl	e ID: 02044	475-003A
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%)
Compound	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(gas)	ND	60	105	114	8.72	112	108	3.6	80	120
МТВЕ	ND	10	85.1	97.4	13.6	105	94.4	10	80	120
Веплепе	ND	10	87.8	95.6	8.55	95.1	94.5	0.65	80	120
Toluene	ND	10	93.7	100	6.97	99.5	98.9	0.60	80	120
Ethylbenzene	ND	10	96.1	101	5.41	101	99.9	0.78	80	120
Xylenes	ND	30	94.7	99.7	5.15	99.3	99.3	0	80	120
%SS	101	10	101	104	2.49	104	105	0.58	80	120

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike, or analyte concentration in sample exceeds spike amount.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / (MS + MSD) \* 2.

\* MS and / or MSD spike recoveries may not be near 100% or their RPDs near 0% if: a) the sample is inhomogeneous AND contains significant concentrations of analyze relative to the amount spiked, or b) If that specific sample matrix interferes with spike recovery.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622

http://www.mccampbell.com E-mail: main@mccampbell.com

### QC SUMMARY REPORT FOR SW8015C

BatchID: 1593

Matrix: W

WorkOrder: 0204480

EPA Method: SW8015C	E	xtraction:	SW35100	2	Ext. Date:	4/30/02	Spiked Sample ID: N/A			
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Critería (%)
Compound	ha\r	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	120	115	4.2	70	130
%SS1	N/A	2500	N/A	N/A	N/A	109	105	3.5	70	130
%SS2	N/A	2500	N/A	N/A	N/A	110	106	3.8	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike, or analyte concentration in sample exceeds spike amount.

% Recovery = 100 \* (MS-Sample)/(Amount Spiked); RPD = 100 \* (MS - MSD)/(MS + MSD) \* 2.

\* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

## McCampbell Analytical Inc.

# **CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

WorkOrder: 0204480

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Environmental Sampling Services 6680 Alhambra Ave. #102 Matinez, CA 94553 TEL:

FAX:

ProjectNo: Arrow Rentals

PO:

30-Apr-02

			<u></u>				Requested	Tests	2	
Sample ID	ClientSampID	Matrix	Collection Date	Bottle 5	SW8015C	8021B/8015	WEITH-			
				T		1 A				
0204480-001	Trip Blank	Water	4/29/02							
0204480-002	W-3s	Water	4/30/02 1:45:00 PM		<u> </u>					
0204480-003	W-Bs	Water	4/30/02 1:55:00 PM		В	A				
0204480-003	W-1s	Water	4/30/02 2:03:00 PM		В	Α				<u> </u>

#### Comments:

Date/Time	Date/Time
Relinquished by:	Received by:
	Received by:
•	Received by:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

020480

CHAIN OF CUSTODY RECORD McCAMPBELL ANALYTICAL INC. TURN AROUND TIME 110 2<sup>nd</sup> AVENUE SOUTH, #D7 PACHECO, CA 94553-5560 48 HR 72 HR 24 HR RUSH Fax: (925) 798-1622 Telephone: (925) 798-1620 Comments Other Analysis Request Bill To: same as "Report To: Report To: Jacki Lee TPH as Diesel (8015) 75,11 (4, 621 Clerin Co. Total Petroleum Oil & Grease (5520 B&F/B&F) Company: Environmental Sampling Scrubes
6680 Alhambra Avenue, #102
Martinez, CA 94553
Tele: ()925-372-8108
Fax: (X9) PAH's / PNA's by EPA 625 / 8270 / 8310 BTEX & TPH as Gas (602/8020 + 8015)/ MTBE Total Petroleum Hydrocarbons (418.1) Fax: ( X925)312-6705 Project Name: Appen Realuls BTEX ONLY (EPA 602 / 8020) Project #: Lead (7240/7421/239.2/6010) RCI EPA 608 / 8080 PCB's ONLY Project Location: Liver more EPA 624 / 8240 / 8260 EPA 625 / 8270 Sampler Signature; Specific Conductivity METHOD MATRIX SAMPLING PRESERVED CAM-17 Metals EPA 608 / 8080 LUFT 5 Metals LOCATION SAMPLE ID Soil Air Sludge Other HCI HNO, Other Date Time pH TSS Ĭce 429/02 TRIP BLANK X 1/31/02 13:45 1/20/02 13:55 3 3 3 W-35 14103 W-15 Received By; VOAS O&C METALS OTHER Nate: Time: Relinquished Bx: PRESERVATION 万义 ICE/t<sup>n</sup> APPROPRIATE Received By: GOOD CONDITION Relinquished By: Date: Time: HEAD SPACE ABSENT CONTAINERS\_ Received By: Time: Date: Relinquished By: