CAMBRIA

December 26, 2001

Don Hwang
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Fourth Quarter 2001 Monitoring Report**
Shell-branded Service Station
350 Grand Avenue
Oakland, California
Incident #98995755
Cambria Project #243-0715-002

DEC 31 2001

Dear Mr. Hwang:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

FOURTH QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged all site wells and sampled wells S-2 and S-4. Blaine calculated groundwater elevations and compiled the analytical data. Cambria prepared a well survey/vicinity map and a groundwater elevation contour map (Figures 1 and 2). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Additional Oxygenate Analysis: In additional to the regular sample analysis, groundwater samples from monitoring wells S-1 and S-2 were analyzed for diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, tertiary butyl alcohol, and ethanol. Analytical results are presented on Table 1.

Work Plan Submittal: Cambria recommends onsite plume delineation to help determine the methyl tert butyl ether source and the most practical remediation technology. To that end, Cambria's *Subsurface Investigation Work Plan* was submitted on December 20, 2001.

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

ANTICIPATED FIRST QUARTER 2002 ACTIVITIES

Groundwater Monitoring: Blaine will gauge and sample selected wells and tabulate the data. Cambria will prepare a monitoring report.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Jacquelyn Jones at (510) 420-3316 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Jacquelyn L. Jones
Project Geologist

Stephan A. Bork, C.E.G., C.HG.
Associate Hydrogeologist

REGISTERED PROFESSIONAL ENGINEER
DIANE M. LUNDQUIST
No. C46725
CIVIL
STATE OF CALIFORNIA

Figures: 1 - Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map

Table: 1 - Groundwater Analytical Data - Oxygenates

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869
Gursharnjeet Cheema, 1060 St. Raphael Drive, Bay Point, CA 94565

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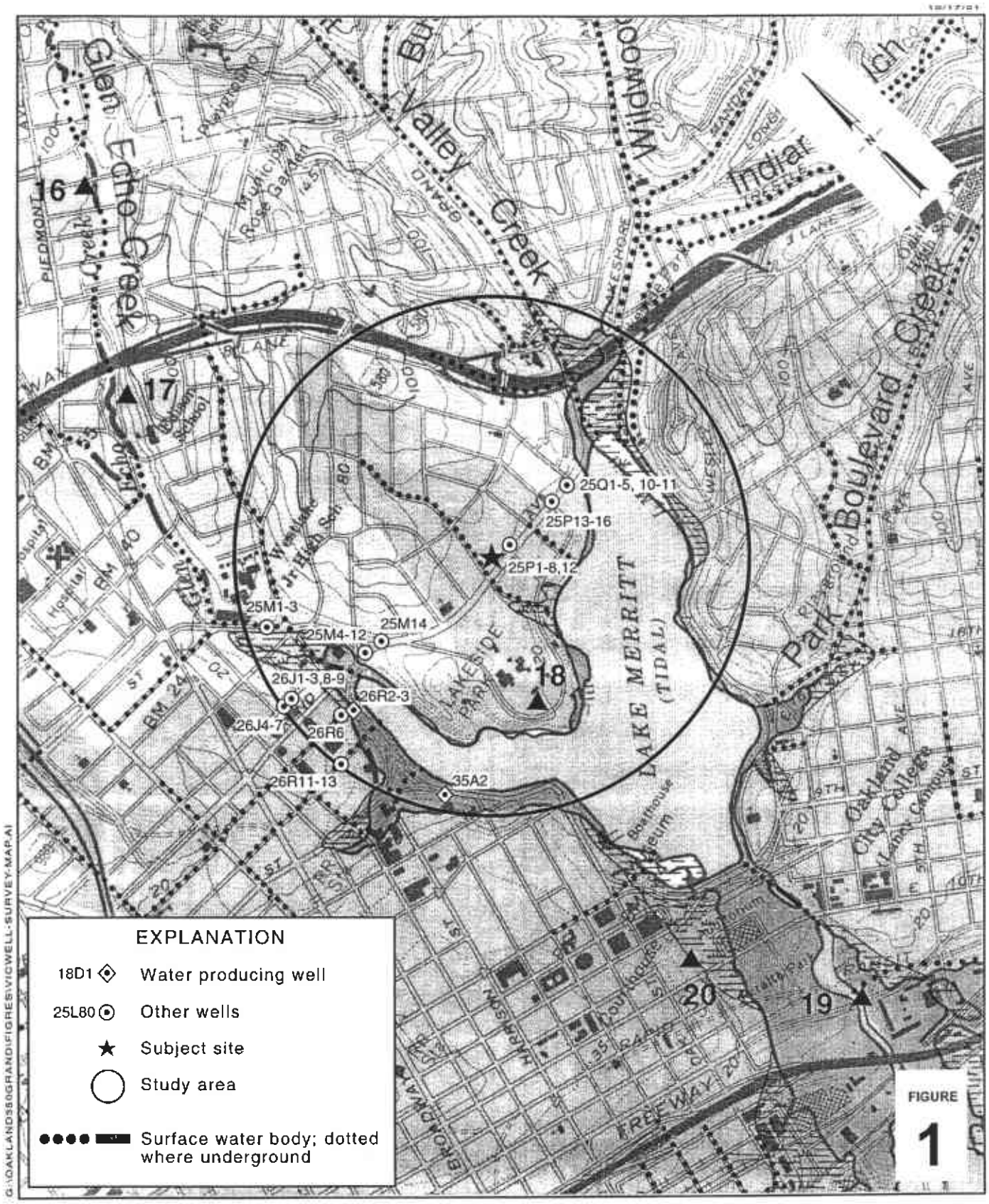

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Shell-branded Service Station

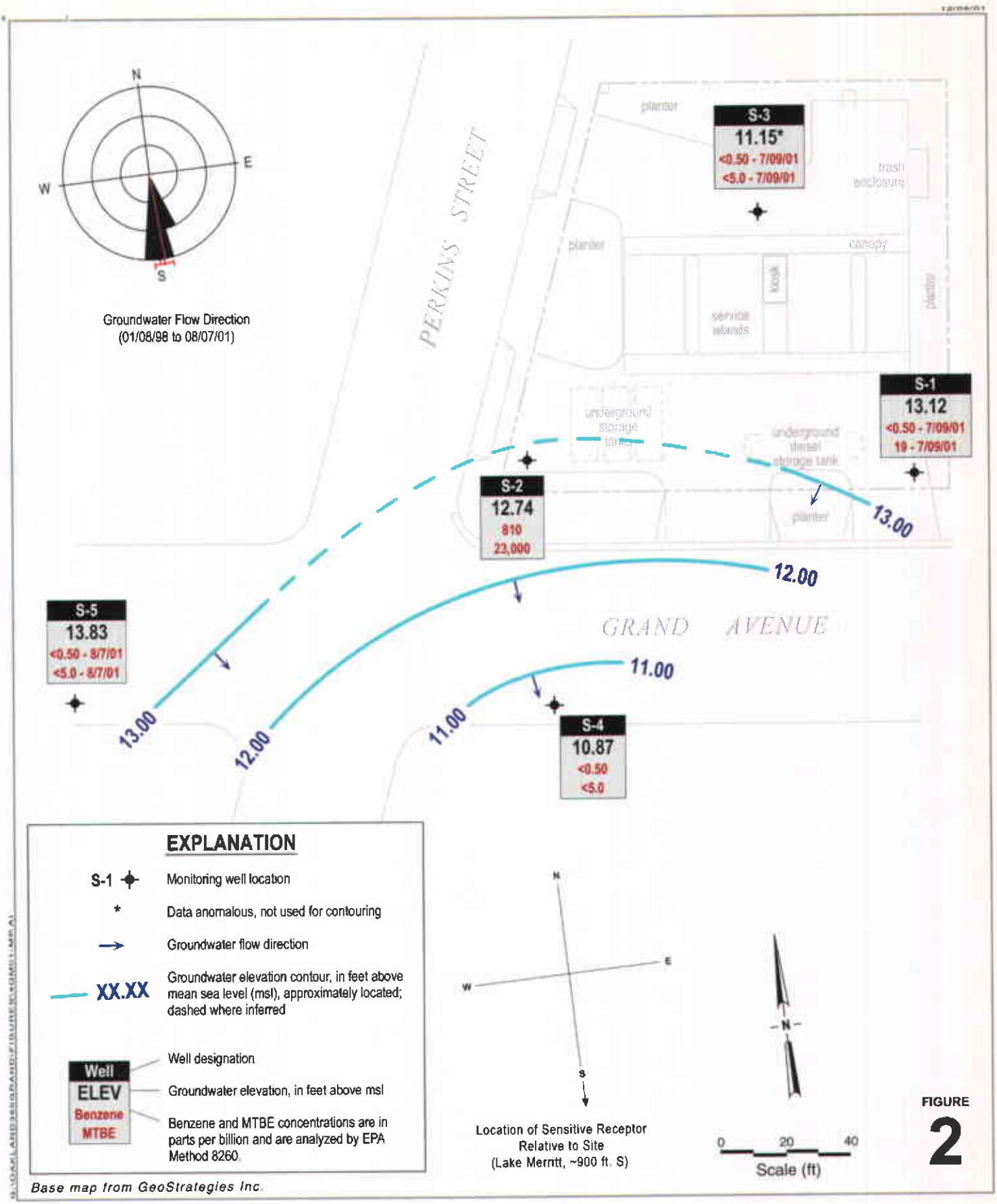
350 Grand Avenue

Oakland, California

Incident #98995755

CAMBRIA

Vicinity / Area Well Survey Map



Base map from GeoStrategies Inc.

FIGURE
2

Shell-branded Service Station

350 Grand Avenue
Oakland, California
Incident #98995755

CAMBRIA

Groundwater Elevation Contour Map

October 2, 2001

Table 1. **Groundwater Analytical Data - Oxygenates** - Shell-branded Service Station, Incident #98995755, 350 Grand Avenue, Oakland, California

Sample ID	Date Sampled	MTBE	DIPE	ETBE	TAME	TBA	Ethanol
		← (Concentrations in ppb) →					
S-1	10/02/01	2.5	<2.0	<2.0	<2.0	<50	<500
S-2	10/02/01	23,000	<20	<20	44	15,000	<500

Abbreviations:

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260
DIPE = Di-isopropyl ether, analyzed by EPA Method 8260
ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260
TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260
TBA = Tert-butyl alcohol, analyzed by EPA Method 8260
Ethanol analyzed by EPA Method 8260
ppb = Parts per billion

ATTACHMENT A

Blaine Groundwater Monitoring Report and Field Notes

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE
CONTRACTOR'S LICENSE #746684
www.blainetech.com

October 29, 2001

Karen Petryna
Equiva Services LLC
P.O. Box 7869
Burbank, CA 91510-7869

Fourth Quarter 2001 Groundwater Monitoring at
Shell-branded Service Station
350 Grand Avenue
Oakland, CA

Monitoring performed on October 2, 2001

Groundwater Monitoring Report **011002-C-2**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, apprioriate calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS.** The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Nick Sudano
Project Coordinator

NS/mrb

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Anni Kreml
Cambria Environmental Technology, Inc.
1144 65th Street, Suite C
Oakland, CA 94608-2411

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-1	01/23/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	9.73	11.11	NA
S-1	04/25/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	7.37	13.47	NA
S-1	07/19/1991	<50	<50	6.8	<0.5	<0.5	<0.5	NA	NA	20.84	8.92	11.92	NA
S-1	10/09/1991	120	260d	10	<0.5	<0.5	<0.5	NA	NA	20.84	9.62	11.22	NA
S-1	01/23/1992	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	8.94	11.90	NA
S-1	04/27/1992	<50	70b	1.2	<0.5	<0.5	<0.5	NA	NA	20.84	7.06	13.78	NA
S-1	07/10/1992	<50	930	13	<0.5	<0.5	<0.5	NA	NA	20.84	8.31	12.53	NA
S-1	10/06/1992	62	110	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	9.55	11.29	NA
S-1	01/06/1993	85	81	1.1	<0.5	<0.5	<0.5	NA	NA	20.84	9.86	10.98	NA
S-1	04/26/1993	<50	53c	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	6.30	14.54	NA
S-1 (D)	04/26/1993	<50	53c	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	6.30	14.54	NA
S-1	07/20/1993	<50	140	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	8.78	12.06	NA
S-1	10/18/1993	<50	210	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	9.20	11.64	NA
S-1	01/07/1994	<50	<50	1.4	1.5	0.55	2.8	NA	NA	20.84	9.53	11.31	NA
S-1 (D)	01/07/1994	<50	53	1.2	1.5	<0.5	2.7	NA	NA	20.84	9.53	11.31	NA
S-1	04/11/1994	<50	320	2.8	<0.5	<0.5	<0.5	NA	NA	20.84	8.50	12.34	NA
S-1 (D)	04/11/1994	<50	220	2.6	<0.5	<0.5	<0.5	NA	NA	20.84	8.50	12.34	NA
S-1	07/14/1994	NA	NA	NA	NA	NA	NA	NA	NA	20.84	8.45	12.39	NA
S-1	07/19/1994	<50	110	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	9.07	11.77	NA
S-1	10/06/1994	110	370	1.4	<0.5	<0.5	<0.5	NA	NA	20.84	11.68	9.16	NA
S-1	01/04/1995	120	1,000	2.5	<0.5	1.5	1.7	NA	NA	20.84	8.51	12.33	NA
S-1	04/12/1995	<50	290	2.1	<0.5	<0.5	<0.5	NA	NA	20.84	6.66	14.18	NA
S-1 (D)	04/12/1995	<50	480	<0.5	<0.5	<0.5	<0.5	NA	NA	20.84	6.66	14.18	NA
S-1	07/07/1995	<50	370	5.5	<0.5	<0.5	<0.5	NA	NA	20.84	6.95	13.89	NA
S-1 (D)	07/07/1995	<50	450	6.5	<0.5	<0.5	<0.5	NA	NA	20.84	6.95	13.89	NA
S-1	10/05/1995	<50	200	3.9	1.2	<0.5	2.4	NA	NA	20.84	8.50	12.34	NA

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (µg/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-1	01/12/1996	230	1,500	2.5	<0.5	0.9	0.6	NA	NA	20.84	8.02	12.82	NA
S-1	04/02/1996	95	2,000	0.91	<0.5	<0.5	<0.5	140	NA	20.84	4.98	15.86	NA
S-1	07/30/1996	<50	510	<0.5	<0.5	<0.5	<0.5	67	NA	20.84	6.40	14.44	NA
S-1 (D)	07/30/1996	<50	380	<0.5	<0.5	<0.5	<0.5	68	NA	20.84	6.40	14.44	NA
S-1	10/02/1996	<50	250	<0.5	<0.5	<0.5	<0.5	96	NA	20.84	7.53	13.31	NA
S-1	09/19/1997	<50	120	<0.50	<0.50	<0.50	<0.50	37	NA	20.84	8.54	12.30	0.8
S-1	01/08/1998	<50	210	<0.50	<0.50	<0.50	<0.50	74	NA	20.84	9.09	11.75	2.6
S-1	07/17/1998	<50	99	<0.50	<0.50	<0.50	<0.50	25	NA	20.86	6.48	14.38	2.6
S-1	01/28/1999	92.7	212	4.5	1.83	1.59	12.1	2.17	NA	20.86	10.46	10.40	2.2
S-1	07/23/1999	537	<50	81.1	91.3	24.8	81.6	47.9	NA	20.86	10.02	10.84	2.1
S-1	01/24/2000	<50.0	79.6	<0.500	<0.500	<0.500	<0.500	8.41	NA	20.86	8.42	12.44	2.2
S-1	07/27/2000	<50.0	127	<0.500	<0.500	<0.500	<0.500	31.9	NA	20.86	7.34	13.52	1.6
S-1	01/12/2001	<50.0	225	<0.500	<0.500	<0.500	<0.500	35.9	NA	20.86	8.15	12.71	1.8
S-1	02/16/2001	<50	140	<0.50	<0.50	<0.50	1.0	NA	24	20.86	7.42	13.44	6.1
S-1	07/09/2001	<50	57	<0.50	<0.50	<0.50	<0.50	NA	19	20.86	7.95	12.91	5.4
S-1	08/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	20.86	7.67	13.19	NA
S-1	**10/02/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2.5**	**20.86**	**7.74**	**13.12**	**4.6**
S-2	01/23/1991	2,500	1,200	550	15	33	42	NA	NA	21.24	10.55	10.69	NA
S-2	04/25/1991	32,000	20,000b	2,900	480	1,400	2,300	NA	NA	21.24	8.24	13.00	NA
S-2	07/19/1991	21,000	30,000b	4,700	430	1,200	2,400	NA	NA	21.24	9.55	11.69	NA
S-2	10/09/1991	29,000	32,000b	6,300	510	1,700	2,400	NA	NA	21.24	10.26	10.98	NA
S-2	01/23/1992	31,000	36,000b	5,800	480	2,000	2,700	NA	NA	21.24	9.51	11.73	NA
S-2	04/27/1992	21,000d	12,000b	4,800	320	1,600	1,400	NA	NA	21.24	7.83	13.41	NA
S-2	07/10/1992	31,000	3,700e	7,500	940	3,400	3,500	NA	NA	21.24	8.57	12.67	NA
S-2	10/06/1992	57,000	4,500e	9,300	1,200	4,000	4,900	NA	NA	21.24	9.49	11.75	NA

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-2	01/06/1993	55,000	5,600	5,600	360	3,000	3,000	NA	NA	21.24	8.56	12.68	NA
S-2	04/26/1993	32,000	9,400e	10,000	500	4,400	3,600	NA	NA	21.24	6.84	14.40	NA
S-2	07/20/1993	25,000	8,400e	5,800	300	2,700	1,400	NA	NA	21.24	8.52	12.72	NA
S-2 (D)	07/20/1993	25,000	8,900e	5,900	310	2,800	1,400	NA	NA	21.24	8.52	12.72	NA
S-2	10/18/1993	23,000	18,000e	3,700	200	2,100	1,600	NA	NA	21.24	9.36	11.88	NA
S-2 (D)	10/18/1993	28,000	14,000e	3,700	210	2,100	1,600	NA	NA	21.24	9.36	11.88	NA
S-2	01/07/1994	120,000	22,000e	6,900	400	3,100	2,600	NA	NA	21.24	8.37	12.87	NA
S-2	04/11/1994	34,000	17,000e	4,800	170	1,900	880	NA	NA	21.24	6.96	14.28	NA
S-2	07/14/1994	NA	NA	NA	NA	NA	NA	NA	NA	21.24	7.49	13.75	NA
S-2	07/19/1994	23,000	NA	4,300	210	1,100	1,000	NA	NA	21.24	8.02	13.22	NA
S-2 (D)	07/19/1994	29,000	NA	4,700	270	1,200	1,200	NA	NA	21.24	8.02	13.22	NA
S-2	10/06/1994	61,000	NA	4,600	290	1,900	1,900	NA	NA	21.24	11.00	10.24	NA
S-2 (D)	10/06/1994	52,000	NA	5,200	270	2,100	1,900	NA	NA	21.24	11.00	10.24	NA
S-2	01/04/1994	23,000	NA	4,500	49	1,300	500	NA	NA	21.24	8.07	13.17	NA
S-2 (D)	01/04/1995	18,000	NA	3,800	33	1,100	390	NA	NA	21.24	8.07	13.17	NA
S-2	04/12/1995	29,000	NA	4,300	210	990	700	NA	NA	21.24	6.12	15.12	NA
S-2	07/07/1995	26,000	NA	4,200	180	1,100	730	NA	NA	21.24	6.35	14.89	NA
S-2	10/05/1995	26,000	10,000	3,500	150	1,100	640	NA	NA	21.24	7.36	13.88	NA
S-2 (D)	10/05/1995	33,000	9,400	4,200	210	1,500	850	NA	NA	21.24	7.36	13.88	NA
S-2	01/12/1996	36,000	13,000	4,100	240	1,400	790	NA	NA	21.24	7.64	13.60	NA
S-2 (D)	01/12/1996	40,000	11,000	4,100	260	1,400	860	NA	NA	21.24	7.64	13.60	NA
S-2	04/02/1996	12,000	7,300	1,300	120	460	150	4,000	NA	21.24	6.18	15.06	NA
S-2 (D)	04/02/1996	17,000	5,800	1,800	29	590	140	7,600	NA	21.24	6.18	15.06	NA
S-2	07/30/1996	18,000	13,000	3,000	100	1,200	420	17,000	19,000	21.24	7.22	14.02	NA
S-2	10/02/1996	28,000	18,000	3,700	110	1,100	260	20,000	NA	21.24	7.60	13.64	NA
S-2 (D)	10/02/1996	25,000	31,000	3,500	100	1,100	260	19,000	NA	21.24	7.60	13.64	NA

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-2	09/19/1997	21,000	11,000	2,300	120	500	110	11,000	NA	21.24	7.45	13.79	2.1
S-2	01/08/1998	35,000	8,100	3,200	260	850	320	23,000	NA	21.24	6.96	14.28	2.3
S-2 (D)	01/08/1998	27,000	5,400	3,400	190	860	200	23,000	NA	21.24	6.96	14.28	2.3
S-2	07/17/1998	19,000	12,000	1,700	130	610	130	13,000	NA	21.24	6.67	14.57	2.3
S-2	01/28/1999	482	99	24	7.52	5.41	63.7	11	NA	21.24	10.63	10.61	2.4
S-2	07/23/1999	320	223	52.0	54.5	14.7	48.6	33.9	NA	21.24	10.12	11.12	2.6
S-2	01/24/2000	18,500	7,600	1,440	140	472	68.9	6,940	NA	21.24	8.63	12.61	1.6
S-2	07/27/2000	14,900	10,200	1,250	98.8	437	<50.0	22,200	30,200	21.24	7.94	13.30	2.0
S-2	01/12/2001 f	<50.0	96.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	21.24	8.82	12.42	1.9
S-2	02/16/2001	20,000	<5,000	990	93	450	63	NA	21,000	21.24	7.10	14.14	1.6
S-2	07/09/2001	16,000	26,000	690	62	210	<50	NA	27,000	21.24	8.35	12.89	2.1
S-2	08/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	21.24	8.19	13.05	NA
S-2	**10/02/2001**	**18,000**	**<12,000**	**810**	**89**	**470**	**69**	**NA**	**23,000**	**21.24**	**8.50**	**12.74**	**2.0**
S-3	01/23/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	14.67	8.03	NA
S-3	04/25/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	12.96	9.74	NA
S-3	07/19/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	12.45	10.25	NA
S-3	10/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	12.98	9.72	NA
S-3	01/23/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	13.06	9.64	NA
S-3	04/27/1992	<50	100	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	7.25	15.45	NA
S-3	07/10/1992	<50	68	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	8.46	14.24	NA
S-3	10/06/1992	<50	<10	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	11.77	10.93	NA
S-3	01/06/1993	<50	<10	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	12.53	10.17	NA
S-3	04/26/1993	<50	69	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	4.28	18.42	NA
S-3	07/20/1993	<50	120	<0.5	0.6	<0.5	<0.5	NA	NA	22.70	5.70	17.00	NA
S-3	10/18/1993	<50	160	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	10.30	12.40	NA

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-3	01/07/1994 a	160	58	59	26	4.9	22	NA	NA	22.70	12.40	10.30	NA
S-3	04/11/1994	<50	<50	<0.52	<0.5	<0.5	<0.5	NA	NA	22.70	10.94	11.76	NA
S-3	07/14/1994	NA	NA	NA	NA	NA	NA	NA	NA	22.70	7.90	14.80	NA
S-3	07/19/1994	<50	110d	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	8.12	14.58	NA
S-3	10/06/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	12.15	10.55	NA
S-3	01/04/1995	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	11.18	11.52	NA
S-3	04/12/1995	<50	110	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	3.76	18.94	NA
S-3	07/07/1995	<50	410	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	4.72	17.98	NA
S-3	10/05/1995	<50	160	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	5.80	16.90	NA
S-3	01/12/1996	100	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	22.70	7.00	15.70	NA
S-3	04/02/1996	<50	170	<0.5	<0.5	<0.5	<0.5	3.4	NA	22.70	3.42	19.28	NA
S-3	07/30/1996	<50	92	<0.5	<0.5	<0.5	<0.5	4.3	NA	22.70	5.89	16.81	NA
S-3	10/02/1996	<50	160	<0.5	<0.5	<0.5	<0.5	4.1	NA	22.70	7.20	15.50	NA
S-3	09/19/1997	<50	260	<0.50	<0.50	<0.50	<0.50	4.3	NA	22.70	6.92	15.78	1.4
S-3 (D)	09/19/1997	<50	290	<0.50	<0.50	<0.50	<0.50	5.2	NA	22.70	6.92	15.78	1.4
S-3	01/08/1998	<50	170	<0.50	<0.50	<0.50	0.92	120	NA	22.70	5.77	16.93	2.7
S-3	07/17/1998	<50	97	<0.50	<0.50	<0.50	<0.50	33	NA	22.71	4.17	18.54	2.7
S-3	01/28/1999	656	<50.0	45.4	10.2	4.98	83.2	87.2	NA	22.71	8.15	14.56	1.8
S-3	07/23/1999	<50.0	77.3	<0.500	<0.500	<0.500	<0.500	39.3	NA	22.71	7.46	15.25	1.9
S-3	01/24/2000	<50.0	77.2	<0.500	<0.500	<0.500	<0.500	12.0	NA	22.71	5.92	16.79	2.1
S-3	07/27/2000	<50.0	142	<0.500	<0.500	<0.500	<0.500	<5.00	NA	22.71	6.54	16.17	1.7
S-3	01/12/2001 f	17,200	8,050	930	88.8	497	57.0	23,200	18,500	22.71	8.25	14.46	1.7
S-3	02/16/2001	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	2.0	22.71	11.37	11.34	NA
S-3	07/09/2001	<50	<50	<0.50	0.54	<0.50	<0.50	NA	<5.0	22.71	9.70	13.01	1.4
S-3	08/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	22.71	11.48	11.23	NA
S-3	**10/02/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**22.71**	**11.56**	**11.15**	**NA**

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-4	07/17/1998	<50	220	<0.50	<0.50	<0.50	<0.50	<2.5	NA	19.96	6.59	13.37	2.5
S-4 (D)	07/17/1998	<50	260	<0.50	<0.50	<0.50	<0.50	<2.5	NA	19.96	6.59	13.37	2.5
S-4	01/28/1999	<50.0	356	0.882	<0.500	<0.500	0.71	<2.00	NA	19.96	10.57	9.39	3.0
S-4	07/23/1999	<50.0	<50	<0.500	<0.500	<0.500	<0.500	8.27	NA	19.96	10.06	9.90	2.1
S-4	01/24/2000	Unable to sample		NA	NA	NA	NA	NA	NA	19.96	8.29	11.67	NA
S-4	02/02/2000	<50.0	410	<0.500	<0.500	<0.500	<0.500	<5.00	NA	19.96	9.93	10.03	2.0
S-4	07/27/2000	Well inaccessible		NA	NA	NA	NA	NA	NA	19.96	NA	NA	NA
S-4	08/02/2000	<50.0	265	<0.500	<0.500	<0.500	<0.500	<2.50	NA	19.96	8.05	11.91	2.0
S-4	01/12/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	19.96	NA	NA	NA
S-4	01/25/2001	<50.0	235	<0.500	0.629	0.656	4.65	<2.50	NA	19.96	10.12	9.84	2.0
S-4	02/16/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	19.96	NA	NA	NA
S-4	07/09/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	19.96	NA	NA	NA
S-4	08/07/2001	<50	<50	<0.50	<0.50	<0.50	<1.0	NA	<5.0	19.96	8.77	11.19	2.3
S-4	**10/02/2001**	**<50**	**350**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**<5.0**	**19.96**	**9.09**	**10.87**	**2.6**
S-5	07/17/1998	<50	110	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.27	6.78	15.49	2.2
S-5	01/28/1999	<50.0	109	<0.500	<0.500	<0.500	<0.500	<2.00	NA	22.27	10.75	11.52	2.0
S-5	07/23/1999	<50.0	204	<0.500	<0.500	<0.500	<0.500	5.95	NA	22.27	10.21	12.06	1.8
S-5	01/24/2000	Unable to sample		NA	NA	NA	NA	NA	NA	22.27	8.23	14.04	NA
S-5	02/02/2000	<50.0	172	<0.500	<0.500	<0.500	<0.500	<5.00	NA	22.27	10.15	12.12	1.9
S-5	07/27/2000	<50.0	119	<0.500	<0.500	<0.500	<0.500	<5.00	NA	22.27	7.41	14.86	2.0
S-5	01/12/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.27	8.80	13.47	NA
S-5	01/25/2001	NA	193	NA	NA	NA	NA	NA	NA	22.27	9.77	12.50	1.7
S-5	02/16/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	22.27	NA	NA	NA
S-5	07/09/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	22.27	NA	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-5	08/07/2001	<50	<50	<0.50	<0.50	<0.50	<1.0	NA	<5.0	22.27	8.97	13.30	2.2
S-5	**10/02/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**22.27**	**8.44**	**13.83**	**NA**
HP-1	01/27/1993	22,000	14,000	2,500	130	1,400	140	NA	NA	NA	NA	NA	NA
HP-2	01/27/1993	<50	NA	<0.5	4.4	<0.5	<0.5	NA	NA	NA	NA	NA	NA
HP-3	01/27/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to February 16, 2001 analyzed by EPA Method 8015.

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to February 16, 2001 analyzed by EPA Method 8020.

MTBE = methyl-tertiary-butyl ether

TOB = Top of Wellbox Elevation

GW = Groundwater

DO = Dissolved Oxygen

ug/L = parts per billion

ppm =parts per million

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

HP = Hydropunch ground water sample

NA = Not applicable

WELL CONCENTRATIONS
Shell-branded Service Station
350 Grand Avenue
Oakland, CA
Wic #204-5510-0204

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)

Notes:

a = TPPH/BETX concentrations anomalous with historical data. Lab verified concentrations.

b = Compounds reported as TPH-D appear to be the less volatile constituents of gasoline.

c = Compounds reported as TPH-D are primarily due to the presence of a heavier petroleum product, possibly motor oil.

d = Chromatogram pattern indicated an unidentified hydrcocarbon.

e = Compounds reported as TPH-D are primarily due to the presence of lighter petroleum product, possibly gasoline.

f = Wells resampled due to anomalous data.

Wells S-1, S-3, S-4, and S-5 surveyed on May 4, 1998 by Virgil Chavez Land Surveying of Vallejo, California.

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Nick Sudano
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 3 Water Samples
Project Name : 350 Grand Ave., Oakland
Project Number : 011002-C2
P.O. Number : 98995755

Dear Mr. Sudano,

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

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

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Subject : 3 Water Samples
Project Name : 350 Grand Ave., Oakland
Project Number : 011002-C2
P.O. Number : 98995755

Case Narrative

The Method Reporting Limit for TPH as Diesel has been increased due to interference from Gasoline-Range Hydrocarbons for the following sample :

S-2

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**
Project Number : **011002-C2**

Sample : **S-1** Matrix : Water Lab Number : 22692-01
Sample Date :10/2/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	**2.5**	0.50	ug/L	EPA 8260B	10/14/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/14/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/14/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	10/14/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	10/14/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/14/2001
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/14/2001
1,2-Dichlorobenzene - d4 (Surr)	101		% Recovery	EPA 8260B	10/14/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**
Project Number : **011002-C2**

Sample : **S-2** Matrix : Water Lab Number : 22692-02
Sample Date :10/2/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**810**	20	ug/L	EPA 8260B	10/14/2001
Toluene	**89**	20	ug/L	EPA 8260B	10/14/2001
Ethylbenzene	**470**	20	ug/L	EPA 8260B	10/14/2001
Total Xylenes	**69**	20	ug/L	EPA 8260B	10/14/2001
Methyl-t-butyl ether (MTBE)	**23000**	200	ug/L	EPA 8260B	10/15/2001
Diisopropyl ether (DIPE)	**< 20**	20	ug/L	EPA 8260B	10/14/2001
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	10/14/2001
Tert-amyl methyl ether (TAME)	**44**	20	ug/L	EPA 8260B	10/14/2001
Tert-Butanol	**15000**	200	ug/L	EPA 8260B	10/14/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/14/2001
TPH as Gasoline	**18000**	2000	ug/L	EPA 8260B	10/14/2001
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	10/14/2001
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	10/14/2001
TPH as Diesel	**< 12000**	12000	ug/L	M EPA 8015	10/11/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**
Project Number : **011002-C2**

Sample : **S-4** Matrix : Water Lab Number : 22692-03
Sample Date :10/2/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	10/14/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/14/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/14/2001
4-Bromofluorobenzene (Surr)	99.2		% Recovery	EPA 8260B	10/14/2001
TPH as Diesel	**350**	50	ug/L	M EPA 8015	10/11/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22692

Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

22692 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	10/8/2001

Approved By: Joel Kiff

Report Number : 22692

Date : 10/17/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Spike Recovery Data														
TPH as Diesel	Blank	<50	1000	1000	1070	1140	ug/L	M EPA 8015	10/8/2001	107	114	6.46	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22692

Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

22692 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/13/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/13/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	10/13/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	10/13/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/13/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/13/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/13/2001
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/13/2001

Approved By: Joel Kiff

Report Number : 22692

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Spike Recovery Data														
Benzene	22686-06	<0.50	19.1	19.0	20.4	20.4	ug/L	EPA 8260B	10/13/200	107	108	0.676	70-130	25
Toluene	22686-06	<0.50	19.1	19.0	20.3	20.4	ug/L	EPA 8260B	10/13/200	107	107	0.421	70-130	25
Tert-Butanol	22686-06	<5.0	95.3	95.0	87.8	91.6	ug/L	EPA 8260B	10/13/200	92.1	96.4	4.52	70-130	25
Methyl-t-Butyl Ether	22686-06	0.65	19.1	19.0	18.0	17.9	ug/L	EPA 8260B	10/13/200	91.2	90.6	0.588	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22692

Date : 10/17/2001

QC Report : Laboratory Control Sample (LCS)

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	10/13/200	107	70-130
Toluene	40.0	ug/L	EPA 8260B	10/13/200	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/13/200	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/13/200	89.4	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

LAB: Kiff

EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Equiva Project Manager to be invoiced: Karen Petryna 22692

- [x] SCIENCE & ENGINEERING
- [ ] TECHNICAL SERVICES
- [ ] CRMT HOUSTON

INCIDENT NUMBER (S&E ONLY): 98995755

SAP or CRMT NUMBER (TS/CRMT):

DATE: 10-2-01

PAGE: 1 of 1

CONSULTANT COMPANY			SITE ADDRESS (Street and City):
Blaine Tech Services			350 Grand Ave., Oakland
ADDRESS: 1680 Rogers Avenue			PROJECT CONTACT (Report to): Nick Sudano
CITY: San Jose, CA 95112			CONSULTANT PROJECT NO.: BTS # 011002-c2
TELEPHONE: 408-573-0555	FAX: 408-573-7771	E-MAIL: nsudano@blainetech.com	SAMPLER NAME(S) (Print): Hank Castro
			LAB USE ONLY:

TURNAROUND TIME (BUSINESS DAYS):
- [x] 10 DAYS
- [ ] 5 DAYS
- [ ] 72 HOURS
- [ ] 48 HOURS
- [ ] 24 HOURS
- [ ] LESS THAN 24 HOURS

- [ ] LA - RWQCB REPORT FORMAT
- [ ] UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT C°

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH- Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5 ppbRL)	Oxygenates (5) by (8260)	Ethanol (8260B)	Methanol	1,2-DCA	EDB (8260B)	TPH-Diesel, Extractable (8015m)	MTBE (8260B) Confirmation, See note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	S-1	10-2	1517	W	3					X	X						01
	S-2	10-2	1420	W	5	X	X	X		X	X				X		02
	S-4	10-2	1450	W	5	X	X	X							X		03

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Hank Castro			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) KIFF	Date: 100301	Time: 1040

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

Q&Q Graphic (714) 898-9702

WELL GAUGING DATA

Project # 011002-C2 Date 10-02-01 Client Equiva

Site 350 Grand Ave Oak.

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
S-1	3					7.74	17.70		G
S-2	3	Gauged w/ stinger in				8.50	15.09		S
S-3	3					11.56	15.10		G
S-4	1					9.09	14.91		S
S-5	1					8.44	13.45	↓	G

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011002-C2	Site: 98995755
Sampler: Hart	Date: 10-02-01
Well I.D.: S-1	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth: 17.70	Depth to Water: 7.74
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: X Bailer

- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

36 (Gals.) X	3	=	10.8 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1510	74.6	6.8	748	78	3.6	
1511	72.4	6.7	831	52	7.2	
1512	73.1	6.5	817	60	10.8	

Did well dewater? Yes (No) Gallons actually evacuated: 10.8

Sampling Time: 1517 Sampling Date: 10-02-01

Sample I.D.: S-1 Laboratory: Sequoia Columbia Other K, FF

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(X) Post-purge:	4.6	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011002-C2	Site: 98995755
Sampler: Hank	Date: 10-02-01
Well I.D.: S-2	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 15.09	Depth to Water: 8.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:
- X Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

2.4 (Gals.) X 3 = 7.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1405	72.4	6.1	916	>200	2.5	
1410	72.1	6.0	978	>200	5	
1415	72.6	6.2	996	>200	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Time: 1420 Sampling Date: 10-02-01

Sample I.D.: S-2 Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G) BTEX MTBE (TPH-D) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge:)	2.0	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011002-C2	Site: 98995755
Sampler: Hank	Date: 10-02-01
Well I.D.: S-4	Well Diameter: 2 3 4 6 8 (1)
Total Well Depth: 14.91	Depth to Water: 9.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- X Other Tubing w/check valve

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: Pin Bailer

0.23 (Gals.) X 3 = 0.6 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1435	67.2	6.1	1157	>200	0.23	
1440	67.0	6.2	1196	>200	0.46	
1445	67.8	6.0	1238	>200	0.69	

Did well dewater? Yes (No) Gallons actually evacuated: 0.69

Sampling Time: 1450 Sampling Date: 10-02-01

Sample I.D.: S-4 Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D) Other:

TB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: mg/L (Post-purge:) 2.6 mg/L

O.R.P. (if req'd): Pre-purge: mV Post-purge: mV

Secure Fuel Services, Inc. [illegible] Rogers Ave., San Jose, CA [illegible]

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Nick Sudano
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 3 Water Samples
Project Name : 350 Grand Ave., Oakland
Project Number : 011002-C2
P.O. Number : 98995755

Dear Mr. Sudano,

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

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

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Subject : 3 Water Samples
Project Name : 350 Grand Ave., Oakland
Project Number : 011002-C2
P.O. Number : 98995755

Case Narrative

The Method Reporting Limit for TPH as Diesel has been increased due to interference from Gasoline-Range Hydrocarbons for the following sample :

S-2

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**
Project Number : **011002-C2**

Sample : **S-1** Matrix : Water Lab Number : 22692-01

Sample Date :10/2/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	**2.5**	0.50	ug/L	EPA 8260B	10/14/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/14/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/14/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	10/14/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	10/14/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/14/2001
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/14/2001
1,2-Dichlorobenzene - d4 (Surr)	101		% Recovery	EPA 8260B	10/14/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**
Project Number : **011002-C2**

Sample : **S-2** Matrix : Water Lab Number : 22692-02
Sample Date :10/2/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**810**	20	ug/L	EPA 8260B	10/14/2001
Toluene	**89**	20	ug/L	EPA 8260B	10/14/2001
Ethylbenzene	**470**	20	ug/L	EPA 8260B	10/14/2001
Total Xylenes	**69**	20	ug/L	EPA 8260B	10/14/2001
Methyl-t-butyl ether (MTBE)	**23000**	200	ug/L	EPA 8260B	10/15/2001
Diisopropyl ether (DIPE)	**< 20**	20	ug/L	EPA 8260B	10/14/2001
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	10/14/2001
Tert-amyl methyl ether (TAME)	**44**	20	ug/L	EPA 8260B	10/14/2001
Tert-Butanol	**15000**	200	ug/L	EPA 8260B	10/14/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/14/2001
TPH as Gasoline	**18000**	2000	ug/L	EPA 8260B	10/14/2001
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	10/14/2001
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	10/14/2001
TPH as Diesel	**< 12000**	12000	ug/L	M EPA 8015	10/11/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 22692
Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**
Project Number : **011002-C2**

Sample : **S-4** Matrix : Water Lab Number : 22692-03
Sample Date :10/2/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/14/2001
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	10/14/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/14/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/14/2001
4-Bromofluorobenzene (Surr)	99.2		% Recovery	EPA 8260B	10/14/2001
TPH as Diesel	**350**	50	ug/L	M EPA 8015	10/11/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22692

Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

22692 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	10/8/2001

Approved By: Joel Kiff

Report Number : 22692

Date : 10/17/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Spike Recovery Data														
TPH as Diesel	Blank	<50	1000	1000	1070	1140	ug/L	M EPA 8015	10/8/2001	107	114	6.46	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22692

Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

22692 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	10/13/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/13/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/13/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	10/13/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	10/13/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/13/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/13/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/13/2001
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/13/2001

Approved By: Joel Kiff

Report Number : 22692

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 10/17/2001

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Spike Recovery Data														
Benzene	22686-06	<0.50	19.1	19.0	20.4	20.4	ug/L	EPA 8260B	10/13/200	107	108	0.676	70-130	25
Toluene	22686-06	<0.50	19.1	19.0	20.3	20.4	ug/L	EPA 8260B	10/13/200	107	107	0.421	70-130	25
Tert-Butanol	22686-06	<5.0	95.3	95.0	87.8	91.6	ug/L	EPA 8260B	10/13/200	92.1	96.4	4.52	70-130	25
Methyl-t-Butyl Ether	22686-06	0.65	19.1	19.0	18.0	17.9	ug/L	EPA 8260B	10/13/200	91.2	90.6	0.588	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 22692

Date : 10/17/2001

QC Report : Laboratory Control Sample (LCS)

Project Name : **350 Grand Ave., Oakland**

Project Number : **011002-C2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	10/13/200	107	70-130
Toluene	40.0	ug/L	EPA 8260B	10/13/200	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/13/200	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/13/200	89.4	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

LAB: Kiff

EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Equiva Project Manager to be invoiced: Karen Petryna 22692

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

INCIDENT NUMBER (S&E ONLY): 98995755

SAP or CRMT NUMBER (TS/CRMT):

DATE: 10-2-01

PAGE: 1 of 1

CONSULTANT COMPANY: Blaine Tech Services

ADDRESS: 1680 Rogers Avenue

CITY: San Jose, CA 95112

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: nsudano@blainetech.com

SITE ADDRESS (Street and City): 350 Grand Ave., Oakland

PROJECT CONTACT (Report to): Nick Sudano

CONSULTANT PROJECT NO.: BTS # 011002-C2

SAMPLER NAME(S) (Print): Hank Castro

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES:

TEMPERATURE ON RECEIPT C°

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH- Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5 ppbRL)	Oxygenates (5) by (8260)	Ethanol (8260B)	Methanol	1,2-DCA	EDB (8260B)	TPH-Diesel, Extractable (8015m)	MTBE (8260B) Confirmation, See note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	S-1	10-2	1517	W	3					X	X						01
	S-2	10-2	1420	W	5	X	X	X		X	X				X		02
	S-4	10-2	1450	W	5	X	X	X							X		03

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Hank Castro			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Hank Burn KIFF	100301	1040

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

Q&Q Graphic (714) 898-9702

WELL GAUGING DATA

Project # 011002-C2 Date 10-02-01 Client Equiva

Site 150 Grand Ave Oak.

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
S-1	3					7.74	17.70		G
S-2	3	Gauged w/ stinger in				8.50	15.09		S
S-3	3					11.56	15.10		G
S-4	1					9.09	14.91		S
S-5	1					8.44	13.45	↓	G

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011002-C2	Site: 98995755
Sampler: Hart	Date: 10-02-01
Well I.D.: S-1	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 17.70	Depth to Water: 7.74
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- ✗ Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: ✗ Bailer

- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

3.6 (Gals.) X	3	=	10.8 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1510	74.6	6.8	748	78	3.6	
1511	72.4	6.7	831	52	7.2	
1512	73.1	6.5	817	60	10.8	

Did well dewater? Yes (No) Gallons actually evacuated: 10.8

Sampling Time: 1517 Sampling Date: 10-02-01

Sample I.D.: S-1 Laboratory: Sequoia Columbia Other K, FF

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge:)	4.6	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011002-C2	Site: 9899575
Sampler: Hank	Date: 10-02-01
Well I.D.: S-2	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 15.09	Depth to Water: 8.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:
- X Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

2.4 (Gals.) X 3 = 7.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1405	72.4	6.1	916	>200	2.5	
1410	72.1	6.0	978	>200	5	
1415	72.6	6.2	996	>200	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Time: 1420 Sampling Date: 10-02-01

Sample I.D.: S-2 Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: mg/L (Post-purge:) 2.0 mg/L

O.R.P. (if req'd): Pre-purge: mV Post-purge: mV

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011002-c2	Site: 98995755
Sampler: Hank	Date: 10-02-01
Well I.D.: S-4	Well Diameter: 2 3 4 6 8 (1)
Total Well Depth: 14.91	Depth to Water: 9.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): (YSI) HACH

Purge Method:
- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- X Other Tubing w/check valve

Sampling Method:
- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: Pin Bailer

0.23 (Gals.) X 3 = 0.6 Gals.
1 Case Volume   Specified Volumes   Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1435	67.2	6.1	1157	>200	0.23	
1440	67.0	6.2	1196	>200	0.46	
1445	67.8	6.0	1238	>200	0.69	

Did well dewater? Yes (No)   Gallons actually evacuated: 0.69

Sampling Time: 1450   Sampling Date: 10-02-01

Sample I.D.: S-4   Laboratory: Sequoia Columbia Other Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D)   Other:

EB I.D. (if applicable): @ Time   Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D   Other:

D.O. (if req'd): Pre-purge: mg/L   (Post-purge:) 2.6 mg/L

O.R.P. (if req'd): Pre-purge: mV   Post-purge: mV