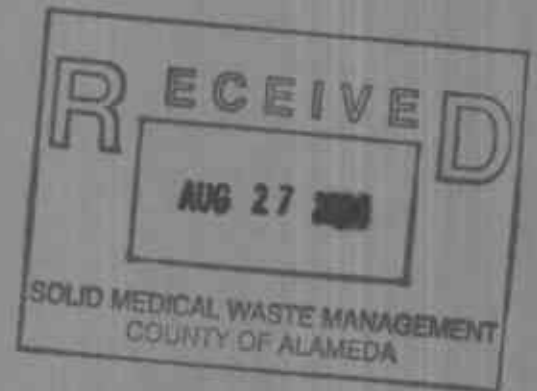


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**ARROW RENTALS
LIVERMORE, CALIFORNIA**

**SEMIANNUAL GROUNDWATER MONITORING EVENT
APRIL 2004**



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

Date Prepared: May 27, 2004

8-24-04

Hi Eva,

Hope all is well. Didn't
hear from you last time I
wrote.

Can we go to annual
monitoring?

Sincerely
Pat Sullins

ARROW RENTALS
187 NORTH L ST.
LIVERMORE, CA 94550

925 449-4741

May 18, 2004
971275

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

Subject: Semiannual Groundwater Monitoring, April 2004
187 North L Street, Livermore, California

Dear Ms. Sullins:

This report presents the results of semiannual groundwater monitoring conducted in April 2004 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 29, 2004, 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 meter. The interface meter was washed with a Liqui-Nox® detergent solution, rinsed with tap water, and rinsed with distilled water. No floating product was present in any of the wells. 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.

On April 29, 2004, groundwater samples were collected from the four wells (W-1s, W-3s, W-Bs, and W-Es). Prior to sampling, each well was purged to ensure that fresh formation water entered the casing. Wells W-1s, W-3s, and W-Bs were purged using a submersible pump equipped with dedicated tubing. Well W-Es was purged using a new disposable bailer. At least three casing volumes of groundwater were purged from each well. 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 four 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 new disposable bailer. Groundwater samples were collected in clean bottles supplied by the analytical laboratory. The bottles were sealed, labeled, stored on ice in a cooler at 4° Celsius, 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 transported with the samples to the laboratory.

The groundwater samples were analyzed for total petroleum hydrocarbons quantified as gasoline (TPH-gasoline) by EPA Method 8015C; total petroleum hydrocarbons quantified as diesel (TPH-diesel) by EPA Method 8015C with a silica gel cleanup; benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA Method 8021B; and methyl tertiary butyl ether (MTBE) by EPA Method 8021B. For quality assurance purposes, the travel blank was analyzed for TPH-gasoline by EPA Method 8015C, BTEX by EPA Method 8021B, and MTBE by EPA Method 8021B.

HYDROGEOLOGIC DATA EVALUATION

On April 29, 2004, groundwater elevations in the four monitoring wells ranged from 443.43 feet in well W-Es to 448.99 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 flows to the west. The hydraulic gradient is approximately 0.019 ft/ft.

ANALYTICAL DATA EVALUATION

Analytical data for groundwater samples collected in April 2004 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. TPH-gasoline was detected at concentrations ranging from 55 $\mu\text{g/L}$ in well W-Es to 39,000 $\mu\text{g/L}$ in well W-1s. TPH-diesel was detected at concentrations ranging from 87 $\mu\text{g/L}$ in well W-Es to 5,900 $\mu\text{g/L}$ in well W-1s. However, the laboratory indicated that a significant amount of the reported diesel in the samples was due to the presence of gasoline.

Benzene was detected at concentrations ranging from 0.62 $\mu\text{g/L}$ in well W-Es to 3,700 $\mu\text{g/L}$ in well W-1s. The Maximum Contaminant Level (MCL) for benzene is 1 $\mu\text{g/L}$. Toluene (up to 1,200 $\mu\text{g/L}$), ethylbenzene (up to 1,300 $\mu\text{g/L}$), and xylenes (up to 4,700 $\mu\text{g/L}$) 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. The levels of toluene and ethylbenzene in the sample collected from well W-Bs exceeded their corresponding MCLs. MTBE was not detected in the samples. TPH-gasoline, BTEX, and MTBE were not detected in the travel blank.

AQUIFER SCIENCES, INC.

SUMMARY AND CONCLUSIONS

A summary of analytical data for the four groundwater monitoring wells is presented in Table 4. Elevated 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.

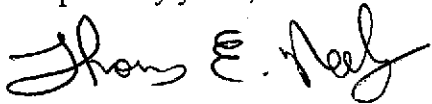
At the beginning of each semiannual monitoring event, the wells are checked for the presence of floating product. No floating product was present in any of the wells in April 2004. Previously, a small amount (0.14 foot) of floating product was measured on the water column in well W-1s in November 2001. None of the other wells (W-Bs, W-3s, and W-Es) have ever contained measurable floating product.

In April 2004, the direction of groundwater flow beneath the site was toward the west. 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.

Please call us if you have any questions concerning this report.

Respectfully yours,

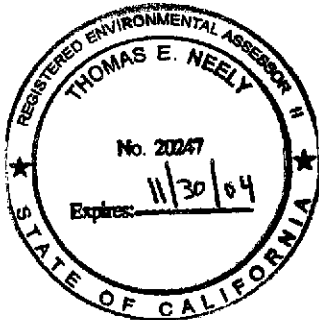


Thomas E. Neely, REA II
Senior Hydrogeologist

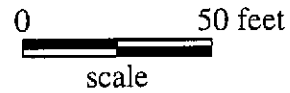
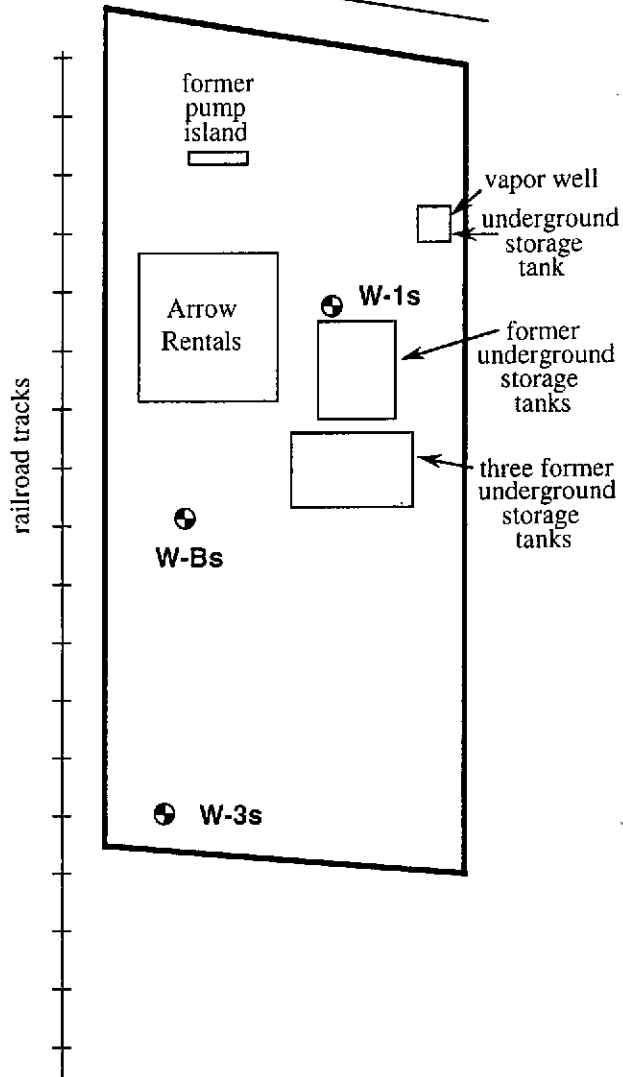


Rebecca A. Sterbentz, RG, CHG
President

Attachments



North L Street



EXPLANATION	
⊕	Approximate well location

W-Es
⊕

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

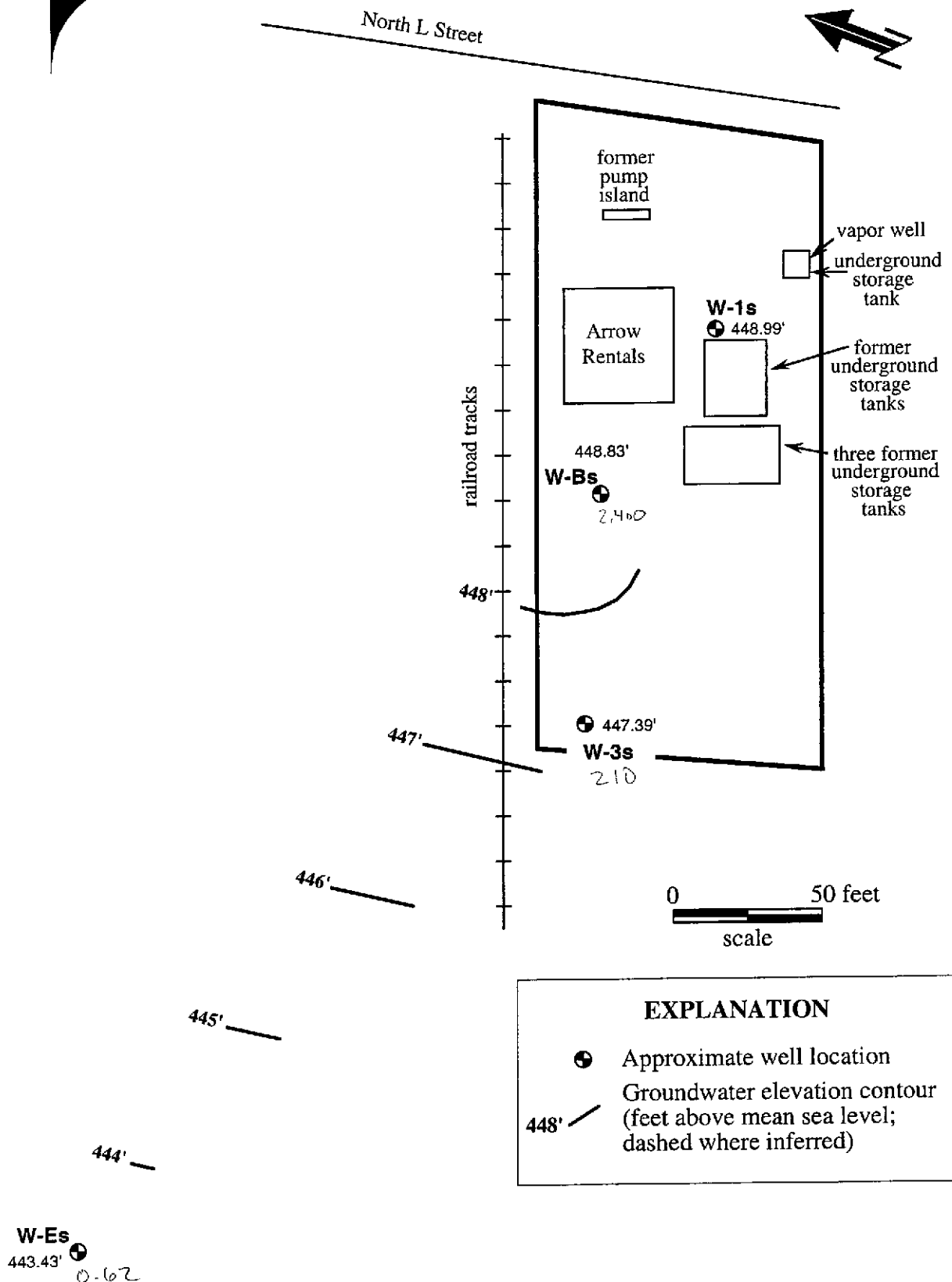


Figure 2. POTENTIOMETRIC SURFACE MAP (4/29/04)
187 North L Street, Livermore, California

Table 1. MONITORING WELL DATA
 187 North L Street, Livermore, California
 April 29, 2004

Well Identification	Top-of-Casing Elevation (feet above MSL)	Depth to Water (feet below TOC)	Groundwater Elevation (feet above MSL)	Product Thickness (feet)
W-1s	479.09	30.10	448.99	0.00
W-3s	476.98	29.59	447.39	0.00
W-Bs	478.82	29.99	448.83	0.00
W-Es	474.66	31.23	443.43	0.00

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

TOC = top of well casing

Table 2. CUMULATIVE GROUNDWATER ELEVATION AND PRODUCT THICKNESS DATA
187 North L Street, Livermore, California

Date	Groundwater Elevation Data*				Product Thickness Data			
	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)
7/15/97	448.68	447.81	449.20	443.20	0.00	0.00	0.00	0.00
10/29/97	442.64	441.53	442.19	437.98	0.00	0.00	0.00	0.00
4/27/98	460.48	457.25	459.96	455.39	0.00	0.00	0.00	0.00
10/23/98	445.11	444.01	445.60	440.16	0.00	0.00	0.00	0.00
4/9/99	453.14	451.02	452.78	447.25	0.00	0.00	0.00	0.00
10/5/99	446.66	445.20	446.72	441.47	0.00	0.00	0.00	0.00
4/5/00	453.12	451.96	453.77	448.04	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	442.63	0.00	0.00	0.00	0.00
11/13/01	435.69	433.32	443.59	431.05	0.14	0.00	0.00	0.00
2/15/02	442.46	NM	NM	NM	0.00	NM	NM	NM
3/15/02	441.32	NM	NM	NM	0.00	NM	NM	NM
4/16/02	441.79	NM	NM	NM	0.00	NM	NM	NM
4/30/02	441.80	439.19	441.50	437.09	0.00	0.00	0.00	0.00
9/30/02	439.17	437.01	439.39	434.50	0.00	0.00	0.00	0.00
3/19/03	446.83	445.03	446.74	441.80	0.00	0.00	0.00	0.00
9/16/03	440.88	438.50	441.40	436.14	0.00	0.00	0.00	0.00
4/29/04	448.99	447.39	448.83	443.43	0.00	0.00	0.00	0.00

NM = not measured

* 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 29, 2004

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)
W-1s	39,000 ^{a,b}	5,900 ^{b,c,d}	NA	3,700	1,200	810	4,700	< 2,500	NA	NA
W-3s	1,300 ^a	400 ^c	NA	210	5.1	23	4.5	< 25	NA	NA
W-Bs	15,000 ^a	3,300 ^c	NA	2,400	170	1,300	950	< 200	NA	NA
W-Es	55 ^a	87 ^{c,e}	NA	0.62	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA
Travel Blank	< 50	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA
MCL	NE	NE	NE	1	150	700	1,750	5	NE	NE

µg/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

MCL = Maximum Contaminant Level, September 2003

a: Unmodified or weakly modified gasoline is significant.

b: Lighter than water immiscible sheen/product is present.

c: Gasoline range compounds are significant.

d: Diesel range compounds are significant; no recognizable pattern.

e: One to a few isolated peaks are present.

Table 4. 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)
W-1s	3/22/96	6,400	NA	NA	580	470	85	1,100	< 500	NA	NA	NA
W-1s	11/22/96	170,000	NA	NA	13,000	18,000	3,500	18,000	< 10,000	NA	NA	NA
W-1s	7/15/97	140,000	38,000 ^a	3,000	12,000	12,000	2,600	16,000	< 800	NA	NA	NA
W-1s	10/29/97	650,000	180,000	1,600	14,000	19,000	7,800	35,000	< 3,000	NA	NA	NA
W-1s	4/27/98	6,700	2,200 ^b	NA	410	250	77	870	< 30	< 5	NA	NA
W-1s	10/23/98	99,000	18,000 ^b	NA	9,800	9,400	1,800	11,000	< 600	NA	NA	NA
W-1s	4/9/99	70,000	24,000	NA	6,500	7,000	1,800	8,900	360	NA	330	< 50
W-1s	10/5/99	82,000	60,000 ^c	NA	5,500	4,500	2,500	14,000	< 300	NA	510	280
W-1s	4/5/00	47,000	15000 ^c	NA	4,300	2,300	1,500	6,100	170	NA	330	110
W-1s	10/26/00	50,000	1,200	< 500	3,800	1,800	1,700	7,600	< 50	NA	350	180
W-1s	4/18/01	54,000 ^d	6,800 ^c	NA	5,200	1,800	1,500	7,000	< 330	NA	NA	NA
W-1s	11/13/01	750,000 ^d	NA	NA	9,500	7,800	7,200	33,000	< 2,000	NA	NA	NA
W-1s	4/30/02	66,000 ^d	8,200 ^c	NA	6,000	2,700	2,300	11,000	< 1,200	NA	NA	NA
W-1s	9/30/02	51,000 ^d	1,200 ^c	< 2500	5,600	1,500	2,000	9,400	< 1,000	NA	NA	NA
W-1s	3/19/03	49,000 ^d	9,800 ^{e,h}	NA	3,400	880	1,300	7,300	< 500	NA	NA	NA
W-1s	9/16/03	53,000 ^{dj}	24,000 ^{cj}	NA	4,100	1,200	1,400	6,600	< 1,000	NA	NA	NA
W-1s	4/29/04	39,000 ^{dj}	5,900 ^{e,hj}	NA	3,700	1,200	810	4,700	< 2,500	NA	NA	NA
W-3s	3/22/96	100	NA	NA	13	6.9	5.3	14	< 5	NA	NA	NA
W-3s	11/22/96	3,200	NA	NA	270	29.0	63.0	100	< 100	NA	NA	NA
W-3s	7/15/97	2,100	340 ^a	740	230	7	33	51	< 20	NA	NA	NA
W-3s	10/29/97	2,800	750	88	630	31	71	69	< 30	NA	NA	NA
W-3s	4/27/98	< 50	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 3	NA	NA	NA

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)
W-3s	10/23/98	3,800	1,000 ^b	NA	500	28	90	37	35	NA	NA	NA
W-3s	4/9/99	980	430	NA	240	4	37	3	< 12	NA	NA	NA
W-3s	10/5/99	1,500	1,000 ^{c,f}	NA	290	9.5	53	9.8	< 6	NA	NA	NA
W-3s	4/5/00	810	320 ^c	NA	150	3.0	9.0	5.7	< 5	NA	< 5	< 5
W-3s	10/26/00	310	120	140	83	3.5	6.4	1.2	< 5	NA	NA	NA
W-3s	4/18/01	2,300 ^d	1,600 ^{e,g}	NA	320	8.0	16	7.0	< 20	NA	NA	NA
W-3s	11/13/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3s	4/30/02	1,400 ^d	490 ^{c,g}	NA	320	5.5	24	5.0	< 25	NA	NA	NA
W-3s	9/30/02	420 ^d	390 ^g	1,400	68	1.4	3.1	1.1	< 5.0	NA	NA	NA
W-3s	3/19/03	5,300 ^d	1,500 ^c	NA	920	24	140	27	< 25	NA	NA	NA
W-3s	9/16/03	1,600 ^d	1,400 ^{g,e,h}	NA	270	1.7	5.2	< 0.5	< 5.0	NA	NA	NA
W-3s	4/29/04	1,300 ^d	400 ^c	NA	210	5.1	23	4.5	< 25	NA	NA	NA
W-Bs	3/22/96	61,000	NA	NA	9,800	8,000	2,200	11,000	< 5,000	NA	NA	NA
W-Bs	11/22/96	47,000	NA	NA	5,100	3,100	1,400	7,800	< 2,500	NA	NA	NA
W-Bs	7/15/97	66,000	17,000 ^a	490	7,800	4,900	1,900	10,000	< 600	NA	NA	NA
W-Bs	10/29/97	44,000	27,000	4,000	6,000	500	1,500	6,400	380	NA	NA	NA
W-Bs	4/27/98	63,000	17,000 ^b	NA	6,100	5,400	1,900	9,100	< 600	NA	NA	NA
W-Bs	10/23/98	48,000	9,600 ^b	NA	6,700	1,200	1,500	6,200	< 300	NA	NA	NA
W-Bs	4/9/99	39,000	12,000	NA	4,100	1,900	1,400	5,600	< 300	NA	NA	NA
W-Bs	10/5/99	38,000	7,300 ^c	NA	3,800	390	1,600	5,900	< 60	NA	NA	NA
W-Bs	4/5/00	34,000	9,600 ^c	NA	3,500	1,200	1,400	4,700	< 150	NA	280	68
W-Bs	10/26/00	23,000	650	< 50	2,500	210	1,100	2,600	150	NA	260	88

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)
W-Bs	4/18/01	20,000 ^a	2,500 ^e	NA	2,400	180	880	1,800	< 20	NA	NA	NA
W-Bs	11/13/01	17,000 ^a	3,600 ^e	NA	2,000	130	1,100	1,700	< 150	NA	NA	NA
W-Bs	4/30/02	13,000 ^a	2,300 ^e	NA	1,000	38	660	360	< 170	NA	NA	NA
W-Bs	9/30/02	7,100 ^a	1,500 ^e	< 250	940	28	260	93	< 250	NA	NA	NA
W-Bs	3/19/03	14,000 ^a	3,900 ^e	NA	1,200	77	820	900	< 120	NA	NA	NA
W-Bs	9/16/03	9,400 ^a	1,900 ^e	NA	1,300	36	580	160	< 150	NA	NA	NA
W-Bs	4/29/04	15,000 ^a	3,300 ^e	NA	2,400	170	1,300	950	< 200	NA	NA	NA
W-Es	3/22/96	< 50	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA
W-Es	11/22/96	280	NA	NA	24	0.6	1.8	2.2	< 5	NA	NA	NA
W-Es	7/15/97	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
W-Es	4/27/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	10/23/98	82	69 ^b	NA	< 0.5	0.8	< 0.5	0.8	4	NA	NA	NA
W-Es	4/9/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	10/5/99	68	88 ^c	NA	< 0.5	< 0.5	< 0.5	< 1.0	4	NA	NA	NA
W-Es	4/5/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	10/26/00	110	< 50	< 50	0.7	< 0.5	< 0.5	< 1.0	< 5	NA	NA	NA
W-Es	4/18/01	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
W-Es	4/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	9/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	3/19/03	86 ⁱ	61 ^e	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA

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)
W-Es	9/16/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-Es	4/29/04	55 _d	87 _{e,k}	NA	0.62	<0.5	<0.5	<0.5	<5.0	NA	NA	NA
Travel Blank	3/20/96	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<5	NA	NA	NA
Travel Blank	11/22/96	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<5	NA	NA	NA
Travel Blank	7/15/97	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	NA
Travel Blank	10/29/97	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	NA
Travel Blank	4/27/98	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	NA
Travel Blank	10/23/98	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	NA
Travel Blank	4/9/99	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	NA
Travel Blank	10/5/99	<50	NA	NA	<0.5	<0.5	<0.5	<1.0	<3	NA	NA	NA
Travel Blank	4/5/00	<50	NA	NA	1.8	<0.5	<0.5	<1.0	<5	NA	NA	NA
Travel Blank	10/26/00	<50	NA	NA	<0.5	<0.5	<0.5	<1.0	<5	NA	NA	NA
Travel Blank	4/18/01	<50	NA	NA	<0.5	<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	<0.5	<5.0	NA	NA	NA
Travel Blank	4/29/02	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<5	NA	NA	NA
Travel Blank	3/19/03	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA
Travel Blank	9/16/03	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA
Travel Blank	4/29/04	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA
MCL		NE	NE	NE	1	150	700	1,750	5	50	NE	NE
AL		NE	NE	NE	NE	NE	NE	NE	35	15	NE	NE

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

$\mu\text{g/L}$ = 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

MTBE = methyl tertiary butyl ether

MCL = Maximum Contaminant Level, September 2003

AL = Action Level, September 2003

- a: The method blank contained heavy oil at 120 $\mu\text{g/L}$.
- b: The chromatogram does not match the typical diesel pattern.
- c: The sample contained a lower boiling point mixture of hydrocarbons quantitated as diesel.
- d: Unmodified or weakly modified gasoline is significant.
- e: Gasoline range compounds are significant.
- f: The sample contained a higher boiling point hydrocarbon mixture quantitated as diesel.
- g: Oil range compounds are significant.
- h: Diesel range compounds are significant; no recognizable pattern.
- i: Heavier gasoline range compounds are significant (aged gasoline?).
- j: Lighter than water immiscible sheen/product is present.
- k: One to a few isolated peaks are present.



**Environmental
Sampling Services**

May 6, 2004

Ms. Rebecca Sterbentz, RG, CHG, REA
Aquifer Sciences Inc.
3680-A Mt. Diablo Blvd.
Lafayette, California 94549

Subject: March 2004 Semi-Annual Groundwater Monitoring Program for Arrow Rentals, Livermore, California

Dear Ms. Sterbentz,

Please find enclosed a copy of Field Activity Report and analytical results for the above-mentioned project.

As you may know, the March sampling event was delayed until April because of lack of payment.

If you have any questions regarding our report, please do not hesitate to call us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jacqueline Lee', written over a horizontal line.

Jacqueline Lee
President

Enclosure

FIELD ACTIVITY REPORT

**ARROW RENTALS
LIVERMORE, CALIFORNIA**

**SEMIANNUAL GROUNDWATER MONITORING EVENT
APRIL 2004**

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

Date Prepared: April 30, 2004



FIELD ACTIVITY REPORT

ARROW RENTALS LIVERMORE, CALIFORNIA SEMI-ANNUAL GROUNDWATER MONITORING EVENT APRIL 2004

ESS Personnel: Jacqueline Lee and Steve Penman
Date of Activities: April 29, 2004

Decontamination Procedures

Prior to use, 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.

Depth to Groundwater Level Measurements

Depth to groundwater level measurements for four monitoring wells were measured and recorded prior to any purging activities. Each well was allowed to equilibrate to atmospheric pressure for approximately 15 minutes. All readings were performed with an Oil/Water Interface meter. Each depth to groundwater level measurement was referenced to the north rim at the top of PVC well casing (Table 1). Three successive readings that agreed to within one-hundredth of a foot determined depth to groundwater.

The presence of floating product was not detected in any the monitoring wells.

Field Equipment Calibration

All field instrumentation was calibrated in accordance with the instruments' calibration procedures prior to use. The pH meter was calibrated using three pH buffer standard solutions: 4, 7, and 10. The Specific Conductivity/Temperature meter is factory calibrated and runs through a self-test when the meter is activated. The turbidity meter was calibrated against a 0.02 NTUs standard.

Field measurements included: pH, Specific Conductance (uS), Turbidity (NTUs), and Temperature (°C). Physical characteristic such as color and odor were also noted.

Well Purging and Sampling Methods

ESS used standard purging protocol, the minimum removal of three casing volumes and stabilization of water quality parameters, prior to sampling unless a well is purged dry. If the well goes dry, it is allowed to recover at least one time, prior to sampling.



**Environmental
Sampling Services**

A Grundfos® Redi-Flow submersible pump was used for purging and sampling at monitoring wells: W-1s, W-3s, and W-Bs. For each well, new tubing was used and stored in labeled large plastic bags for future use.

Monitoring well W-1s was pumped dry once and allowed to recover for approximately 50 minutes. A total of 67 gallons (3.16 casing volumes) were removed prior to sampling.

Monitoring well W-Es required 8 gallons to be removed; therefore it was purged and sampled with a new disposable PVC bailer.

Chemical Analyses

McCampbell Analytical Inc. of Pacheco, California supplied all sample containers, trip blank, and performed all required analyses. All monitoring wells were sampled for the following analyses: TPH-Gasoline/BTEX, and MTBE (EPA Method 8015M/8020) and TPH as Diesel (EPA Method 8015M) with Silica Gel Cleanup.

Each TPH-Gasoline, BTEX, and MTBE sample set was contained in three 40-ml clear glass containers preserved with hydrochloric acid.

Each Diesel sample was contained in a non-preserved, 1-liter amber glass container.

Sample Handling

Sample labels were completed with waterproof ink and affixed to sample containers prior to sample collection.

During decanting, all 40-ml sample containers were slightly tilted to avoid aeration or degassing. Each container was filled until there was a meniscus at the top. After capping, the container was inverted and tapped lightly to check for air bubbles. The absence of air bubbles indicated a successful seal. Non-preserved sample containers were filled to capacity.

Sample handling was conducted under strict chain of custody procedures. All sample containers were wiped dry, sealed in Ziploc® bags, and placed in a chilled cooler for storage and shipment to the laboratory. All samples were relinquished to McCampbell Analytical Inc. on April 29, 2004.

QA/QC

One trip blank container was submitted for TPH-Gasoline, BTEX and MTBE analysis. The trip blank was re-labeled and remained in the sample cooler throughout the sampling event.

No other QA/QC samples were required nor requested.



Storage of Wastewater

Approximately 220 gallons of wastewater was generated during this sampling event and stored in four labeled 55-gallon drums. ESS will arrange for proper disposal following confirmation of chemical analysis.

Comments

After removing the well monument cover for monitoring well W-3s, a significant amount of nuisance mud was covering the wellhead. ESS removed mud and replaced the existing well cap with a new well cap.

A handwritten signature in black ink, appearing to read "J. Lee", is written over a horizontal line.

Jacqueline Lee
President

Enclosure

Table 1: Summary of Groundwater Monitoring and Sampling
Water Sample Log Sheets
Copy of Chain of Custody



Table 1: Summary of April 2004 Semi-Annual Groundwater Monitoring Event
Site Location: Arrow Rentals, 187 North L Street, Livermore, California

Well I.D.	Groundwater Level Measurement (ft., TOC)	Product Depth Measurement (ft., TOC)	Time of Measurement	Sample Date	Sample Time	QA/QC
W-1s	30.10	ND	10:07	4/29/2004	14:00	None
W-3s	29.59	ND	10:01	4/29/2004	10:58	None
W-Bs	29.99	ND	10:04	4/29/2004	12:08	None
W-Es	31.23	ND	9:45	4/29/2004	13:39	None

Legend:

ND = Not Detected



WATER QUALITY SAMPLE LOG SHEET WELL IDENTIFICATION W-1s DATE 4/29/04

Project Name: Arrow Rentals - Livermore, CA Project Task: Semi-Annual Groundwater Monitoring
 Laboratory: McC Campbell Analytical, Inc. Weather Conditions: Sunny, clear skies, warm
 Well Description: 2" 3" 4" 5" 6 Other: _____ Well Type: PVC Stainless Steel Other: _____
 Is Well Secured? Yes / No Bolt Size: 15/16" Type of Lock / Lock number: Master/Unknown Number
 Observations / Comments: _____
 Purge Method: Teflon/PVC Disposable Bailer Centrifugal Pump Grundfos Pump Other: _____
 Pump Lines: NA New/ Cleaned/ Dedicated Bailer Line: NA New/ Cleaned / Dedicated
 Method of Cleaning Pump: NA Alconox Liqui-nox Tap Water DI Rinse Other: _____
 Method of Cleaning Bailer: NA Alconox Liqui-nox Tap Water DI Rinse Other: well water
 Sampling Method: Disp. Teflon Bailer Disp. PVC Bailer GrundFos Redi-flow Pump Peristaltic Pump
 pH Meter Serial No.: 217254 / 330089 Spec. Cond. Meter Serial No.: 96H0203AB / AE
 Date/Time Calibrated: 4/29 10:04 7 10 @ 25°C Spec. Cond. Meter Calibration: Self Test Other: _____
 Method to Measure Water Level: Solinst Serial No.: 122.25(1/2) P.I.D. Reading: NA ppm @ Well Head
 Water Level at Start (DTW): 30.10 @ 10:07 Water Level Prior To Sampling: 39.79
 TD = 44.64 - 30.10 (DTW) = 14.54 (ft. of water) x "K" = 212 (Gals./CV) x 3 (No. of CV) = 636 (Gals.)
 "K" = 0.163(2" well) "K" = 0.653(4" well) "K" = 1.02(5" well) "K" = 1.46(6" well) "k" = 2.61(8" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Gallons)	pH	Temp. (°C)	Specific Conductance mS (uS)	Turbidity (NTU's)	Color	Comments
<u>4/29/04</u>	<u>12:25</u>	<u>10.0</u>	<u>6.91</u>	<u>21.5</u>	<u>563</u>	<u>4.64</u>	<u>lt. gray</u>	<u>slight pet. odor</u>
	<u>12:31</u>	<u>20.0</u>	<u>6.90</u>	<u>21.2</u>	<u>542</u>	<u>2.75</u>	"	"
	<u>12:39</u>	<u>30.0</u>	<u>6.82</u>	<u>21.0</u>	<u>523</u>	<u>4.53</u>	"	"
	<u>12:49</u>	<u>40.0</u>	<u>6.86</u>	<u>21.1</u>	<u>512</u>	<u>8.37</u>	"	"
	<u>13:01</u>	<u>50.0</u>	<u>6.86</u>	<u>22.8</u>	<u>550</u>	<u>30.1</u>	<u>lt. yell/gray</u>	<u>Dry @ 55 gallons</u>
	<u>13:52</u>	<u>60.0</u>	<u>6.92</u>	<u>21.6</u>	<u>527</u>	<u>10.9</u>	<u>lt. yell/gray</u>	
	<u>13:55</u>	<u>65.0</u>	<u>6.87</u>	<u>21.1</u>	<u>497.8</u>	<u>9.2</u>	"	

Total Discharge: 67 Gallons Casing Volumes Removed: 3.16
 Method of disposal of discharged water: 55 Gallon Drums Poly Tank Treatment System Other: _____
 Date/Time Sampled: 4/29/04 @ 14:00 Analysis: TPH-Gas/BTEX, MTBE (EPA 8015M/8020);
TPH-Diesel w/Silica Gel Cleanup (EPA 8015M)
 Number of Sample Containers: 4 Preservative: None HCl
 QA/QC: None @ _____ as an Equipment Blank Duplicate MS/MSD Lab Split Field Blank
 Comments: _____

Sampled By Jacki Lee / Stephen Penman Casey Wheable Recorded by [Signature]



WATER QUALITY SAMPLE LOG SHEET WELL IDENTIFICATION W-3s DATE 4/29/04

Project Name: Arrow Rentals - Livermore, CA Project Task: Semi-Annual Groundwater Monitoring
 Laboratory: McC Campbell Analytical, Inc. Weather Conditions: Sunny, clear skies ~70's°F
 Well Description: 2" 3" 4" 5" 6" Other: _____ Well Type: PVC Stainless Steel Other: _____
 Is Well Secured? Yes / No Bolt Size: 15/16" Type of Lock / Lock number: No lock
 Observations / Comments: Installed new 4" well cap (Nuisance mud covering well cap)
 Purge Method: Teflon/PVC Disposable Bailer Centrifugal Pump Grundfos Pump Other: _____
 Pump Lines: NA New / Cleaned / Dedicated Bailer Line: NA New / Cleaned / Dedicated
 Method of Cleaning Pump: NA Alconox Liqui-nox Tap Water DI Rinse Other: _____
 Method of Cleaning Bailer: NA Alconox Liqui-nox Tap Water DI Rinse Other: Well Water Rinse
 Sampling Method: Disp. Teflon Bailer Disp. PVC Bailer GrundFos Redi-flow Pump Peristaltic Pump
 pH Meter Serial No.: 217254 / 330089 Spec. Cond. Meter Serial No.: 96H0203AB / AE
 Date/Time Calibrated: 4/29 @ 10:03 7 10 @ 25°C Spec. Cond. Meter Calibration: Self Test Other: _____
 Method to Measure Water Level: Solinst Serial No.: 122.25(%) P.I.D. Reading: NA ppm @ Well Head
 Water Level at Start (DTW): 29.59 @ 10:01 Water Level Prior To Sampling: 30.03
 TD = 44.76 - 29.59 (DTW) = 15.17 (ft. of water) x "K" = 9.95 (Gals./CV) x 3 (No. of CV) = 29.8 (Gals.)
 "K" = 0.163(2" well) "K" = 0.653(4" well) "K" = 1.02(5" well) "K" = 1.46(6" well) "K" = 2.61(8" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Gallons)	pH	Temp. (°C)	Specific Conductance mS (S)	Turbidity (NTU's)	Color	Comments
<u>4/29/04</u>	<u>10:27</u>	<u>5.0</u>	<u>7.35</u>	<u>20.6</u>	<u>527</u>	<u>8.64</u>	<u>clear</u>	
	<u>10:31</u>	<u>10.0</u>	<u>7.19</u>	<u>20.1</u>	<u>477</u>	<u>3.51</u>	<u>clear</u>	
	<u>10:36</u>	<u>15.0</u>	<u>7.22</u>	<u>19.9</u>	<u>472.1</u>	<u>1.36</u>	<u>clear</u>	
	<u>10:40</u>	<u>20.0</u>	<u>7.17</u>	<u>20.1</u>	<u>479.8</u>	<u>0.91</u>	<u>clear</u>	
	<u>10:44</u>	<u>25.0</u>	<u>7.11</u>	<u>20.0</u>	<u>479.9</u>	<u>0.47</u>	<u>clear</u>	
	<u>10:50</u>	<u>30.0</u>	<u>7.10</u>	<u>19.9</u>	<u>483.2</u>	<u>0.36</u>	<u>clear</u>	

Total Discharge: 30.0 Gallons Casing Volumes Removed: 3.21
 Method of disposal of discharged water: 55 Gallon Drums Poly Tank Treatment System Other: _____
 Date/Time Sampled: 4/29/04 @ 10:58 Analysis: TPH-Gas/BTEX, MTBE (EPA 8015M/8020);
TPH-Diesel w/Silica Gel Cleanup (EPA 8015M)

Number of Sample Containers: 4 Preservative: None HCl
 QA/QC: None @ _____ as an Equipment Blank Duplicate MS/MSD Lab Split Field Blank
 Comments: _____

Sampled By Jacki Lee Stephen Penman Casey Wheable Recorded by [Signature] [Signature]



**Environmental
Sampling Services**

WATER QUALITY SAMPLE LOG SHEET WELL IDENTIFICATION **W-Bs** DATE **9/29/04**

Project Name: Arrow Rentals - Livermore, CA Project Task: Semi-Annual Groundwater Monitoring
 Laboratory: McC Campbell Analytical, Inc. Weather Conditions: Sunny, clear skies ~70's F
 Well Description: 2" 3" 4" 5" (6") Other: _____ Well Type: PVC Stainless Steel Other: _____
 Is Well Secured? Yes / No Bolt Size: 15/16" Type of Lock / Lock number: Master/Unknown Number

Observations / Comments: _____
 Purge Method: Teflon/PVC Disposable Bailer Centrifugal Pump Grundfos Pump Other: _____
 Pump Lines: NA (New) / Cleaned (Dedicated) Bailer Line: NA (New) / Cleaned / Dedicated
 Method of Cleaning Pump: NA Alconox (Liqui-nox Tap Water DI Rinse) Other: _____
 Method of Cleaning Bailer: NA Alconox Liqui-nox Tap Water DI Rinse Other: well water
 Sampling Method: Disp. Teflon Bailer (Disp. PVC Bailer) GrundFos Redi-flow Pump Peristaltic Pump
 pH Meter Serial No.: 217254 / (330089) Spec. Cond. Meter Serial No.: (96H0203AB) AE
 Date/Time Calibrated: 4/9/04 10:04 4 7 10 @ 25°C Spec. Cond. Meter Calibration: Self Test Other: _____
 Method to Measure Water Level: Solinst Serial No.: 122.25 (%W) P.I.D. Reading: NA ppm @ Well Head
 Water Level at Start (DTW): 29.99 @ 10:04 Water Level Prior To Sampling: 35.10
 TD = 44.47 - 29.99 (DTW) = 14.48 (ft. of water) x "K" = 21.1 (Gals./CV) x 3 (No. of CV) = 63.4 (Gals.)
 "K" = 0.163(2" well) "K" = 0.653(4" well) "K" = 1.02(5" well) "K" = 1.46(6" well) "K" = 2.61(8" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Gallons)	pH	Temp. (°C)	Specific Conductance mS <u>(µS)</u>	Turbidity (NTU's)	Color	Comments
<u>9/29/04</u>	<u>11:18</u>	<u>10</u>	<u>7.00</u>	<u>21.0</u>	<u>461.5</u>	<u>1.55</u>	<u>clear</u>	
	<u>11:24</u>	<u>20</u>	<u>6.83</u>	<u>20.5</u>	<u>445.9</u>	<u>1.10</u>	<u>"</u>	
	<u>11:33</u>	<u>30</u>	<u>6.88</u>	<u>20.6</u>	<u>450.9</u>	<u>2.09</u>	<u>"</u>	
	<u>11:40</u>	<u>40</u>	<u>6.84</u>	<u>20.6</u>	<u>442.1</u>	<u>3.28</u>	<u>"</u>	
	<u>11:47</u>	<u>50</u>	<u>6.82</u>	<u>20.7</u>	<u>441.6</u>	<u>3.74</u>	<u>"</u>	
	<u>11:54</u>	<u>60</u>	<u>6.83</u>	<u>20.7</u>	<u>439.3</u>	<u>3.42</u>	<u>"</u>	
<u>✓</u>	<u>11:58</u>	<u>65</u>	<u>6.85</u>	<u>20.7</u>	<u>438.8</u>	<u>3.71</u>	<u>"</u>	

Total Discharge: 67 Gallons Casing Volumes Removed: 3.17
 Method of disposal of discharged water: 55 Gallon Drum(s) Poly Tank Treatment System Other: _____
 Date/Time Sampled: 9/29/04 @ 12:08 Analysis: TPH-Gas/BTEX, MTBE (EPA 8015M/8020);
 TPH-Diesel w/Silica Gel Cleanup (EPA 8015M)

Number of Sample Containers: 4 Preservative: None HCl
 QA/QC: None @ _____ as an Equipment Blank Duplicate MS/MSD Lab Split Field Blank
 Comments: _____

Sampled By: (Jacki Lee / Stephen Penmap) / Casey Wheable Recorded by: [Signature]



WATER QUALITY SAMPLE LOG SHEET WELL IDENTIFICATION W-Es DATE 4/29/04

Project Name: Arrow Rentals - Livermore, CA Project Task: Semi-Annual Groundwater Monitoring

Laboratory: McCampbell Analytical, Inc. Weather Conditions: Sunny, clear skies ~70's F

Well Description: (2") 3" 4" 5" 6" Other: Well Type: (PVC) Stainless Steel Other:

Is Well Secured? (Yes) / No Bolt Size 1/16" Type of Lock / Lock number: Master/Unknown Number

Observations / Comments: _____

Purge Method: Teflon (PVC Disposable Bailer) Centrifugal Pump Grundfos Pump Other: _____

Pump Lines: (NA) New / Cleaned / Dedicated Bailer Line: NA (New) / Cleaned / Dedicated

Method of Cleaning Pump: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: _____

Method of Cleaning Bailer: (NA) Alconox Liqui-nox Tap Water DI Rinse Other: Well Water

Sampling Method: Disp. Teflon Bailer (Disp. PVC Bailer) GrundFos Redi-flow Pump Peristaltic Pump

pH Meter Serial No.: 217254 / (330089) Spec. Cond. Meter Serial No.: (96H0203AB) / AE

Date/Time Calibrated: 4/29/04 @ 4 7 10 @ 25°C Spec. Cond. Meter Calibration: Self Test Other: _____

Method to Measure Water Level: Solinst Serial No.: 122.25(96) P.I.D. Reading: NA ppm @ Well Head

Water Level at Start (DTW): 31.23 @ 9:45 Water Level Prior To Sampling: 31.71

TD = 44.32 - 31.23 (DTW) = 13.09 (ft. of water) x "K" = 2.13 (Gals./CV) x 3 (No. of CV) = 6.40 (Gals.)

"K" = 0.163(2" well) "K" = 0.653(4" well) "K" = 1.02(5" well) "K" = 1.46(6" well) "K" = 2.61(8" well)

FIELD WATER QUALITY PARAMETERS

Date	Time	Discharge (Gallons)	pH	Temp. (°C)	Specific Conductance mS (uS)	Turbidity (NTU's)	Color	Comments
4/29/04	13:19	1	7.31	21.7	452.8	31.4	slight yellow brown	Suspended Organic Material
	13:22	2	7.33	20.8	434.7	62.9	yellow brown	"
	13:25	3	7.28	20.9	421.8	60.2	"	"
	13:28	4	7.27	20.6	417.5	80.1	"	"
	13:31	5	7.31	20.7	420.1	59.2	"	"
	13:34	6	7.27	20.7	418.3	60.9	"	"
✓	13:37	7	7.28	20.6	420.5	64.3	"	"

Total Discharge: 7 Gallons Casing Volumes Removed: 3.3

Method of disposal of discharged water: 55 Gallon Drum(s) Poly Tank Treatment System Other: _____

Date/Time Sampled: 4/29/04 @ 13:39 Analysis: TPH-Gas/BTEX, MTBE (EPA 8015M/8020); TPH-Diesel w/Silica Gel Cleanup (EPA 8015M)

Number of Sample Containers: 4 Preservative: None HCl

QA/QC: None @ _____ as an Equipment Blank Duplicate MS/MSD Lab Split Field Blank

Comments: _____

Sampled By: (Jacki Lee / Stephen Penman) Casey Wheable Recorded by: [Signature]

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH
 24 HR
 48 HR
 72 HR
 5 DAY

EDF Required? Yes No

Report To: Jacqueline Lee Bill To: same
 Company: Env. Sampling Services
6680 Alhambra Avenue #102
Martinez, CA 94553-6105 E-Mail: JLee@EnvSampling.com
 Tele: () 925-372-8108 Fax: () 925-372-6705
 Project #: _____ Project Name: Arrow Rentals
 Project Location: Arrow Re Livermore, CA
 Sampler Signature: [Signature]

Analysis Request

Other

Comments

BTEX & TPH as Gas (602/8020 + 8015)M/TBE

TPH as Diesel (8015) w/Silica Gel Cleanup

Total Petroleum Oil & Grease (5520 E&F/B&F)

Total Petroleum Hydrocarbons (418.1)

EPA 601 / 8010

BTEX ONLY (EPA 602 / 8020)

EPA 608 / 8080

EPA 608 / 8080 PCB's ONLY

EPA 624 / 8240 / 8260

EPA 625 / 8270

PAH's / PNA's by EPA 625 / 8270 / 8310

CAM-17 Metals

LUFT 5 Metals

Lead (7240/7421/239.2/6010)

RCI

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED							
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other				
Trip Blank		4/29/04	10:00	1	VOAS	X					X	X						
W-3s		4/29/04	10:58	4	VOAS Amber	X					X	X						
W-Bs		4/29/04	12:08	4	VOAS Amber	X					X	X						
W-Es		4/29/04	13:39	4	VOAS ILAmber	X					X	X						
W-Is		4/29/04	14:00	4	VOAS ILAmber	X					X	X						

Relinquished By: <u>[Signature]</u>	Date: <u>4/29/04</u>	Time: <u>17:05</u>	Received By: <u>[Signature]</u>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/A° _____	VOAS	O&G	METALS	OTHER
GOOD CONDITION _____	PRESERVATION APPROPRIATE			
HEAD SPACE ABSENT _____	CONTAINERS _____			
DECHLORINATED IN LAB _____	PERSERVED IN LAB _____			

APPENDIX B

LABORATORY REPORT

AND

CHAIN-OF-CUSTODY DOCUMENTATION



McC Campbell Analytical, Inc.

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

Environmental Sampling Services 6680 Alhambra Ave. #102 Matinez, CA 94553	Client Project ID: Arrow Rentals	Date Sampled: 04/29/04
		Date Received: 04/29/04
	Client Contact: Jacki Lee	Date Reported: 05/06/04
	Client P.O.:	Date Completed: 05/06/04

WorkOrder: 0404454

May 06, 2004

Dear Jacki:

Enclosed are:

- 1). the results of 5 analyzed 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

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

Environmental Sampling Services 6680 Alhambra Ave. #102 Matinez, CA 94553	Client Project ID: Arrow Rentals	Date Sampled: 04/29/04
		Date Received: 04/29/04
	Client Contact: Jacki Lee	Date Extracted: 05/03/04-05/06/04
	Client P.O.:	Date Analyzed: 05/03/04-05/06/04

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0404454

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Trip Blank	W	ND	ND	ND	ND	ND	ND	1	101
002A	W-3s	W	1300,a	ND<25	210	5.1	23	4.5	5	113
003A	W-Bs	W	15,000,a	ND<200	2400	170	1300	950	20	117
004A	W-Es	W	55,a	ND	0.62	ND	ND	ND	1	101
005A	W-1s	W	39,000,a,h	ND<2500	3700	1200	810	4700	500	98.1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 / mineral spirit?); 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 ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

 Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

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Environmental Sampling Services 6680 Alhambra Ave. #102 Matinez, CA 94553	Client Project ID: Arrow Rentals	Date Sampled: 04/29/04
		Date Received: 04/29/04
	Client Contact: Jacki Lee	Date Extracted: 04/29/04
	Client P.O.:	Date Analyzed: 05/01/04-05/03/04

Diesel Range (C10-C23) Extractable Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0404454

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0404454-002B	W-3s	W	400,d	1	108
0404454-003B	W-Bs	W	3300,d	1	108
0404454-004B	W-Es	W	87,d,f	1	106
0404454-005B	W-1s	W	5900,d,b,h	1	95.4

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

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.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell 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 ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

 Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0404454

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 11331			Spiked Sample ID: 0404456-003A			
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	60	98.8	98.7	0.0789	100	100	0	70	130
MTBE	ND	10	104	104	0	118	108	8.87	70	130
Benzene	ND	10	105	109	3.94	113	108	4.61	70	130
Toluene	ND	10	101	103	2.51	106	102	4.07	70	130
Ethylbenzene	ND	10	106	111	4.69	113	109	4.08	70	130
Xylenes	ND	30	95.7	100	4.43	100	96.3	3.74	70	130
%SS:	98.3	10	101	102	0.586	104	102	1.86	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.

% 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.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



McC Campbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8015C

Matrix: W

WorkOrder: 0404454

EPA Method: SW8015C		Extraction: SW3510C		BatchID: 11332			Spiked Sample ID: N/A			
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	84.5	86.9	2.84	70	130
%SS:	N/A	2500	N/A	N/A	N/A	92.2	97.4	5.47	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.


% 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.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

 QA/QC Officer

McC Campbell Analytical, Inc.

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



CHAIN-OF-CUSTODY RECORD

WorkOrder: 0404454

ClientID: ESS

Report to:

Jacki Lee
Environmental Sampling Services
6680 Alhambra Ave. #102
Matinez, CA 94553

TEL:
FAX: (925) 372-8108
ProjectNo: Arrow Rentals
PO:

Bill to:

Jacki Lee
Environmental Sampling Services
6680 Alhambra Ave #102
Martinez, CA 94553

Requested TAT: 5 days

Date Received: 4/29/04

Date Printed: 4/29/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0404454-002	W-3s	Water	4/29/04 10:58:00	<input type="checkbox"/>	A	B													
0404454-003	W-Bs	Water	4/29/04 12:08:00	<input type="checkbox"/>	A	B													
0404454-004	W-Es	Water	4/29/04 1:39:00 PM	<input type="checkbox"/>	A	B													
0404454-005	W-1s	Water	4/29/04 2:00:00 PM	<input type="checkbox"/>	A	B													

Test Legend:

1	G-MBTX_W	2	TPH(D)WSG_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

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.

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

Report To: Jacqueline Lee Bill To: same
Company: Env. Sampling Services
6680 Alhambra Avenue #102
Martinez, CA 94553-6105 E-Mail: JLee@EnvSampling.com
Tele: () 925-372-8108 Fax: () 925-372-6705
Project #: _____ Project Name: Arrow Rentals
Project Location: Arrow Rentals Livermore, CA
Sampler Signature: [Signature]

Analysis Request

Other

Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other					
Trip Blank		4/29/04	10:00	1	VOAS	X					X	X							
W-3S		4/29/04	10:58	4	VOAS PCHAS Ambient	X					X	X			X	X			
W-Bs		4/29/04	12:08	4	VOAS PCHAS Ambient	X					X	X			X	X			
W-ES		4/29/04	13:39	4	VOAS PCHAS ILAmb	X					X	X			X	X			
W-IS		4/29/04	14:00	4	VOAS PCHAS ILAmb	X					X	X			X	X			

BTEX & TPH as Gas (602/8020 + 8015)/MTBE																			
TPH as Diesel (8015) w/Silica Gel Cleanup																			
Total Petroleum Oil & Grease (5520 E&F/B&F)																			
Total Petroleum Hydrocarbons (418.1)																			
EPA 601 / 8010																			
BTEX ONLY (EPA 602 / 8020)																			
EPA 608 / 8080																			
EPA 608 / 8080 PCB's ONLY																			
EPA 624 / 8240 / 8260																			
EPA 625 / 8270																			
PAH's / PNA's by EPA 625 / 8270 / 8310																			
CAM-17 Metals																			
LUFT 5 Metals																			
Lead (7240/7421/239.2/6010)																			
RCI																			

Relinquished By: <u>[Signature]</u>	Date: <u>4/29/04</u>	Time: <u>17:05</u>	Received By: <u>[Signature]</u>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/C° <input checked="" type="checkbox"/>	VOAS <input checked="" type="checkbox"/>	O&G <input type="checkbox"/>	METALS <input type="checkbox"/>	OTHER <input type="checkbox"/>
GOOD CONDITION <input checked="" type="checkbox"/>	PRESERVATION APPROPRIATE <input checked="" type="checkbox"/>			
HEAD SPACE ABSENT <input checked="" type="checkbox"/>	CONTAINERS <input checked="" type="checkbox"/>			
DECHLORINATED IN LAB <input type="checkbox"/>	PERSERVED IN LAB <input type="checkbox"/>			

095

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