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March 17, 1998
Project No. 8700688.200

Mr. Wayne Chun
265 Heron Drive
Pittsburg, California 94565

Subject **First Quarter 1998 Groundwater Monitoring Report**
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Dear Mr. Chun:

This report documents results of quarterly groundwater monitoring and sampling conducted on January 30, 1998, at the former Bill Chun Service Station located at 2301 Santa Clara Avenue, Alameda, California (subject property). A site location map is provided as Figure 1, and site maps are provided as Figures 2 and 3.

BACKGROUND

In July 1992, three underground storage tanks (USTs), two 550 gallon and one 285 gallon capacity, were removed from the subject property by Parker Environmental Services. During removal, it was discovered that the 285-gallon gasoline UST had leaked. Analysis of soil samples indicated total petroleum hydrocarbons as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) had impacted the subsurface soil.

Several assessment activities were conducted at the subject property to determine the extent of the petroleum-impacted soil and groundwater. These activities consisted of soil and groundwater monitoring and testing and free product recovery. Other consultants installed six monitoring wells at the subject property in 1993: MW-1, MW-2, and MW-3 in January, and MW-4, MW-5, and MW-6 in September. The purpose of these wells was to determine the lateral extent of petroleum-impacted subsurface soil and groundwater. Concentrations of gasoline-range hydrocarbons were detected in soils at depths of 9.5 to 11 feet below ground surface (bgs).

Monitoring wells MW-1, MW-2, and MW-3 were installed with the screened casing depth below the current surface of the groundwater. It is suspected that if floating gasoline product is present in the vicinity of monitoring wells MW-1, MW-2, and MW-3, accurate assessment of it's extent and quantity may not be possible due to the position of the screens.

In November 1995, Fugro West Inc. (Fugro) installed off-site monitoring wells MW-8, MW-9, MW-10, and MW-11 to assess the lateral extent and migration of TPH-g and BTEX in the groundwater.

Quarterly groundwater monitoring and sampling has occurred at the subject property since January 1993. ENSR (formerly Fugro) has conducted quarterly monitoring activities at the subject property since November 1994. Since that time, groundwater flow directions ranged from the northwest to the northeast. Free-phase product and residual sheens have been detected in monitoring well MW-5 since November, 1993 and in MW-7 since February, 1994.

GROUNDWATER MONITORING

Groundwater Levels in Monitoring Wells

ENSR collected water level data from groundwater monitoring wells MW-1 through MW-11 on January 30, 1998. The measurements were recorded to the nearest 0.01 foot from the referenced (top of casing) elevations. Groundwater elevations have increased an average of 1.1 feet since the last monitoring event in October of 1997. The potentiometric surface of groundwater beneath the site on January 30, 1998 is shown on Figure 2. Water level data is summarized in Table 1. Groundwater elevation data indicated a hydraulic gradient of approximately 0.007 feet per foot in a northerly direction.

Monitoring Well Sampling

On January 30, 1998, groundwater monitoring wells MW-1 through MW-11 were monitored for groundwater depth and the presence of free-phase floating product. Groundwater samples were collected from monitoring wells MW-3, MW-4, MW-8, MW-9, MW-10, and MW-11. They were submitted to Sequoia Analytical, a California state certified laboratory, for analysis of TPH-g, BTEX, and methyl tertiary-butyl ether (MTBE). Monitoring wells MW-1, MW-2, MW-5, MW-6, and MW-7 were not sampled because visible product sheen was observed on the groundwater within these monitoring wells.

Quarterly groundwater samples have been analyzed for MTBE since the June 1997 quarterly event. MTBE is found in most gasoline as an octane enhancing and oxygenating compound and has been used in California since 1990. MTBE is readily water-soluble and degrades at a relatively slower rate than other volatile constituents of gasoline.

Quarterly groundwater samples have been analyzed for volatile organic compounds (VOCs) since May 1996. In a meeting on June 5, 1997 with Alameda County Environmental Health Division (ACEHD), ENSR requested that the sampling frequency for VOC analysis be reduced

to semi-annual and analysis of VOCs from monitoring wells MW-3 and MW-4 be discontinued. The reduction of sampling frequency for VOCs was based on the consistent detection of 1,2 dichloroethene (1,2 DCE) (ethylene dichloride). ENSR expects that the source of 1,2 DCE is the gasoline present in the soil and groundwater at the subject property or an off site source. Semi-annual sampling for VOCs will take place in April 1998.

Groundwater samples collected since November of 1995 have not contained detectable levels of total petroleum hydrocarbons as diesel (TPH-d); thus, diesel analyses were not performed. Historically, diesel fuel was not dispensed at the former Bill Chun station. It is expected that the previous diesel detection reflected high boiling point range hydrocarbons from the gasoline previously released to the subsurface.

The distribution of TPH identified as gasoline and benzene in groundwater from the January 30, 1998 sampling event is included on Figure 4. Monitoring well sampling documentation is included as Attachment 2. Laboratory analytical reports and chain of custody documentation are included as Attachment 3.

The results of groundwater elevation data and concentrations of TPH-g, BTEX, and MTBE are summarized in Table 1. Laboratory data reports and chain of custody forms are included in Attachment A. ENSR's Standard Operating Procedures for groundwater monitoring and sampling is provided in Attachment B. Groundwater analytical results are summarized in Table 3.

REMARKS

ENSR has performed its services in a manner consistent with the standards of care and skill ordinarily exercised by members of the profession practicing under similar conditions in the geographic vicinity and at the time the services were performed. No warranty or guarantee, is expressed or implied.

This report has been prepared solely for the use of Mr. Wayne Chun. Any reliance on this report by third parties shall be at the parties' sole risk.

We appreciate the opportunity to provide environmental consulting services to Mr. Wayne Chun. If there are any questions or comments regarding this report, or if we can assist you in any other matter, please contact us at (916) 362-7100.

Sincerely,
ENSR

Annette Cornelius,
Staff Geologist

Alan D. Gibbs, R.G., C.H.G
Client Service Center Manager

AC:AG:em

cc: Barney Chan, Alameda County Division of Environmental Health

Attachments

ATTACHMENTS

TABLES

FIGURES

ATTACHMENTS

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Well Number	Groundwater Elevation (feet amsl)	TPH-Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-1	20.33	--	--	--	--	--	--
MW-2	20.45	--	--	--	--	--	--
MW-3	20.5	5,900	ND	ND	ND	ND	44
MW-4	20.24	ND	ND	ND	ND	ND	ND
MW-5	20.24	--	--	--	--	--	--
MW-6	20.2	--	--	--	--	--	--
MW-7	20.68	--	--	--	--	--	--
MW-8	20.33	430	24	3.1	5.7	8.4	ND
MW-9	19.59	2,400	1,100	ND	ND	10	ND
MW-10	19.95	ND	ND	ND	ND	ND	ND
MW-11	20.7	1,800	22	3.4	66	65	42
MCL	NA	NA	1.0	1,000	680	1,750	NA

NOTES:
amsl = above mean sea level
ppb = parts per billion = micrograms per liter = µg/L
NA = Not Applicable - no MCL has been established for these constituents.
ND = Not Detected
-- = Not Sampled due to the presence of petroleum product sheen.
MCL = Maximum Contaminant Level. Numbers reported for California primary MCLs. Maximum contaminant levels (MCLs) mandated by the state of California Regional Water Quality Control Board. The MCLs are established based on either identified health risks or aesthetics and apply to drinking water.

TABLE 2
GROUNDWATER ELEVATION DATA
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Monitoring Well Identification	Monitoring Date	Top of Casing Elevation (ft. above MSL)	Depth to Water (feet)	Depth to Free Product (feet)	Free Product Thickness (feet)	Corrected Groundwater Elevation (ft. above MSL)
MW-1	01/07/93	28.53	8.87	--	0.00	19.66
	09/07/93		9.63	--	0.00	18.90
	11/16/93		9.89	--	0.00	18.64
	12/07/93		9.66	--	0.00	18.87
	01/06/94		9.67	--	0.00	18.86
	02/03/94		9.50	--	0.00	19.03
	03/04/94		9.18	--	0.00	19.35
	06/06/94		9.55	--	0.00	18.98
	11/09/94		8.83	--	0.00	19.70
	12/20/94		9.00	--	0.00	19.53
	03/29/95		8.44	--	0.00	20.09
	05/24/95		9.01	--	0.00	19.52
	08/30/95		9.52	--	0.00	19.01
	11/29/95	28.49 (2)	9.96	--	0.00	18.53
	05/01/96		9.19	--	0.00	19.30
	08/05/96		9.63	--	0.00	18.86
	12/10/96		9.31	--	0.00	19.18
	03/05/97		9.01	--	0.00	19.48
	06/25/97		9.61	--	0.00	18.88
	10/14/97		9.48	--	sheen	19.01
	1/30/98		8.16	--	sheen	20.33
MW-2	01/07/93	28.51	8.78	--	0.00	19.73
	09/07/93		9.52	--	0.00	18.99
	11/16/93		9.73	--	0.00	18.78
	12/07/93		9.54	--	0.00	18.97
	01/06/94		9.54	--	0.00	18.97
	02/03/94		9.37	--	0.00	19.14
	03/04/94		9.02	--	0.00	19.49
	06/06/94		9.40	--	0.00	19.11
	11/09/94		NM(1)	NM	NM	NM
	12/20/94		NM(1)	NM	NM	NM
	03/29/95		8.26	--	0.00	20.25
	05/24/95		8.89	--	0.00	19.62
	08/30/95		9.41	--	0.00	19.10
	11/29/96	28.47 (2)	9.96	--	0.00	18.53
	05/01/96		9.19	--	0.00	19.30
	08/05/96		9.49	--	0.00	18.98
	12/10/96		9.13	--	0.00	19.34
	03/05/97		8.90	--	0.00	19.57
	06/25/97		9.49	--	0.00	18.98
	10/14/97		9.37	--	sheen	19.10
	1/30/98		8.02	--	sheen	20.45

NOTES: 1 = MW-2 could not be located; well box was temporarily buried during tank excavation activities
2 = Top of casing reference elevations of all well were resurveyed on Nov. 29, 1995, following installation of MW-8, MW-9, and MW-11. Elevations relative to a found "cut-cross" in the top of the depressed curb at the mid return of the northwest corner of the intersection of Santa Clara Avenue and oak Street. Benchmark elevation taken as 28.455 feet above MSL
3 = MW-10 inaccessible due to parked car

MSL = Mean Sea Level
NM = Not Measured
Ground water elevations (GWE) are corrected for free product thickness (FPT) using the following equation: Corrected GWE = Top of Casing Elevation - (Measured Depth to Water - (0.8 x FPT))
Data prior to 11/09/94 from Environmental Science and Engineering, Inc.

TABLE 2 (Cont.)
GROUNDWATER ELEVATION DATA
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Monitoring Well Identification	Monitoring Date	Top of Casing Elevation (ft. above MSL)	Depth to Water (feet)	Depth to Free Product (feet)	Free Product Thickness (feet)	Corrected Groundwater Elevation (ft. above MSL)
MW-3	01/07/93	28.82	8.86	--	0.00	19.96
	09/07/93		9.62	--	0.00	19.20
	11/16/93		9.82	--	0.00	19.00
	12/07/93		9.60	--	0.00	19.22
	01/06/94		9.62	--	0.00	19.20
	02/03/94		9.45	--	0.00	19.37
	03/04/94		9.11	--	0.00	19.71
	06/06/94		9.50	--	0.00	19.32
	11/09/94	28.78 (2)	8.82	--	0.00	20.00
	12/20/94		9.00	--	0.00	19.82
	03/29/95		8.45	--	0.00	20.37
	05/24/95		8.99	--	0.00	19.83
	08/30/95		9.54	--	0.00	19.28
	11/29/95		9.90	--	0.00	18.88
	05/01/96		9.25	--	0.00	19.53
	08/05/96		9.61	--	0.00	19.17
	12/10/96		9.27	--	0.00	19.51
	03/05/97		9.09	--	0.00	19.69
	06/25/97		9.62	--	0.00	19.16
	10/14/97		9.55	--	0.00	20.23
	1/30/98		8.28	--	0.00	20.5
MW-4	09/07/93	28.57	9.39	--	0.00	19.18
	11/16/93		9.60	--	0.00	18.97
	12/07/93		9.42	--	0.00	19.15
	01/06/94		9.44	--	0.00	19.13
	02/03/94		9.31	--	0.00	19.26
	03/04/94		9.05	--	0.00	19.52
	06/06/94		9.31	--	0.00	19.26
	11/09/94		8.68	--	0.00	19.89
	12/20/94		8.97	--	0.00	19.60
	03/29/95		8.46	--	0.00	20.11
	05/24/95		8.86	--	0.00	19.71
	08/30/95		9.41	--	0.00	19.16
	11/29/95	28.53 (2)	9.72	--	0.00	18.81
	05/01/96		9.17	--	0.00	19.36
	08/05/96		9.44	--	0.00	19.09
	12/10/96		9.18	--	0.00	19.35
	03/05/97		8.99	--	0.00	19.54
	06/25/97		9.43	--	0.00	19.10
	10/14/97		9.30	--	0.00	19.23
	1/30/98		8.29	--	0.00	20.24

NOTES:
1 = MW-2 could not be located; well box was temporarily buried during tank excavation activities
2 = Top of casing reference elevations of all well were resurveyed on Nov. 29, 1995, following installation of MW-8, MW-9, and MW-11. Elevations relative to a found "cut-cross" in the top of the depressed curb at the mid return of the northwest corner of the intersection of Santa Clara Avenue and oak Street. Benchmark elevation taken as 28.455 feet above MSL
3 = MW-10 inaccessible due to parked car

MSL = Mean Sea Level
NM = Not Measured
Ground water elevations (GWE) are corrected for free product thickness (FPT) using the following equation: Corrected GWE = Top of Casing Elevation - (Measured Depth to Water - (0.8 x FPT))
Data prior to 11/09/94 from Environmental Science and Engineering, Inc.

TABLE 2 (Cont.)
GROUNDWATER ELEVATION DATA
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Monitoring Well Identification	Monitoring Date	Top of Casing Elevation (ft. above MSL)	Depth to Water (feet)	Depth to Free Product (feet)	Free Product Thickness (feet)	Corrected Groundwater Elevation (ft. above MSL)
MW-5	09/07/93	28.37	9.31	0.00	--	19.06
	11/16/93		9.99	9.45	0.54	18.81
	12/07/93		9.88	9.27	0.61	18.98
	01/06/94		9.85	9.27	0.58	18.98
	02/03/94		9.51	9.19	0.32	19.12
	03/04/94		8.99	8.96	0.03	19.40
	06/06/94		9.72	9.14	0.58	19.11
	11/09/94		8.58	8.56	0.02	19.81
	12/20/94		8.77	8.76	0.01	19.61
	03/29/95		8.31	--	0.00	20.06
	05/24/95		8.77	8.76	0.01	19.61
	08/30/95		9.50	9.19	0.31	19.12
	11/29/95	28.33 (2)	9.84	9.60	0.24	18.68
	05/01/96		8.87	8.86	0.01	19.47
	08/05/96		9.37	9.36	0.01	18.97
	12/10/96		8.15	8.14	0.01	19.39
	03/05/97		8.75	--	0.00	19.58
	06/25/97		9.34	--	0.00	18.99
	10/14/97		9.21	--	sheen	19.12
	1/30/98		8.09	--	sheen	20.24
MW-6	09/07/93	28.41	9.53	--	0.00	18.88
	11/16/93		9.74	--	0.00	18.67
	12/07/93		9.58	--	0.00	18.83
	01/06/94		9.60	--	0.00	18.81
	02/03/94		9.47	--	0.00	18.94
	03/04/94		9.18	--	0.00	19.23
	06/06/94		9.46	--	0.00	18.95
	11/09/94		8.72	--	0.00	19.69
	12/20/94		9.00	--	0.00	19.41
	03/29/95		8.44	--	0.00	19.97
	05/24/95		8.94	--	0.00	19.47
	08/30/95		9.43	--	0.00	18.98
	11/29/95	28.36 (2)	9.83	--	0.00	18.53
	05/01/96		9.00	--	0.00	19.36
	08/05/96		9.55	--	0.00	18.81
	12/10/96		9.18	--	0.00	19.18
	03/05/97		8.97	--	0.00	19.39
	06/25/97		9.53	--	0.00	18.83
	10/14/97		9.37	--	sheen	18.99
	1/30/98		8.16	--	sheen	20.2

NOTES: 1 = MW-2 could not be located; well box was temporarily buried during tank excavation activities
2 = Top of casing reference elevations of all well were resurveyed on Nov. 29, 1995, following installation of MW-8, MW-9, and MW-11. Elevations relative to a found "cut-cross" in the top of the depressed curb at the mid return of the northwest corner of the intersection of Santa Clara Avenue and oak Street. Benchmark elevation taken as 28.455 feet above MSL
3 = MW-10 inaccessible due to parked car

MSL = Mean Sea Level
NM = Not Measured
Ground water elevations (GWE) are corrected for free product thickness (FPT) using the following equation: Corrected GWE = Top of Casing Elevation - (Measured Depth to Water - (0.8 x FPT))
Data prior to 11/09/94 from Environmental Science and Engineering, Inc.

TABLE 2 (Cont.)
GROUNDWATER ELEVATION DATA
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Monitoring Well Identification	Monitoring Date	Top of Casing Elevation (ft. above MSL)	Depth to Water (feet)	Depth to Free Product (feet)	Free Product Thickness (feet)	Corrected Groundwater Elevation (ft. above MSL)
MW-7	09/07/93	28.56	9.61	--	0.00	18.95
	11/16/93		9.86	--	0.00	18.70
	12/07/93		9.58	--	0.00	18.98
	01/06/94		9.59	--	0.00	18.97
	02/03/94		9.56	9.39	0.17	19.14
	03/04/94		9.04	9.01	0.03	19.54
	06/06/94		9.67	9.37	0.30	19.13
	11/09/94		8.57	8.52	0.05	20.03
	12/20/94		9.08	8.67	0.41	19.81
	03/29/95		8.51	7.96	0.55	20.49
	05/24/95		8.98	8.81	0.17	19.72
	08/30/95		9.71	9.40	0.31	19.10
	11/29/95	28.44 (2)	9.86	9.84	0.02	18.60
	05/01/96		8.94	8.85	0.09	19.57
	08/05/96		9.48	9.45	0.03	19.03
	12/10/96		8.96	8.95	0.01	19.49
	03/05/97		8.77	--	0.00	19.67
	06/25/97		9.47	--	0.00	18.97
	10/14/97		8.71	--	sheen	19.04
	1/30/98		8.09	7.68	0.41	20.68
MW-8	11/29/95	28.17 (2)	8.92	--	0.00	19.25
	05/01/95		8.42	--	0.00	19.75
	08/05/96		8.75	--	0.00	19.42
	12/10/96		8.53	--	0.00	19.64
	03/05/97		8.77	--	0.00	19.76
	06/25/97		8.72	--	0.00	19.45
	10/14/97		8.71	--	0.00	19.46
	1/03/98		7.84	--	0.00	20.33
MW-9	11/29/95	27.45 (2)	9.23	--	0.00	18.22
	05/01/96		8.66	--	0.00	18.79
	08/05/96		8.94	--	0.00	18.51
	12/10/96		8.60	--	0.00	18.85
	03/05/97		8.40	--	0.00	19.05
	06/25/97		8.96	--	0.00	18.49
	10/14/97		8.80	--	0.00	18.65
	1/30/98		7.86	--	0.00	19.59

NOTES: 1 = MW-2 could not be located; well box was temporarily buried during tank excavation activities
2 = Top of casing reference elevations of all well were resurveyed on Nov. 29, 1995, following installation of MW-8, MW-9, and MW-11. Elevations relative to a found "cut-cross" in the top of the depressed curb at the mid return of the northwest corner of the intersection of Santa Clara Avenue and oak Street. Benchmark elevation taken as 28.455 feet above MSL
3 = MW-10 inaccessible due to parked car

MSL = Mean Sea Level
NM = Not Measured
Ground water elevations (GWE) are corrected for free product thickness (FPT) using the following equation: Corrected GWE = Top of Casing Elevation - (Measured Depth to Water - (0.8 x FPT))
Data prior to 11/09/94 from Environmental Science and Engineering, Inc.

TABLE 2 (Cont.)
GROUNDWATER ELEVATION DATA
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Monitoring Well Identification	Monitoring Date	Top of Casing Elevation (ft. above MSL)	Depth to Water (feet)	Depth to Free Product (feet)	Free Product Thickness (feet)	Corrected Groundwater Elevation (ft. above MSL)
MW-10	11/29/95	27.32 (2)	8.73	--	0.00	18.59
	05/01/96		NM (3)	NM	NM	NM
	08/05/96		8.50	--	0.00	18.82
	12/10/96		8.17	-	0.00	19.15
	03/05/97		8.06	--	0.00	19.26
	06/25/97		8.51	--	0.00	18.81
	10/14/97		8.06	--	0.00	19.26
	1/30/98		7.37	--	0.00	19.95
MW-11	11/29/95	28.56 (2)	10.16	--	0.00	18.40
	05/01/96		9.12	--	0.00	1944
	08/05/96		9.62	--	0.00	18.94
	12/10/96		9.18	--	0.00	19.38
	03/05/97		8.93	--	0.00	19.63
	06/25/97		9.65	--	0.00	18.91
	10/14/97		9.63	--	0.00	18.93
	1/30/98		7.86	--	0.00	20.7

NOTES:
1 = MW-2 could not be located; well box was temporarily buried during tank excavation activities
2 = Top of casing reference elevations of all well were resurveyed on Nov. 29, 1995, following installation of MW-8, MW-9, and MW-11. Elevations relative to a found "cut-cross" in the top of the depressed curb at the mid return of the northwest corner of the intersection of Santa Clara Avenue and oak Street. Benchmark elevation taken as 28.455 feet above MSL
3 = MW-10 inaccessible due to parked car

MSL = Mean Sea Level
NM = Not Measured
Ground water elevations (GWE) are corrected for free product thickness (FPT) using the following equation: Corrected GWE = Top of Casing Elevation - (Measured Depth to Water - (0.8 x FPT))
Data prior to 11/09/94 from Environmental Science and Engineering, Inc.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylene (Total) (µg/L)	TPH as Diesel (µg/L)	HVOCs (µg/L)	MTBE (µg/L)
MW-1	01/07/93	110,000	14,000	17,000	2,500	8,800	ND (3,000)	1,2-DCE-470 (470)	NA
	09/07/93	28,000	11,000	2,100	380	1,200	1,000 (2)	NA	NA
	12/07/93	17,000	10,000	3,000	610	2,000	1,800 (1)	NA	NA
	03/04/94	6,600	4,400	870	150	590	920 (4)	NA	NA
	06/06/94	12,000	6,300	230	ND (0.5)	ND (0.5)	710 (4)	NA	NA
	11/09/94	28,000	9,500	3,000	810	2,300	250	NA	NA
	12/20/94	5,600	3,000	92	86	76	ND (50)	NA	NA
	03/29/95	24,000	5,800	3,100	390	1,300	ND (50)	NA	NA
	05/24/95	2,500	800	280	31	130	ND (50)	NA	NA
	08/30/95	48,000	14,000	3,500	620	1,600	800	NA	NA
	11/29/95	120,000	42,000	22,000	2,300	9,900	ND (1000)	NA	NA
	05/01/96	49,800	11,800	5,720	121	3,160	ND (50)	1,2-DCE- (5.6)	NA
	08/05/96	54,600	17,400	7,440	1,130	3,880	ND (50)	1,2-DCE- (50.7)	NA
	12/10/96	27,500	7,680	2,020	720	720	ND (50)	ND	NA
	03/06/97	86,900	18,900	7,730	1,470	3,320	ND (50)	ND	NA
	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	1/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NA	NSFP
MW-2	01/07/93	85,000	20,000	8,500	1,500	4,300	ND (3,000)	1,2-DCE-550	NA
	09/07/93	140,000	46,000	28,000	3,300	15,000	8,200 (2)	NA	NA
	12/07/93	86,000	28,000	17,000	35,000	16,000	8,200 (2)	NA	NA
	03/04/94	130,000	22,000	22,000	3,500	16,000	18,000 (4)	NA	NA
	06/06/94	100,000	27,000	22,000	2,300	10,000	9,600 (5)	NA	NA
	11/09/94	NSL	NSL	NSL	NSL	NSL	NSL	NA	NA
	12/20/94	NSL	NSL	NSL	NSL	NSL	NSL	NA	NA
	03/29/95	240,000	56,000	30,000	3,100	7,000	3,800	NA	NA
	05/24/95	330,000	54,000	51,000	4,700	22,000	28,000	NA	NA
	08/30/95	200,000	48,000	52,000	3,900	16,000	8,000	NA	NA
	11/29/95	170,000	42,000	40,000	3,400	17,000	ND (1000)	NA	NA
	05/01/96	481,000	59,000	69,000	27,200	89,600	ND (50)	1,2-DCE- (61.8)	NA
	08/05/96	193,000	41,800	56,000	3,590	18,000	ND (50)	1,2-DCE- (83.2)	NA
	12/10/96	166,000	26,400	38,600	3,180	14,700	ND (50)	ND	NA
	03/06/97	316,000	36,600	55,900	4,160	16,100	ND (50)	ND	NA
	06/25/97	160,000	37,000	63,000	3,500	19,000	NA	ND	ND
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	1/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NA	NSFP

NOTES:
- 1,2-DCE = 1,2-Dichloroethane
- TCB = 1,1,2,2-Tetrachlorobenzene
- TPH-g = Total Petroleum Hydrocarbons as gasoline
- TPH-d = Total Petroleum Hydrocarbons as diesel
- MTBE = Methyl tertiarybutyl ether reported in µg/L
- µg/L = micrograms per liter or parts per billion (ppb)
- ND = Not Detected (detection limit in parentheses)
- NSFP = Not Sampled - Free Product present
- NSL = Not Samples - well could not be located
- NSR = Not Sampled - well could not be reached
- NA = Not Analyzed

- (1) = Results typical of a non-diesel mixture (<C16)
- (2) = Results typical of a diesel and non-diesel mixture (<C16)
- (3) = Results typical of weathered gasoline
- (4) = Results typical of diesel and unidentified hydrocarbons <C14)
- (5) = Results typical of unidentified hydrocarbons (<C14)

TABLE 3 (Cont.)
GROUNDWATER ANALYTICAL RESULTS
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylene (Total) (µg/L)	TPH as Diesel (µg/L)	HVOCs (µg/L)	MTBE (µg/L)
MW-3	01/07/93	8,500 (3)	170	70	ND (30)	ND (30)	ND (3,000)	NA	NA
	09/07/93	2,800	19	46	7.7	23	2,500 (1)	NA	NA
	12/07/93	3,000	17	43	13	28	520 (2)	NA	NA
	03/04/94	2,300	22	46	9.0	27	1,300 (5)	NA	NA
	06/06/94	1,900	3.9	ND (0.5)	9.0	27	1,600 (5)	NA	NA
	11/09/94	2,800	2.6	17	17	32	ND (50)	NA	NA
	12/20/94	2,700	10	62	24	59	ND (50)	NA	NA
	03/29/95	1,200	230	230	13	37	500	NA	NA
	05/24/95	5,700	ND (5)	73	20	57	ND (50)	NA	NA
	08/30/95	3,100	ND (1.0)	29	13	28	ND (50)	NA	NA
	11/29/95	13,000	39	59	7	33	ND (80)	NA	NA
	05/01/96	3,020	ND (1.0)	39.9	9.86	30.8	ND (50)	ND	NA
	08/05/96	2,340	4.1	5.3	4.9	25.3	ND (50)	ND	NA
	12/10/96	694,000	920	5,980	1,060	2,960	ND (50)	ND	NA
	03/06/97	9,060	136	244	34	126	ND (50)	ND	NA
	06/25/97	600	ND	1.1	ND	3.0	NA	ND	ND
	10/14/97	2,400	1.8	13	7.8	18	NA	ND (0.5)	ND (5)
	1/30/98	5,900	ND	ND	ND	ND	NA	NA	44
MW-4	09/07/93	440	2.7	1.2	1	1.9	330 (2)	NA	NA
	12/07/93	610	6.6	0.5	0.61	2.5	460 (2)	NA	NA
	03/04/94	110	ND (0.5)	ND (0.5)	ND (0.5)	0.63	56 (5)	NA	NA
	06/06/94	68	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	68 (4)	NA	NA
	11/09/94	90	0.7	1.1	0.5	2.1	ND(50)	NA	NA
	12/20/94	130	2.2	33	4.8	27	ND (50)	NA	NA
	03/29/95	ND (50)	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (50)	NA	NA
	05/24/95	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NA	NA
	08/30/95	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NA	NA
	11/29/95	100	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NA	NA
	05/01/96	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	ND	NA
	08/05/96	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	ND	NA
	12/10/96	65	ND (0.5)	ND (0.5)	ND (0.5)	0.6	ND (50)	ND	NA
	03/06/97	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND	NA
	06/25/97	200	ND (0.5)	ND (0.5)	0.5	ND (0.5)	NA	ND	ND
	10/14/97	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	ND (0.5)	ND (5)
	1/30/98	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	NA	ND (5)
MW-5	09/07/93	37,000	2,700	1,700	870	4,600	1,700 (2)	NA	NA
	12/07/93	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	03/04/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	06/06/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	11/09/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	12/20/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	03/29/95	54,000	6,800	3,600	1,500	7,600	7,500	NA	NA
	05/24/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	08/30/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	11/29/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	05/01/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	08/05/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	12/10/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	03/06/97	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	1/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NA	NSFP

NOTES:
1,2-DCE = 1,2-Dichloroethane
TCB = 1,1,2,2-Tetrachlorobenzene
TPH-g = Total Petroleum Hydrocarbons as gasoline
TPH-d = Total Petroleum Hydrocarbons as diesel
MTBE = Methyl tertiarybutyl ether reported in µg/L
µg/L = micrograms per liter or parts per billion (ppb)
ND = Not Detected (detection limit in parentheses)
NSFP = Not Sampled - Free Product present
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(1) = Results typical of a non-diesel mixture (<C16)
(2) = Results typical of a diesel and non-diesel mixture (<C16)
(3) = Results typical of weathered gasoline
(4) = Results typical of diesel and unidentified hydrocarbons <C14)
(5) = Results typical of unidentified hydrocarbons (<C14)

TABLE 3 (Cont.)
GROUNDWATER ANALYTICAL RESULTS
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylene (Total) (µg/L)	TPH as Diesel (µg/L)	HVOCs (µg/L)	MTBE (µg/L)
MW-6	09/07/93	10,000	1,300	540	370	1,600	1,400 (2)	NA	NA
	12/07/93	17,000	4,300	1,200	600	2,700	2,400 (2)	NA	NA
	03/04/94	21,000	4,600	1,000	460	1,800	1,800 (4)	NA	NA
	06/06/94	12,000	5,400	350	ND (0.5)	1,200	1,600 (4)	NA	NA
	11/09/94	29,000	4,600	1,600	820	3,600	7,500	NA	NA
	12/20/94	66,000	5,800	2,200	1,100	4,600	1,100	NA	NA
	03/29/95	25,000	8,000	780	450	1,300	1,300	NA	NA
	05/24/95	56,000	1,600	1,300	1,200	7,200	40,000	NA	NA
	08/30/95	68,000	16,000	3,400	1,900	6,800	4,900	NA	NA
	11/29/95	57,000	15,000	2,900	2,500	10,000	ND (900)	NA	NA
	05/01/96	39,500	7,400	2,540	1,270	4,470	ND (50)	1,2-DCE-73 (73.0)	NA
	08/05/96	71,200	22,600	4,000	2,100	7,030	ND (50)	1,2-DCE-157 (157)	NA
	12/10/96	49,200	10,900	2,180	1,880	6,720	ND (50)	1,2-DCE-210 (210)	NA
	03/06/97	65,300	10,300	2,500	1,940	5,770	ND (50)	ND	NA
	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	1/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NA	NSFP
MW-7	09/07/93	24,000	6,000	4,800	490	2,300	1,300	NA	NA
	12/07/93	95,000	28,000	24,000	1,600	8,700	2,200	NA	NA
	03/04/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	06/06/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	11/09/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	12/20/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	03/29/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	05/24/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	08/30/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	11/29/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	05/01/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	08/05/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	12/10/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	03/05/97	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA
	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NA	NSFP
	1/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NA	NSFP
MW-8	11/29/95	7,400	260	40	140	190	ND (80)	NA	NA
	05/01/96	270	1.02	ND	1.10	1.87	ND (50)	ND	NA
	08/05/96	1,100	22.6	3.4	11.2	12.7	ND (50)	TCB-2.5	NA
	12/10/96	442	17.2	2.7	5.9	5.6	ND (50)	ND	NA
	03/05/97	765	33.2	7.2	9.3	11.1	525	ND	NA
	06/25/97	700	36	5.1	8.0	8.0	NA	NA	10
	10/14/97	660	29	6.6	10	13	NA	ND (0.5)	ND (5)
	1/30/98	430	24	3.1	5.7	8.4	NA	NA	ND (5)
MW-9	11/29/95	1,500	590	2	3	20	ND (50)	1,2-DCE-46	NA
	05/01/96	230	142	0.78	ND	1.17	ND (50)	ND	NA
	08/05/96	180	3.1	0.5	0.5	2.3	ND (50)	ND	NA
	12/10/96	157,000	13.6	320	135	500	ND (50)	1,2-DCE-5.0	NA
	03/05/97	2,710	940	4.6	20.2	12.4	ND (50)	1,2-DCE-19.2	NA
	06/25/97	8,000	4,600	190	100	30	NA	NA	220
	10/14/97	910	480	8.1	2.4	5.0	NA	ND (0.5)	46
	1/30/98	2,400	1,100	ND (0.5)	ND (0.5)	ND (0.5)	NA	NA	ND (5)

NOTES:
1,2-DCE = 1,2-Dichloroethane
TCB = 1,1,2,2-Tetrachlorobenzene
TPH-g = Total Petroleum Hydrocarbons as gasoline
TPH-d = Total Petroleum Hydrocarbons as diesel
MTBE = Methyl tertiarybutyl ether reported in µg/L
µg/L = micrograms per liter or parts per billion (ppb)
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(1) = Results typical of a non-diesel mixture (<C16)
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(3) = Results typical of weathered gasoline
(4) = Results typical of diesel and unidentified hydrocarbons <C14)
(5) = Results typical of unidentified hydrocarbons (<C14)

TABLE 3 (Cont.)
GROUNDWATER ANALYTICAL RESULTS
Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylene (Total) (µg/L)	TPH as Diesel (µg/L)	HVOCs (µg/L)	MTBE (µg/L)
MW-10	11/29/95	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (2)	ND (950)	NA	NA
	05/01/96	NSR	NSR	NSR	NSR	NSR	NSR	NSR	NA
	08/05/96	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	Chloroform (13.2)	NA
	12/10/96	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	1,2-DCE-10.1	NA
	03/05/97	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	ND	NA
	06/25/97	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	NS	ND
	10/14/97	ND (50)	1.2	2.5	ND (0.5)	1.7	NA	Chloroform-1.5	ND (5)
	1/30/98	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	NA	ND (5)
MW-11	11/29/95	3,200	14	31	15	570	ND (50)	NA	NA
	05/01/96	79	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	107	ND	NA
	08/05/96	6,660	5,040	ND (0.5)	51.6	ND (0.5)	ND (50)	1,2-DCE-16.0	NA
	12/10/96	68,000	800	260	200	1,160	ND (50)	ND	NA
	03/05/97	340	4.2	0.6	3.1	5.3	ND (50)	ND	NA
	06/25/97	300	3.5	0.9	2.7	5.0	NA	NS	ND
	10/14/97	510	4.0	8.7	21	23	NA	ND (0.5)	ND (5)
	1/30/98	1,800	22	3.4	66	65	NA	NA	42

NOTES:
1,2-DCE = 1,2-Dichloroethane
TCB = 1,1,2,2-Tetrachlorobenzene
TPH-g = Total Petroleum Hydrocarbons as gasoline
TPH-d = Total Petroleum Hydrocarbons as diesel
MTBE = Methyl tertiarybutyl ether reported in µg/L
µg/L = micrograms per liter or parts per billion (ppb)
ND = Not Detected (detection limit in parentheses)
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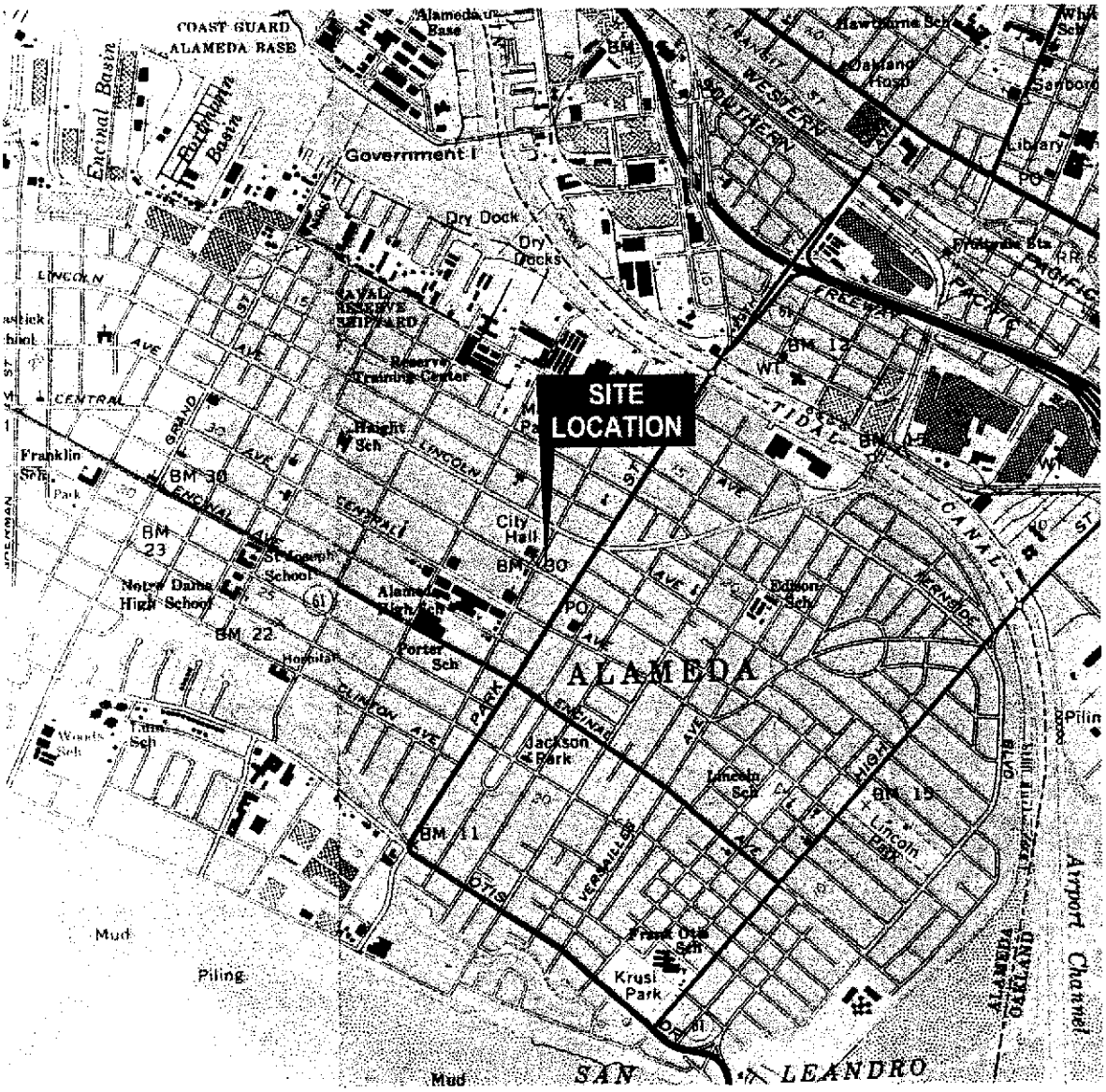
(3) = Results typical of weathered gasoline
(4) = Results typical of diesel and unidentified hydrocarbons <C14)
(5) = Results typical of unidentified hydrocarbons (<C14)



USGS 7.5 MINUTE
OAKLAND EAST & WEST,
CALIFORNIA QUADRANGLE

NORTH
0 1000 2000
FEET

ENSR

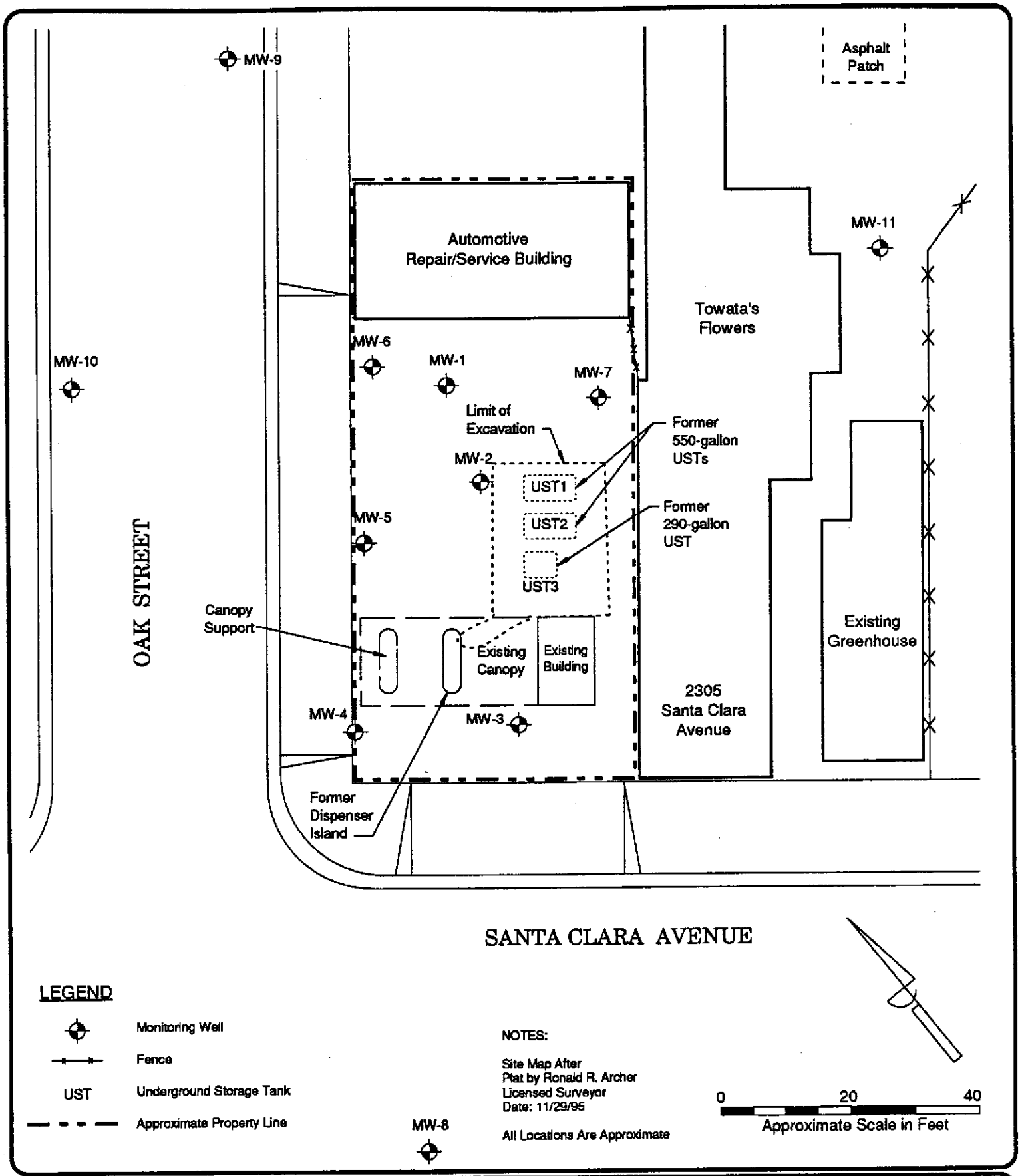
DRAWN BY: S. Hale	REVISED BY:
DATE: November 13, 1997	DATE:

SITE LOCATION MAP

Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

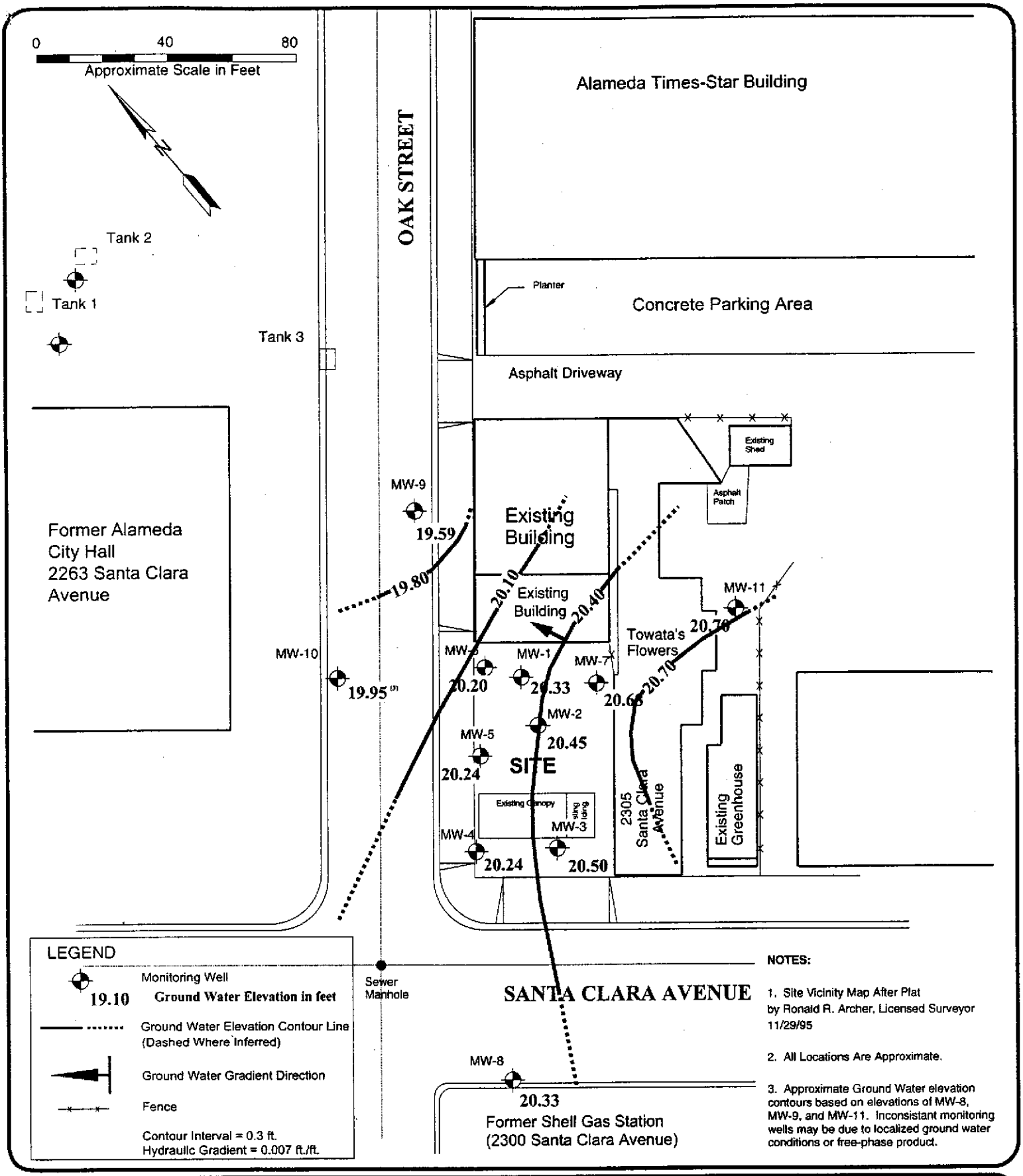
FIGURE
1

PROJECT NUMBER
8700-688



ENSR

DRAWN BY:	REVISED BY:	SITE MAP	FIGURE 2
J. Scruggs	S. Hale	Former Bill Chun Service Station 2301 Santa Clara Avenue Alameda, CA	PROJECT NUMBER: 8700-688
DATE: December 28, 1995	DATE: March 10, 1998		



ENSR

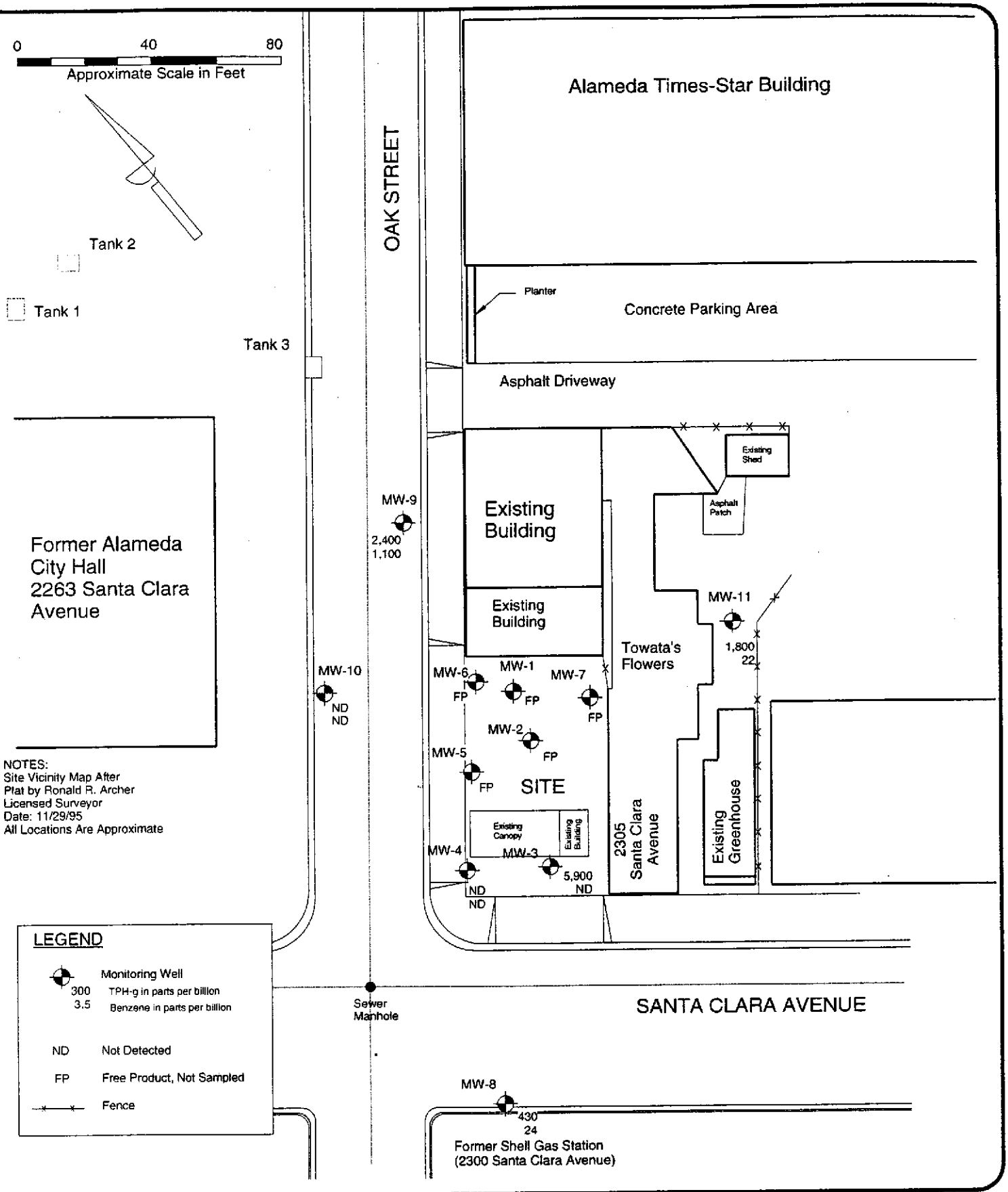
DRAWN BY: J. Paradis	REVISED BY: S. Hale
DATE: October 31, 1996	DATE: December 15, 1997

POTENTIOMETRIC SURFACE MAP
January 30, 1998

Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

FIGURE 3

PROJECT NUMBER: 8700-688



ENSR

DRAWN BY: J. Paradis | REVISED BY: S. Hale

DATE: October 31, 1996 | DATE: February 20, 1998

DISTRIBUTION MAP OF TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND BENZENE IN GROUND WATER January 30, 1998

Former Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California

FIGURE 4

PROJECT NUMBER: 8700-688

ATTACHMENT A

STANDARD OPERATING PROCEDURES
GROUNDWATER MONITORING AND SAMPLING

SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES

SOP-4

Sample identification and chain-of-custody procedures ensure sample integrity, and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any name(s) of on-site personnel and any other pertinent field observations also recorded on the field excavation or boring log.

Chain-of-custody forms are used to record possession of the sample from time of collection to its arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample-control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s), and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name, and any other relevant information will also be recorded.

LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL

SOP-5

In addition to routine instrument calibration, replicates, spikes, blanks, spiked blanks, and certified reference materials are routinely analyzed at method-specific frequencies to monitor precision and bias. Additional components of the laboratory Quality Assurance/Quality Control program include:

1. Participation in state and federal laboratory accreditation/certification programs;
2. Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
3. Standard operating procedures describing routine and periodic instrument maintenance;
4. "Out-of-Control"/Corrective Action documentation procedures; and,
5. Multi-level review of raw data and client reports.

GROUNDWATER PURGING AND SAMPLING

SOP-7

Prior to water sampling, each well is purged by evacuating a minimum of three wetted well-casing volumes of groundwater. When required, purging will continue until either the discharge water temperature, conductivity, or pH stabilize to within 10% of previously measured values; and a maximum of ten wetted casing volumes of groundwater have been recovered, or the well is bailed dry. When practical, the groundwater sample should be collected when the water level in the well recovers to at least 80 percent of its static level. Field measurements, observations and procedures are noted.

The sampling equipment consists of a clean bailer, or stainless steel bladder pump with a "Teflon" bladder. If the sampling system is dedicated to the well, then the bailer is usually "Teflon," but the bladder pump may be PVC with a polypropylene bladder. Sample container type, preservation, and volume depends on the intended analyses.

The groundwater sample is decanted into each VOA vial in such a manner that there is no meniscus at the top of the vial. A cap is quickly secured to the top of the vial. The vial is then inverted and gently tapped to see if air bubbles are present. If none are present, the vial is labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. Label information should include a unique sample identification number, job identification number, date, time, and the sampler's initials.

For quality control purposes, a duplicate water sample may be collected from a well. When required, a trip blank is prepared at the laboratory and placed in the transport cooler. It is labeled similar to the well samples, remains in the cooler during transport, and is analyzed by the laboratory along with the groundwater samples. In addition, a field blank may be prepared in the field when sampling equipment is not dedicated. The field blank is prepared after a pump or bailer has been either steam cleaned or properly washed, prior to use in the next well, and is analyzed along with the other samples. The field blank analysis demonstrates the effectiveness of in-field cleaning procedures to prevent cross-contamination.

To minimize the potential for cross-contamination between wells, all well development and water sampling equipment not dedicated to a well is either steam cleaned or properly washed between use. As a second precautionary measure, wells are sampled in order of lowest to highest concentrations as established by available previous analytical data.

In the event the water samples cannot be submitted to the analytical laboratory on the same day they are collected (e.g., due to weekends or holidays), the samples are temporarily stored until the first opportunity for submittal either on ice in a cooler, such as when in the field, or in a refrigerator.

MEASURING LIQUID LEVELS USING A WATER LEVEL INDICATOR OR INTERFACE PROBE

SOP-12

Field equipment used for liquid-level gauging typically includes the measuring probe (water level or interface) and a clean product bailer(s). The field kit also includes cleaning supplies (buckets, TSP, spray bottles, and deionized water) to be used in cleaning the equipment between wells.

Prior to measurement, the probe tip is lowered into the well until it touches bottom. Using the previously established top-of-casing or top-of-box (i.e., wellhead vault) point, the probe cord (or halyard) is marked and a measuring tape (graduated in hundredths of a foot) is used to determine the distance between the probe end and the marking on the cord. This measurement is then recorded on the liquid-level data sheet as the "Measured Total Depth" of the well.

When necessary in using the interface probe to measure liquid levels, the probe is first electrically grounded to either the metal stove pipe or another metal object nearby. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case.

The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates the probe is in water. The probe is slowly raised until either the oscillating tone ceases or becomes a steady tone. In either case, this is the depth-to-water (DTW) indicator and the DTW measurement is made accordingly. The steady tone indicates floating hydrocarbons. In this case, the probe is slowly raised until the steady tone ceases. This is the depth-to-product (DTP) indicator and the measurement of DTP is recorded. A corrected depth to groundwater to account for floating hydrocarbons can be calculated by using the following formula:

CDTW = DTW - (SP.G x LHT).
CDTW = Corrected depth to groundwater.
DTW = Measured depth to groundwater.
SP.G = Specific gravity: unweathered gasoline = 0.75; diesel = 0.80
LHT = Measured liquid hydrocarbon thickness.

The corresponding groundwater elevation is the difference between a previously determined well reference elevation and either the depth to groundwater or the corrected depth to groundwater.

The process of lowering and raising the probe must be repeated several times to ensure accurate measurements. The DTW and DTP measurements are recorded on the liquid-level data sheet. When floating product is indicated by the probe's response, a product bailer is lowered partially through the product-water interface to confirm the product on the water surface, and as further indication of product thickness, particularly in cases where the product layer is quite thin. Either this measurement or the difference between DTW and DTP is recorded on the data sheet as "product thickness."

In order to avoid cross-contamination of wells during the liquid-level measurement process, wells are measured in the order of "clean" to "dirty" (where such information is available). In addition, all measurement equipment is cleaned with TSP or similar solution and thoroughly rinsed with deionized water before use, between measurements in respective wells, and at the completion of the day's activities.

ATTACHMENT B

FIELD DOCUMENTATION

ENSR
GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet)

Project Address: 2301 Santa Clara Avenue, Alameda

Recorded by: TKP

Date: 1/30/98

Project No.: 8700-688.100

	Well No.	Time	Measured Total Depth	Depth to Gr. Water	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
7	MW-1	0640	24.19	8.16			ABOVE TOC | VERTICAL CRACK IN TOP OF CASING, 3" SHOULD BE CUT DOWN, TIGHTEN CAP OR SEAL CRACK
8	MW-2	0642	20.76	8.02			PRESSURE UNDER CAP WHEN REMOVED
9	MW-3	0645	19.60	8.28			
3	MW-4	0624	21.54	8.29			ABOVE TOC
0	MW-5	1026		8.09			USED ORS INTF PROBE (TOP OF CASING NOT CUT STRAIGHT | NOTCH IN SIDE | REF MARK? (SHOULD BE CUT STRAIGHT
6	MW-6	0637	22.20	8.16			BOLT HOLES STRIPPED OUT
1	MW-7	1031		8.09	7.68	[illegible].41	CAP NOT IN WELL JUST SET ON TOP, WATER LEVEL W/TOC / ORS PROBE (INTF)
2	MW-8	0621	14.34	7.84			
4	MW-9	0626	15.22	7.86			ABOVE TOC
1	MW-10	0619	13.51	7.37			
5	MW-11	0632	14.77	7.86			

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chun
Site: 2201 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-3

Is setup of traffic control devices required? :	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box? :	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level? :	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked? :	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches) :	10		
General condition of Wellhead assembly :	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:

_____	2" Disposable bailer	_____	Submersible pump
X	2" PVC bailer	_____	Dedicated bailer
_____	4" PVC bailer		

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0645
Depth of well: 19.60
Depth to water: 8.26

Recharge Measurement
Time: _____
Depth to water: _____

Calculated purge: 5.5
Actual purge: 6

Start purge: 0920 Sampling time: 0935 Sampling Date: 1/30/98

Time	Temp (F)	E.C.	pH	~~Turbidity~~	O (ppm)	Volume (Gal.)
0922	15.0	365 aS	5.2	070		2
0924	16.2	363 1	5.2	073		2
0926	16.8	357 V	5.2	093		2

Sample appearance: CLOUDY

QC samples collected at this well: NONE

Lock: DOLPHIN

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X
3" Locking Cap:
4" Locking Cap:

Lock #2357:
Lock #3753:
Chevron Lock:

Lock #0909:
Lock-Dolphin: X

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)

Signature YKR Review _____

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chun
Site: 2201 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-4

Is setup of traffic control devices required? :	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box? :	NO	(YES)	(Above TOC) Below TOC)
Is Top of Casing cut level? :	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked? :	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches) :	5		
General condition of Wellhead assembly :	Excellent	Good	(Fair) Poor (Explain in remarks)

Purging Equipment:

	2" Disposable bailer		Submersible pump
X	2" PVC bailer		Dedicated bailer
	4" PVC bailer		

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3"	4"	6"	8"	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0624
Depth of well: 21.54
Depth to water: 8.29

Recharge Measurement
Time: _____
Depth to water: _____

Calculated purge: 6.5
Actual purge: 7

Start purge: 0855 Sampling time: 0910 mV Sampling Date: 4/30/98

Time	Temp (F)	E.C.	pH	~~Turbidity~~	O (ppm)	Volume (Gal.)
0859	14.5	3954S	5.6	109		2
0901	16.1	3201	5.6	120		3
0904	16.3	3981	5.6	132		2

Sample appearance: SEMI-CLEAR

QC samples collected at this well: NONE

Lock: DOLPHIN

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X
3" Locking Cap:
4" Locking Cap:

Lock #2357:
Lock #3753:
Chevron Lock:

Lock #0909:
Lock-Dolphin: X

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)

Signature YKR Review _____

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chan
Site: 2201 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-8

Is setup of traffic control devices required? :	NO	YES	Setup & Takedown time: _____ hours
Is there standing water in well box? :	NO	YES	(Above TOC Below TOC)
Is Top of Casing cut level? :	NO	YES	(If NO please explain in remarks)
Is well cap sealed and locked? :	NO	YES	(If NO please explain in remarks)
Height of Well Casing Riser (in inches) :	_____		
General condition of Wellhead assembly :	Excellent	Good	Fair Poor (Explain in remarks)

Purging Equipment:

_____	2" Disposable bailer	_____	Submersible pump
X	2" PVC bailer	_____	Dedicated bailer
_____	4" PVC bailer		

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0621
Depth of well: 14.34
Depth to water: 7.84

Recharge Measurement
Time: _____
Depth to water: _____

Calculated purge: 3.2
Actual purge: 3

Start purge: 0953 Sampling time: 1010 Sampling Date: 4/29/98

Time	Temp (F)	E.C.	pH	Turbidity	O (ppm)	Volume (Gal.)
0954	15.5	286.5	5.1	091		1
0955	16.7	365.1	5.2	065		1
0956	17.2	299	5.2	057		1

Sample appearance: CLOUDY
QC samples collected at this well: NONE
Lock: DOLPHIN

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X	Lock #2357:	Lock #0909:
3" Locking Cap:	Lock #3753:	Lock-Dolphin: X
4" Locking Cap:	Chevron Lock:	

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)
HAD TO DO THIS WELL LAST. CITY REPLACING TRAFFIC LITE
PAVED OVER WELL

Signature YKR Review

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chun
Site: 2201 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-9

Is setup of traffic control devices required? :	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box? :	NO	(YES)	(Above TOC) Below TOC)
Is Top of Casing cut level? :	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and (locked?) :	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches) :	12		
General condition of Wellhead assembly :	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:

_____	2" Disposable bailer	_____	Submersible pump
X	2" PVC bailer	_____	Dedicated bailer
_____	4" PVC bailer		

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0626
Depth of well: 15.22
Depth to water: 7.86

Recharge Measurement
Time: _____
Depth to water: _____

Calculated purge: <4
Actual purge: 4

Start purge: 0731 oc Sampling time: 0750 AV Sampling Date: 1/30/98

Time	Temp (F)	E.C.	pH	~~Turbidity~~	O (ppm)	Volume (Gal.)
0733	12.3	4575	5.3	1		2
0736	13.5	3341	5.3	184		1
0739	13.9	1466	5.2	187		1

Sample appearance: SEMI-CLEAR
Lock: DOLPHIN
QC samples collected at this well: NONE

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X	Lock #2357:	Lock #0909:
3" Locking Cap:	Lock #3753:	Lock-Dolphin: X
4" Locking Cap:	Chevron Lock:	

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)
NO LOCK

Signature YKR Review _____

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chun
Site: 2201 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-10

Is setup of traffic control devices required? :	(NO)	YES	Setup & Takedown time: ____ hours
Is there standing water in well box? :	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level? :	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked? :	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches) :	6		
General condition of Wellhead assembly :	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:

____	2" Disposable bailer	____	Submersible pump
X	2" PVC bailer	____	Dedicated bailer
____	4" PVC bailer		

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0619
Depth of well: 13.51
Depth to water: 7.37

Recharge Measurement
Time: ____
Depth to water: ____

Calculated purge: 3
Actual purge: 3

Start purge: 0648 Sampling time: 0705 Sampling Date: 1/20/98

Time	Temp (°F)	E.C.	pH	Turbidity	O (ppm)	Volume (Gal.)
0650	11.8	368uS	4.9			1
0653	13.3	434	4.7			1
0656	13.7	430	4.6			1

Sample appearance: SEMI-CLEAR

QC samples collected at this well: NONE

Lock: DOLPHIN

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X	Lock #2357:	Lock #0909:
3" Locking Cap:	Lock #3753:	Lock-Dolphin: X
4" Locking Cap:	Chevron Lock:	

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)

Signature YKR Review

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chun
Site: 2301 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-11

Is setup of traffic control devices required? :	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box? :	NO	(YES)	(Above TOC (Below TOC)
Is Top of Casing cut level? :	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked? :	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches) :	_____		
General condition of Wellhead assembly :	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:

_____	2" Disposable bailer	_____	Submersible pump
X	2" PVC bailer	_____	Dedicated bailer
_____	4" PVC bailer		

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0632
Depth of well: 14.77
Depth to water: 7.86

Recharge Measurement
Time: _____
Depth to water: _____

Calculated purge: 3.5
Actual purge: 4

Start purge: 0814 °C Sampling time: 0830 mV Sampling Date: 1/30/98

Time	Temp (F)	E.C.	pH	~~Turbidity~~	O (ppm)	Volume (Gal.)
0817	13.1	297 µS	5.1	012		2
0819	14.1	246 µ	5.1	016		1
0821	14.2	267 µ	5.1	004		1

Sample appearance: SEMI-CLEAR

QC samples collected at this well: NONE

Lock: DOLPHIN

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X	Lock #2357:	Lock #0909:
3" Locking Cap:	Lock #3753:	Lock-Dolphin: X
4" Locking Cap:	Chevron Lock:	

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)

Signature YKR Review _____

MONITORING WELL SAMPLING INFORMATION SHEET

ENSR

Client: Wayne Chun
Site: 2201 Santa Clara Ave
Alameda

Project No: 8700-688.100
Well Designation: MW-

Is setup of traffic control devices required? :	(NO)	YES	Setup & Takedown time: _____ hours	
Is there standing water in well box? :	NO	YES	(Above TOC Below TOC)	
Is Top of Casing cut level? :	NO	YES	(If NO please explain in remarks)	
Is well cap sealed and locked? :	NO	YES	(If NO please explain in remarks)	
Height of Well Casing Riser (in inches) :	_____			
General condition of Wellhead assembly :	Excellent	Good	Fair	Poor (Explain in remarks)

Purging Equipment:
- _____ 2" Disposable bailer
- X 2" PVC bailer
- _____ 4" PVC bailer
- _____ Submersible pump
- _____ Dedicated bailer

Sampled with: Disposal bailer: X Teflon Bailer:

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time:_____
Depth of well:_____
Depth to water:_____

Recharge Measurement
Time:_____
Depth to water:_____

Calculated purge: _____
Actual purge: _____

Start purge: _____ Sampling time: _____ Sampling Date: 4/29/98

Time	Temp (F)	E.C.	pH	Turbidity	O (ppm)	Volume (Gal.)

Sample appearance: _____

QC samples collected at this well: NONE

Lock: DOLPHIN

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: X
3" Locking Cap:
4" Locking Cap:

Lock #2357:
Lock #3753:
Chevron Lock:

Lock #0909:
Lock-Dolphin: X

Remarks: REPLACED LOCKING CAP & LOCK (DOLPHIN)

Signature YKR Review _____

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☒ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: ENSR	Project Name: FORMER BILL CHUN SERVICE STATION
Address: 10324 PLACER LN STE 200	Billing Address (if different):
City: SACTO State: CA Zip Code: 95827	
Telephone (916) 362-7100 FAX #: (916) 362-8100	P.O. #: JOB# 8700-688.100
Report To: KURT MARTIN Sampler: TRACE RANKIN	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Working Days ☐ 7 Working Days ☐ 5 Working Days ☐ 3 Working Days ☐ 2 Working Days ☐ 24 Hours ☐ 2 - 8 Hours

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH/BTEX/MTBE	Comments
1. MW3	1/31/98 0935	H2O	3	40ml VOA w/ HCl		X	
2. MW4	0910						
3. MW8	1010						
4. MW9	0754						
5. MW10	0705						
6. MW11	0838						
7.							
8.							
9.							
10.							

Pink - Client
Yellow - Sequoia
White - Sequoia

Relinquished By: [signature]	Date: 2/2/98	Time: 1640	Received By: [signature]	Date: 2/2/98	Time: 1640
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date:	Time:

Were Samples Received In Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: SEQUOIA

ATTACHMENT C

LABORATORY REPORTS
GROUNDWATER SAMPLE ANALYSIS

SUPERIOR ANALYTICAL LABORATORY
MARTINEZ, CALIFORNIA

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

ENSR	Client Project ID:	Former Bill Chun Service Station	Sampled:	Jan 30, 1998
10324 Placer Ln., Ste. 200	Sample Matrix:	Water	Received:	Feb 2, 1998
Sacramento, CA 95827	Analysis Method:	EPA 5030/8020, DHS Luft	Reported:	Feb 12, 1998
Attention: Kurt Martin	First Sample #:	802-0029		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 802-0029 MW 3	Sample I.D. 802-0030 MW 4	Sample I.D. 802-0031 MW 8	Sample I.D. 802-0032 MW 9	Sample I.D. 802-0033 MW 10	Sample I.D. 802-0034 MW 11
Purgeable Hydrocarbons	50	5,900	N.D.	430	2,400	N.D.	1,800
Benzene	0.50	N.D.	N.D.	24	1,100	N.D.	22
Toluene	0.50	N.D.	N.D.	3.1	N.D.	N.D.	3.4
Ethyl Benzene	0.50	N.D.	N.D.	5.7	N.D.	N.D.	66
Total Xylenes	0.50	N.D.	N.D.	8.4	10	N.D.	65
Chromatogram Pattern:		Unidentified Hydrocarbons C6-C12	--	Weathered Gasoline C6-C12	Weathered Gasoline C6-C12	--	Weathered Gasoline C6-C12

Quality Control Data

Reporting Limit Multiplication Factor:	5.0	1.0	1.0	20	1.0	2.0
Date Analyzed:	02/09/98	02/06/98	02/06/98	02/09/98	02/06/98	02/06/98
Instrument Identification:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 60-140%)	103	104	99	92	110	145*

* Matrix Interference
Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected at or above the reporting limit.

SEQUOIA ANALYTICAL, ELAP #1624

Ronald W. Bobel
Project Manager/Sacramento Laboratory

Sequoia Analytical

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ENSR
10324 Placer Ln., Ste. 200
Sacramento, CA 95827
Attention: Kurt Martin

Client Project ID: Former Bill Chun Service Station
Sample Matrix: Water
Analysis Method: EPA 5030/8020 Modified
First Sample #: 802-0029

Sampled: Jan 30, 1998
Received: Feb 2, 1998
Reported: Feb 12, 1998

METHYL TERTIARY BUTYL ETHER (MTBE)

Analyte	Reporting Limit µg/L	Sample I.D. 802-0029 MW 3	Sample I.D. 802-0030 MW 4	Sample I.D. 802-0031 MW 8	Sample I.D. 802-0032 MW 9	Sample I.D. 802-0033 MW 10	Sample I.D. 802-0034 MW 11
MTBE	5.0	44	N.D.	N.D.	N.D.	N.D.	42

Quality Control Data

Report Limit Multiplication Factor:	5.0	1.0	1.0	20	1.0	2.0
Date Analyzed:	02/09/98	02/06/98	02/06/98	02/09/98	02/06/98	02/06/98
Instrument Identification:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery: (QC Limits = 60-140%)	103	104	99	92	110	145*

* Matrix Interference
Analytes reported as N.D. were not detected at or above the reporting limit.

SEQUOIA ANALYTICAL, ELAP #1624

Ronald W. Bobel
Project Manager/Sacramento Laboratory

Sequoia Analytical

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ENSR
10324 Placer Ln., Ste. 200
Sacramento, CA 95827
Attention: Kurt Martin

Client Project ID: Former Bill Chun Service Station
Matrix: Water

QC Sample Group 8020029-0034

Reported: Feb 12, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	L. Bettencourt	L. Bettencourt	L. Bettencourt	L. Bettencourt
Concentration Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Batch#:	LCS020998	LCS020998	LCS020998	LCS020998
Date Prepared:	02/09/98	02/09/98	02/09/98	02/09/98
Date Analyzed:	02/09/98	02/09/98	02/09/98	02/09/98
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
LCS % Recovery:	106	104	104	103
Control Limits:	70-130%	70-130%	70-130%	70-130%
MS/MSD Batch #:	8020100	8020100	8020100	8020100
Date Prepared:	02/09/98	02/09/98	02/09/98	02/09/98
Date Analyzed:	02/09/98	02/09/98	02/09/98	02/09/98
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Matrix Spike % Recovery:	99	94	94	94
Matrix Spike Duplicate % Recovery:	101	95	96	96
Relative % Difference:	2.0	1.0	2.1	2.1

SEQUOIA ANALYTICAL

Ronald W. Bobel
Project Manager/Sacramento Laboratory

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

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ENSR
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Sacramento, CA 95827
Attention: Kurt Martin

Client Project ID: Former Bill Chun Service Station
Matrix: Water
QC Sample Group 8020029-0034

Reported: Feb 12, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	L. Bettencourt	L. Bettencourt	L. Bettencourt	L. Bettencourt
Concentration Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Batch#:	LCS020698	LCS020698	LCS020698	LCS020698
Date Prepared:	02/06/98	02/06/98	02/06/98	02/06/98
Date Analyzed:	02/06/98	02/06/98	02/06/98	02/06/98
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
LCS % Recovery:	107	106	104	104
Control Limits:	70-130%	70-130%	70-130%	70-130%
MS/MSD Batch #:	8020033	8020033	8020033	8020033
Date Prepared:	02/06/98	02/06/98	02/06/98	02/06/98
Date Analyzed:	02/06/98	02/06/98	02/06/98	02/06/98
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Matrix Spike % Recovery:	99	98	96	96
Matrix Spike Duplicate % Recovery:	107	105	104	103
Relative % Difference:	7.8	6.9	8.0	7.0

SEQUOIA ANALYTICAL

Ronald W. Bobel
Project Manager/Sacramento Laboratory

Please Note:
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ENSR
10324 Placer Ln., Ste. 200
Sacramento, CA 95827
Attention: Kurt Martin

Client Project ID: Former Bill Chun Service Station

Lab Project ID: 8020029-0034

Reported: Feb 12, 1998

LAB NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 6 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL, ELAP #1624

Ronald W. Bobel
Project Manager/Sacramento Laboratory

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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- ☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: ENSR	Project Name: FORMER BILL CHUN SERVICE STATION
Address: 10324 PLACER LN STE 200	Billing Address (If different):
City: SACTO State: CA Zip Code: 95827	
Telephone (916) 362-7100 FAX #: (916) 362-8100	P.O. #: JOB# 8700-688.100
Report To: KURT MARTIN Sampler: TRACE RANKIN	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Working Days ☐ 7 Working Days ☐ 5 Working Days ☐ 3 Working Days ☐ 2 Working Days ☐ 24 Hours ☐ 2 - 8 Hours

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH/BTEX/MTBE									Comments
1. MW3	1/30/98 0935	H2O	3	40ml VOA's/HCL	9802-0029	X									
2. MW4	0910	↓	↓	↓	0030	↓									
3. MW8	1010	↓	↓	↓	0031	↓									
4. MW9	0750	↓	↓	↓	0032	↓									
5. MW10	0705	↓	↓	↓	0033	↓									
6. MW11	0830	↓	↓	↓	0034	↓									
7.															
8.															
9.															
10.															

SEQUOIA ANALYTICAL

Relinquished By: Trace Rankin	Date: 2/2/98	Time: 1640	Received By: John Yowell	Date: 2/2/98	Time: 1640
Relinquished By: John Yowell	Date: 2/2/98	Time: 1730	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: John Yowell	Date: 2/2/98	Time: 1730

Were Samples Received in Good Condition? ☒ Yes ☐ No   Samples on Ice? ☒ Yes ☐ No   Method of Shipment SEQUOIA COURIER   Page 1 of 1

Pink - Client / Yellow - Sequoia / White - Sequoia