FUGRO WEST, INC.

44 Montgomery Street, Suite 1010 San Francisco, California 94104 Phone: (415) 296-1041 Telefax: (415) 296-0944



LETTER OF TRANSMITTAL

To:	Env	rironmental H	ealth Services	Project No.	9537-0741				
	113	1 Harbor Bay	Parkway, Suite	250		Date	11/22/96		
	Alar	neda, CA 94	502-6577						
Attn:	Ms.	Juliet Shin							
Phone:	510	-567-6700		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Fax No.	510-337-9335			
From	Peter B. Hudson								
Subject	Firs	t and Second	Quarter 1996	Ground Water Moi	nitoring Re	port			
SENT B\ ☐ Messe		☐ O ₁	∕ernight Mail	Overnight (b	y 10 AM)	⊠ Regular mail	☐ Hand Delivered		
WE ARE	TRAN	ISMITTING:			THESE	ARE TRANSMIT	TED:		
☐ Draft I	Report	t			☐ For Y	our Review			
⊠ Final I	Report					our Information ar	nd Use		
☐ Propo	sal				☐ Per Y	our Request			
Other:					☐ Other	" :			
the Forn	ner Bi	ll Chun Serv	rice Station at	2301 Santa Clara	a Avenue	in Alameda, Cali	onitoring Report for fornia. If you have opportunity to be o		
Signature				Date					
	A		FOR	OFFICE USE OF	VLY				
			Originator Please	Initial Appropriate Box F	Prior to Sendir	ng			
Create type		Mail to Addressee	Mail copy, then file original	Mail copy, return original	☐ Mail to	Addressee and cc, file	сору		



Consulting • Engineering • Remediation

PROTECTION

98 JUL 17 PH 4: 55

#3838

10324 Placer Lane Suite 200 Sacramento, CA 95827

(916) 362-7100 FAX (916) 362-8100 http://www.ensr.com

June 30, 1998 Project No. 8700688.200

Mr. Wayne Chun 265 Heron Drive Pittsburg, California 94565

Subject:

Second 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 May 8, 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.



ENSR

Mr. Wayne Chun June 30, 1998 Page 2

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 May 8, 1998. The measurements were recorded to the nearest 0.01 foot from the referenced (top of casing) elevations. Groundwater elevations have decreased an average of 0.3 feet since the last monitoring event in January of 1998. 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 0.009 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.



Mr. Wayne Chun June 30, 1998 Page 3

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.



Ł

Mr. Wayne Chun June 30, 1998 Page 4

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

tweek (or relus

AC:AG:em

cc: Barney Chan, Alameda County Division of Environmental Health

Attachments

ATTACHMENTS

TABLES

TABLE 1	GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS					
TABLE 2	GROUNDWATER LEVEL DATA					
TABLE 3	GROUNDWATER ANALYTICAL RESULTS					
	FIGURES					
FIGURE 1	SITE LOCATION MAP					
FIGURE 2	SITE VICINITY MAP					
FIGURE 3	POTENTIOMETRIC SURFACE MAP May 8, 1998					
FIGURE 4D	DISTRIBUTION MAP OF TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND BENZENE IN GROUNDWATER May 8, 1998					
ATTACHMENTS						
ATTACHMENT A	STANDARD OPERATING PROCEDURES					
ATTACHMENT B	FIELD DOCUMENTATION					
ATTACHMENT C	LABORATORY ANALYTICAL REPORT					

TABLE 1 GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS MAY 8, 1998

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

Well Number	Groundwater	TPH-	Benzene	Toluene	Ethyl-	Total	MTBE
Moniber	Elevation (feet amsl)	Gasoline (μg/L)	(µg/L)	(µg/L)	benzene (µg/L)	Xylenes (µg/L)	(µg/L)
MW-1	19.93						-
MW-2	20.06						
MW-3	20.16	2,170	4.92	<2.5	<2.5	<2.5	
MW-4	20.01	<50.0	<0.5	<0.5	<0.5	<0.5	
MW-5	19.98						
MW-6	19.87						
MW-7	20.13						
MW-8	20.13	178	13.6	3.29	3.65	4.34	
MVV-9	19.36	1,500	891	18.2	14.1	<10	
MW-10	19.74	<50.0	<0.5	<0.5	<0.5	<0.5	
MW-11	20.15	2,050	15.3	6.11	118	179	
MCL	NA	NA .	1.0	1,000	680	1,750	NA

NOTES:

amsi =

above mean sea level μg/L ≖

micrograms per liter (which is approximately equal to parts per million [ppm]) NA ND Not Applicable - no MCL has been established for these constituents.

Not Detected

Not Sampled due to the presence of petroleum product sheen.

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 LEVEL 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 (fent)	Depth to Free Product	Free Product Thickness	Corrected Groundwater Elevation
				(feet)	(feet)	(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
İ	01/30/98		8.16		sheen	20.33
	05/08/98		8.56	8.55	0.01	19.94
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	İ	NM(1)	NM	NM	NM
[12/20/94		NM(1)	NM	NM	NM
	03/29/95		8.26		0.00	20.25
İ	05/24/95		8.89		0.00	19.62
	08/30/95		9.41		0.00	19.10
Ì	11/29/96	28.47 (2)	9.96		0.00	18.53
ſ	05/01/96		9.19		0.00	19.30
ļ	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	ļ	9.49	[0.00	18.98
	10/14/97		9.37		sheen	19.10
	01/30/98		8.02		sheen	20.45
	05/08/98		8.41	_	0.00	20.45

NOTES:

MW-2 could not be located; well box was temporarily buried during tank excavation activities

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))

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 2 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 MVV-10 inaccessible due to parked car

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

Monitoring	Monitoring	Top of Casing	Depth to Water	Depth to	Free	Corrected
Well	Date	Elevation	(feet)	Free	Product	Groundwater
Identification		(ft. above MSL)		Product	Thickness	Elevation
				(feet)	(feet)	(ft. above MSL)
MW-3	01/07/93	28.82	8,86	-	0.00	19.96
İ	09/07/93		9.62		0.00	19.20
	11/16/93	ì	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
i	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
	01/30/98		8.28		0.00	20.50
	05/08/98		8.62		0.00	20.16
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
1	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
l	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
İ	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
	01/30/98		8.29		0.00	20.24
<u> </u>	05/08/98		8.52		0.00	20.24

NOTES:

MW-2 could not be located; well box was temporarily buried during tank excavation activities

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.

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

TABLE 2 (Cont.) GROUNDWATER LEVEL 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	
MW-5	09/07/93	28,37	0.24		(icet)	(ft. above MSL)	
1	11/16/93	20,01	9.31 9.99	0.00	_	19.06	
	12/07/93	-	9.88	9.45	0.54	18.81	
	01/06/94		I	9.27	0.61	18.98	
	02/03/94		9.85	9.27	0.58	18.98	
	03/04/94		9.51 8.99	9.19	0.32	19.12	l
	06/06/94		9.72	8.96	0.03	19.40	
	11/09/94			9.14	0.58	19.11	
	12/20/94		8.58 8.77	8.56	0.02	19.81	- 1
	03/29/95		8.31	8.76	0.01	19.61	
	05/24/95		8.77	-	0.00	20.06	
	08/30/95		9.50	8.76	0.01	19.61	ı
	11/29/95	28.33 (2)	9.84	9.19	0.31	19.12	ı
	05/01/96	25.55 (2)	8.87	9.60	0.24	18.68	
	08/05/96		9.37	8.86	0.01	19.47	١
	12/10/96		9.37 8.15	9.36	0.01	18.97	1
	03/05/97		8.75	8.14	0.01	19.39	ı
	06/25/97		9.34		0.00	19.58	
	10/14/97		9.21		0.00	18.99	1
	01/30/98		8.09	"	sheen	19.12	
<u></u>	05/08/98		8.35		sheen	20.24	1
MW-6	09/07/93	28.41	9.53	<u>-</u>	0.00	19,98	
	11/16/93		9.74		0.00	18.88	
	12/07/93		9.74		0.00	18.67	ı
	01/06/94	!	9.60	-	0.00	18.83	ı
	02/03/94		9.47	_	0.00	18.81	ı
	03/04/94		9.47 9.18		0.00	18.94	I
	06/06/94		9.46		0.00	19.23	İ
	11/09/94		8.72		0.00	18.95	ı
	12/20/94		9.00	-	0.00	19.69	
	03/29/95		8.44	-	0.00	19.41	
•	05/24/95		8.94		0.00	19.97	ı
	08/30/95		9.43		0.00	19.47	ı
].	11/29/95	28.36 (2)	9.83	••	0.00	18.98	ı
	05/01/96	\ - /	9.00		0.00	18.53	ı
' 	08/05/96		9.55	_	0.00	19.36	ı
	12/10/96		9.18		0.00	18.81	
]	03/05/97	j	8.97		0.00	19.18	
İ	06/25/97		9.53		0.00	19.39	
	10/14/97	-	9.37		0.00	18.83	
	01/30/98		8.16]	sheen	18.99	
	05/08/98		8.49		sheen	20.20	
			0.49		0.00	19.87	1

NOTES:

MW-2 could not be located; well box was temporarily buried during tank excavation activities

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.

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 "out-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

TABLE 2 (Cont.) **GROUNDWATER LEVEL 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)	Gorrected 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	l	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
	01/30/98		8.09	7.68	0.41	20.68
MW-8	05/08/98		8.31	<u> </u>	0.00	20.13
IVIVV-O	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 06/25/97		8.77	• ••	0.00	19.76
			8.72		0.00	19.45
-	10/14/97 01/03/98		8.71		0.00	19.46
	05/08/98		7.84		0.00	20.33
MW-9			8:04		0.00	20.13
14144-2	11/29/95	27.45 (2)	9.23	-	0.00	18.22
i	05/01/96		8.66	_	0.00	18.79
İ	08/05/96		8,94	-	0.00	18.51
	12/10/96	/	8.60		0.00	18.85
ļ	03/05/97		8,40		0.00	19.05
ļ	06/25/97	i	8.96		0.00	18,49
	10/14/97	f	8.80		0.00	18.65
	01/30/98	.]	√ 7.86	-	0.00	19.59
- 1	05/08/98	i	8 70	1		

NOTES:

MW-2 could not be located; well box was temporarily buried during tank excavation activities

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

8.09

0.00

19.36

MW-10 inaccessible due to parked car

MSL = Mean Sea Level NM = Not Measured

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

Monitoring Well Identification	Monitoring Date	Top of Casing Elevation (It. 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	1
	08/05/96		8.50		0.00	NM 10.00
	12/10/96		8.17	_	0.00	18.82
:	03/05/97		8.06	_		19.15
	06/25/97		8.51	_	0.00	19.26
	10/14/97		8.06	-	0.00	18.81
	01/30/98		1	-	0.00	19.26
	05/08/98	.:	7.37	**	0.00	19.95
MW-11	11/29/95	29.56 (2)	7.58)		0.00	19.74
,	05/01/96	28.56 (2)	10.16		0.00	18.40
	08/05/96		9.12	_	0.00	1944
	12/10/96		9.62		0.00	18.94
			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
·	01/30/98		7.86		0.00	20.70
	05/08/98		8.41	-	0.00	20.15

NOTES:

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.

MW-2 could not be located; well box was temporarily buried during tank excavation activities

Top of casing reference elevations of all well were resurveyed on Nov. 29, 1995, following installation of MVV-8, MVV-9, and MVV-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

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

Well	Sample	TPH as	Benzene	Toluene	Ethyl	Xylene	TPH as	HVOCs (µg/L)	MTBE
Number	Date	Gasoline	(µg/L)	(µg/L)	Benzene	(Total)	Diesel		(µg/L)
		(µg/L)			(hā/r)	(µg/L)	(µg/L)		(13-)
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	NA
	11/09/94	28,000	9,500	3,000	810	2,300	250	NA NA	NA
	12/20/94	5,600	3,000	92	86	76	ND (50)	NA 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	NA.
	08/30/95	48,000	14,000	3,500	620	1,600	800	NA NA	NA NA
	11/29/95	120,000	42,000	22,000	2,300	9,900	ND (1000)	NA NA	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 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
	01/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA.	NA NA	NSFP
	05/08/98	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	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	NA
	12/07/93	86,000	28,000	17,000	35,000	16,000	8,200 (2)	NA NA	NA
	03/04/94	130,000	22,000	22,000	3,500	16,000	18,000 (4)	NA NA	NA NA
	06/06/94	100,000	27,000	22,000	2,300	10,000	9,600 (5)	NA NA	NA
	11/09/94	NSL	NSL	NSL	NSL	NSL	NSL	NA I	NA NA
	12/20/94	NSL	NSL	NSL	NSL	NSL	NSL	NA NA	NA NA
	03/29/95	240,000	56,000	30,000	3,100	7,000	3,800	NA NA	NA
ļ	05/24/95	330,000	54,000	51,000	4,700	22.000	28,000	NA NA	NA NA
	08/30/95	200,000	48,000	52,000	3,900	16,000	8,000	NA NA	NA
	11/29/95	170,000	42,000	40,000	3,400	17,000	ND (1000)	NA I	NA NA
	05/01/96	481,000	59,000	69,000	27,200	89,600	ND (50)	1,2-DCE- (61.8)	NA NA
	08/05/96	193,000	41,800	56,000	3,590	18,000	ND (50)	1,2-DCE- (83.2)	NA NA
	12/10/96	166,000	26,400	38,600	3,180	14,700	ND (50)	ND	NA NA
ļ	03/06/97	316,000	36,600	55,900	4,160	16,100	ND (50)	ND D	NA NA
[06/25/97	160,000	37,000	63,000	3,500	19,000	NA NA	ND ND	NA ND
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA I	NSFP .	NSFP
	01/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA	NA NA	
	05/08/98	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP NSFP

NOTES:	1.2-DCE TCB TPH-g TPH-d MTBE µg/L ND NSFP NSL NSR NA		1,2-Dichloroethane 1,1,2,2-Tetrachlorobenzene Total Petroleum Hydrocarbons as gasoline Total Petroleum Hydrocarbons as diesel Methyl tertiarybutyl ether reported in µg/L micrograms per liter or parts per billion (ppb) Not Detected (detection limit in parentheses) Not Sampled - Free Product present Not Samples - well could not be located Not Sampled - well could not be reached Not Analyzed	(1) (2) (3) (4) (5)	= - - - - - - - - - - - - - - - - - - -	Results typical of a non-diesel mixture (<c16) (<c14)<="" (<c16)="" <c14)="" a="" and="" diesel="" gasoline="" hydrocarbons="" mixture="" non-diesel="" of="" results="" th="" typical="" unidentified="" weathered=""></c16)>
--------	--	--	---	---------------------------------	--	---

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

Well	Sample	TPH as	Benzene	Toluene	Ethyl	Xylene	TPH as	HVOCs (µg/L)	MTBE
Number	Date	Gasoline	(µg/L)	(µg/L)	Benzene	(Total)	Diesel	nvocs (µg/L)	110000000000000000000000000000000000000
		(µg/L)	1	(FS-)	(µg/L)	(µg/L)	(µg/L)		(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	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	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	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	NA
	05/01/96	3,020	ND (1.0)	39.9	9.86	30,8	ND (50)	ND 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
į	06/25/97	600	ND	1.1	ND	3.0	NA NA	ND	ND
i	10/14/97	2,400	1.8	13	7.8	18	NA NA	ND (0.5)	ND (5)
	01/30/98	5,900	ND	ND	ND	ND	NA	NA NA	44
	05/08/98	2,170	4.92	ND (2.5)	ND (2.5)	ND (2.5)	NA	ND ND	NA.
MW-4	09/07/93	440	2.7	1.2	1	1.9	330 (2)	NA NA	NA.
	12/07/93	610	6.6	0.5	0.61	2.5	460 (2)	NA NA	NA.
	03/04/94	110	ND (0.5)	ND (0.5)	ND (0.5)	0.63	56 (5)	NA 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	NA
	12/20/94	130	2.2	33	4.8	27	ND (50)	NA NA	NA
	03/29/95	ND (50)	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (50)	NA NA	NA.
ŀ	05/24/95	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NA.	NA NA
	08/30/95	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NA NA	NA
	11/29/95	100	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NA.	NA NA
1	05/01/96	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	ND	NA NA
l	08/05/96	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	ND	NA NA
}	12/10/96	65	ND (0.5)	ND (0.5)	ND (0.5)	0.6	ND (50)	ND	NA NA
- 1	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 I
	10/14/97	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	ND (0.5)	ND (5)
	01/30/98	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	NA	ND (5)
	05/08/98	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA NA	ND	ND (5)

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

(1) = Results typical of a non-diesel mixture (<C15)
(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	Sample	TPH as	Benzene	Toluene	Ethyl	Xylene	TPHas	HVOCs (pg/L)	MTBE
Number	Date	Gasoline	(µg/L)	(µg/L)	Benzene	(Total)	Diesel	cos (pg/c)	(µg/L)
		(µg/L)			(µg/L)	(µg/L)	(µg/L)		(1914)
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 NA
ĺ	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
1	05/01/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	08/05/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
1	12/10/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	03/06/97	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA.
ŀ	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA	NSFP	NSFP
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA	NSFP	NSFP
	01/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA	NA NA	NSFP
	05/08/98	NSFP	NSFP	NSFP :	NSFP	NSFP	NSFP	NSFP	NSFP
MW-6	09/07/93	10,000	1,300	540	370	1,600	1,400 (2)	NA NA	NA.
1	12/07/93	17,000	4,300	1,200	600	2,700	2,400 (2)	NA NA	NA
!	03/04/94	21,000	4,600	1,000	460	1,800	1,800 (4)	NA NA	NA
	06/06/94	12,000	5,400	350	ND (0.5)	1,200	1,600 (4)	NA NA	NA
	11/09/94	29,000	4,600	1,600	820 1	3,600	7,500	l NA	NA NA
	12/20/94	66,000	5,800	2,200	1,100	4,600	1,100	NA NA	NA NA
i	03/29/95	25,000	8,000	780	450	1,300	1 300	NA NA	NA NA
- 1	05/24/95	56,000	1,600	1,300	1,200	7,200	40,000	NA NA	NA NA
l	08/30/95	68,000	16,000	3,400	1,900	6,800	4,900	NA NA	NA NA
	11/29/95	57,000	15,000	2,900	2,500	10,000	ND (900)	l NA	NA NA
	05/01/96	39,500	7,400	2,540	1,270	4,470	ND (50)	1,2-DCE-73 (73.0)	NA NA
	08/05/96	71,200	22,600	4,000	2,100	7,030	ND (50)	1,2-DCE-157 (157)	NA NA
	12/10/96	49,200	10,900	2,180	1,880	6.720	ND (50)	1,2-DCE-210 (210)	NA NA
į	03/06/97	65,300	10,300	2,500	1,940	5,770	ND (50)	ND	NA NA
1	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA	NSFP	NSFP
.	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA .	NSFP	NSFP
	01/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA I	NA NA	NSFP
	05/08/98	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	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
	MTSE	=	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	2	Not Sampled - Free Product present
	NSL	=	Not Samples - well could not be located
	NSR	=	Not Sampled - well could not be reached
	NA	=	Not Analyzed

Results typical of a non-diesel mixture (<C16)
Results typical of a diesel and non-diesel mixture (<C16)
Results typical of weathered gasoline
Results typical of diesel and unidentified hydrocarbons <C14)
Results typical of unidentified hydrocarbons (<C14)

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

Alameda, California

Well	Sample	TPH as	Benzene	Toluene	Ethyl	Xylene	TPH as	HVOCs (µg/L)	MTBE
Number	Date	Gasoline	(µg/L)	(µg/L)	Benzene	(Total)	Diesel	(+3/-)	(µg/L)
		(µg/L)	100000		(µg/L)	(µg/L)	(µg/t)		, r-y-/
MW-7	09/07/93	24,000	6,000	4,800	490	2,300	1,300	NA NA	NA NA
	12/07/93	95,000	28,000	24,000	1,600	8,700	2,200	NA NA	NA NA
	03/04/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	
	06/06/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	11/09/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	12/20/94	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	03/29/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	05/24/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	08/30/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	11/29/95	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	05/01/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	08/05/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	
	12/10/96	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	03/06/97	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA
	06/25/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA	NSFP	NSFP
	10/14/97	NSFP	NSFP	NSFP	NSFP	NSFP	NA.	NA NA	NSFP
	01/30/98	NSFP	NSFP	NSFP	NSFP	NSFP	NA NA	NA NA	NSFP
	05/08/98	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP	NSFP
MW-8	11/29/95	7,400	260	40	140	190	ND (80)	NA NA	NA NA
	05/01/96	270	1.02	ND	1.10	1.87	ND (50)	ND	NA NA
	08/05/96	1,100	22.6	3.4	11.2	12.7	ND (50)	TC8-2.5	NA NA
	12/10/96	442	17.2	2.7	5.9	5.6	ND (50)	ND	NA NA
	03/05/97	765	33.2	7.2	9.3	11.1	525	ND	NA NA
	06/25/97	700	36	5.1	8.0	8.0	NA	NA NA	10
	10/14/97	660	29	6.6	10	13	NA NA	ND (0.5)	
	01/30/98	430	24	3.1	5.7	8.4	NA	NA	ND (5)
	05/08/98	178	13.6	3.29	3.65	4.34	NA NA	ND ND	ND (5)
MW-9	11/29/95	1,500	590	2	3	20	ND (50)	1,2-DCE-46	NA NA
	05/01/96	230	142	0.78	ND	1.17	ND (50)	1,2-0CE-46 ND	NA
	08/05/96	180	3.1	0.5	0.5	2.3	ND (50)	ND DN	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-5.0 1,2-DCE-19.2	NA NA
	06/25/97	8,000	4,600	190	100	30	NA NA	1,2-DQE-19.2 NA	NA 220
	10/14/97	910	480	8.1	2.4	5.0	NA i	ND (0.5)	220
	01/30/98	2,400	1,100	ND (0.5)	ND (0.5)	ND (0.5)	NA NA	ND (0.5)	46
	05/08/98	1,500	891	18.2	14.1	ND (10)	NA I	1,2-DCA-4.76	ND (5)
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	NA NOD	NA
	08/05/96	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	NSR	NA
	12/10/96	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	` ' 1	, ,	Chloroform (13.2)	NA
	03/05/97	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (50)	1,2-DCE-10.1	NA
ļ	06/25/97	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5) ND (0.5)	ND (0.5)	ND (50)	ND	NA
	10/14/97	ND (50)	1.2	2.5	ND (0.5) ND (0.5)	ND (0.5)	NA	NS	ND
	01/30/98	ND (50)	ND (0.5)	ND (0.5)	ND (0.5) ND (0.5)	1.7	NA NA	Chloroform-1.5	ND (5)
ļ	05/08/98	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA	NA NA	ND (5)
			(0.0)	140 (0,3)	NU (0.5)	ND (0.5)	NA	ND	NA

NOTES:	1.2-DCE TCB TPH-g TPH-d MTBE µg/L ND NSFP NSL NSR NA	********	1,2-Dichloroethane 1,1,2,2-Tetrachlorobenzene Total Petroleum Hydrocarbons as gasoline Total Petroleum Hydrocarbons as diesel Methyl tertiarybutyl ether reported in µg/L micrograms per liter or parts per billion (ppb) Not Detected (detection limit in parentheses) Not Sampled - Free Product present Not Samples - well could not be located Not Sampled - well could not be reached Not Analyzed	(1) (2) (3) (4) (5)	= , = = = = = =	Results typical of a non-diesel mixture (<c16) (<c14)<="" (<c16)="" <c14)="" a="" and="" diesel="" gasoline="" hydrocarbons="" mixture="" non-diesel="" of="" results="" th="" typical="" unidentified="" weathered=""></c16)>
--------	--	----------	---	---------------------------------	-----------------------------------	---

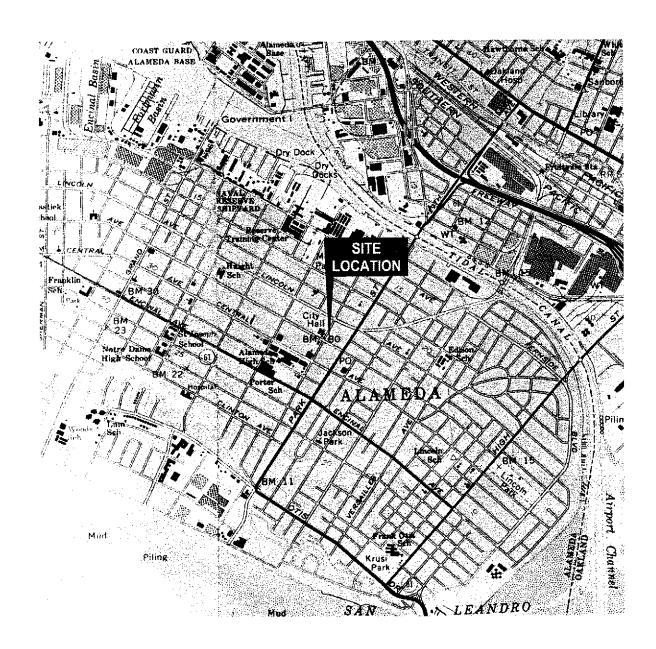
TABLE 3 (Cont.) GROUNDWATER ANALYTICAL RESULTS

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-11	11/29/95 05/01/96 08/05/96 12/10/96 03/05/97 06/25/97 10/14/97 01/30/98 05/08/98	3,200 79 6,660 68,000 340 300 510 1,800 2050	14 ND (0.5) 5,040 800 4.2 3.5 4.0 22 15.3	31 ND (0.5) ND (0.5) 260 0.6 0.9 8.7 3.4 6.11	15 ND (0.5) 51.6 200 3.1 2.7 21 66 118	570 ND (0.5) ND (0.5) 1,160 5.3 5.0 23 65	ND (50) 107 ND (50) ND (50) ND (50) NA NA NA	NA ND 1,2-DCE-16.0 ND ND NS ND (0.5) NA ND	NA NA NA NA ND ND (5) 42 NA

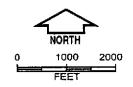
NOTES:	1.2-DCE TCB TPH-g TPH-d MTBE µg/L ND NSFP NSF NSR NA	1,2-Dichloroethane 1,1,2,2-Tetrachlorobenzene Total Petroleum Hydrocarbons as gasoline Total Petroleum Hydrocarbons as diesel Methyl tertiarybutyl ether reported in µg/L micrograms per liter or parls per billion (ppb) Not Detected (detection limit in parentheses) Not Sampled - Free Product present Not Samples - well could not be located Not Sampled - well could not be reached Not Analyzed	(1) (2) (3) (4) (5)

(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)





USGS 7.5 MINUTE OAKLAND EAST & WEST, CALIFORNIA QUADRANGLE



	C	

DRAWN BY:

S. Hale

REVISED BY:

DATE: November 13, 1997

DATE:

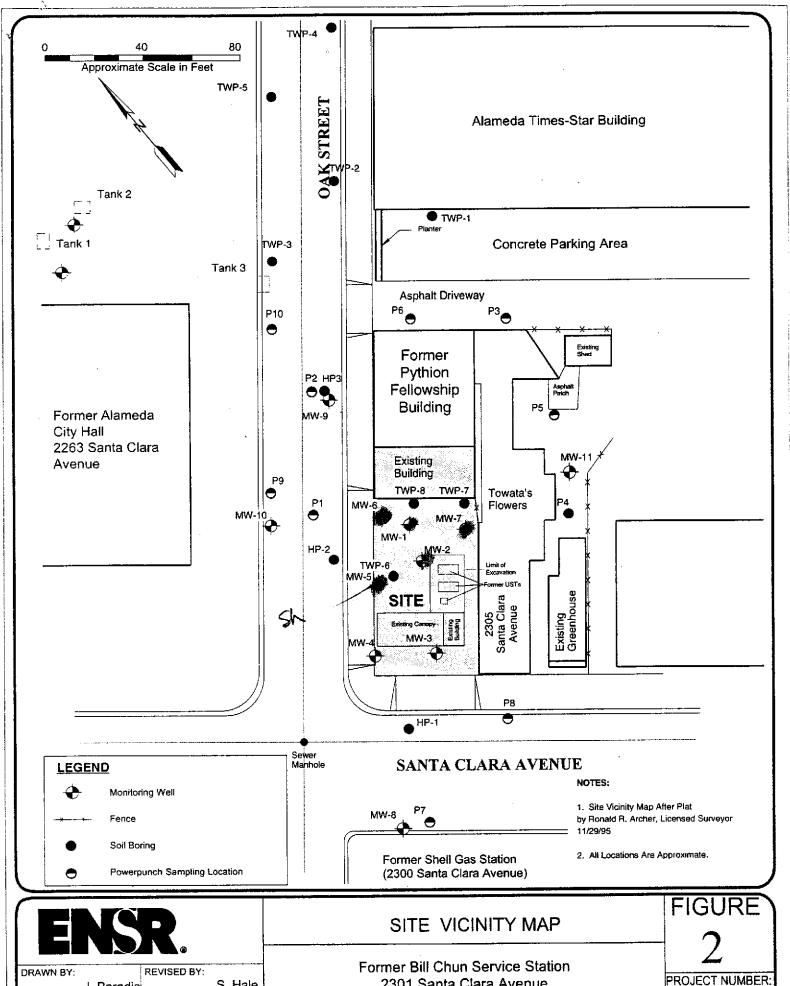
SITE LOCATION MAP

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

FIGURE

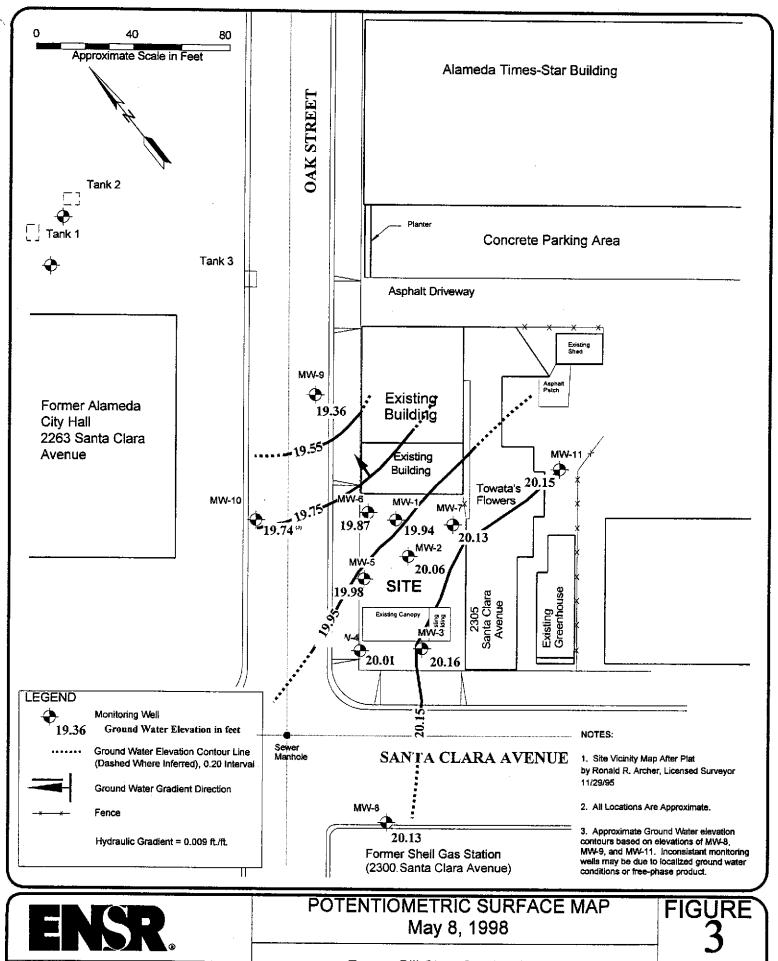
1

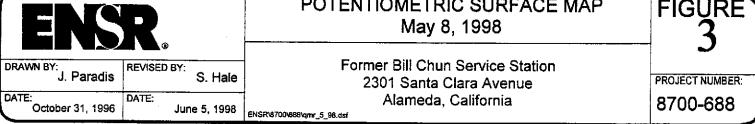
PROJECT NUMBER: 8700-688

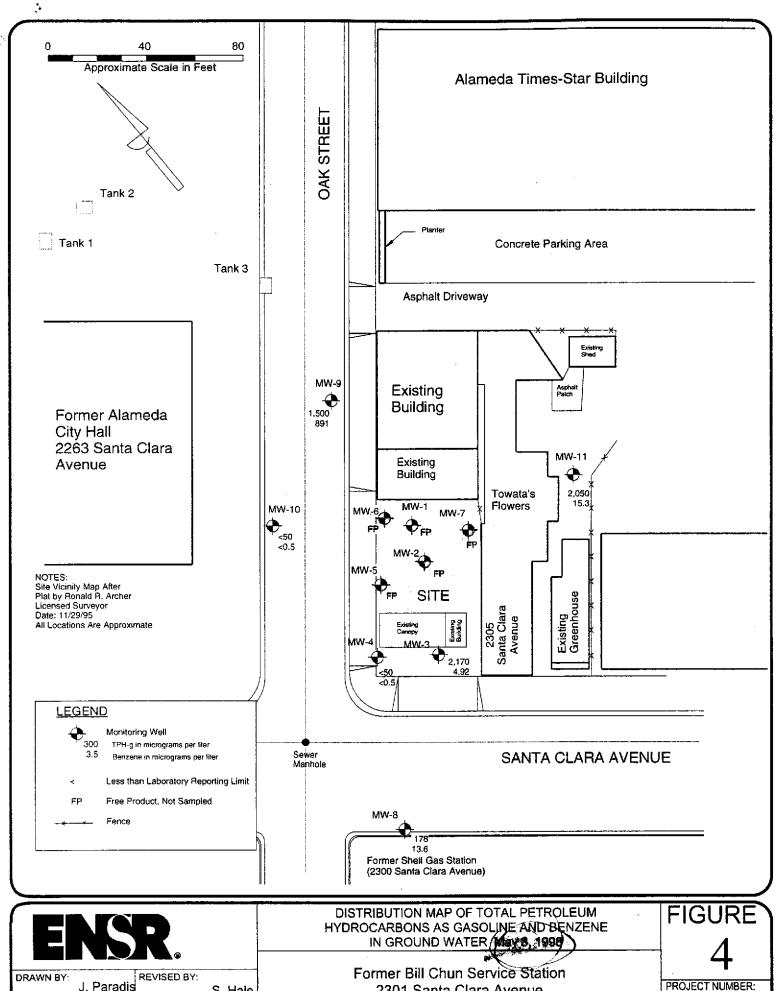


2301 Santa Clara Avenue S. Hale J. Paradisi Alameda, California DATE DATE: April 28, 1998 ENSR\8700\688\688_site.dsf October 31, 1996

8700-688







J. Paradis S. Hale DATE: October 31, 1996 February 20, 1998

2301 Santa Clara Avenue Alameda, California

8700-688

ATTACHMENT A

STANDARD OPERATING PROCEDURES GROUNDWATER MONITORING AND SAMPLING

SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES

SUB_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:

- Participation in state and federal laboratory accreditation/certification programs;
- Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
- 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 \cdot (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

ATTACHMENT B FIELD DOCUMENTATION





Client:	Wagne Ch	w/k			Project No:	87006	88,169
		ta Clava Avi	<u>. </u>	– Well D	esignation:	سرن	
•	Alaureda			_			
is setup of traffic	control device	es required? :	(NO)	YES	Setup & Takedo	wn time:	hours
is there st	anding water is	n well box? :	NO	(TES)	(Above TOC	Below TOC)	
	Top of Casing	_	NG .	(YES)	(If NO please e		
	il cap sealed a		NO	YES	(If NO please e	xplain in rema	ırks)
Height of Well General conditi			Excellent	_ Goad	Fair	Poor (Eyp	lain in remarks)
General conditions Purging Equip		u assembly .		sable bailer		Submersit	
ruignig Equip	men.	<u>X</u>	2" PVC b			Dedicated	•
	•		4" PVC b			Dealoatea	builer
•	•		4 2460	aller			
Sampled wit	th: Dispo	sal bailer:	\ Te	eflon Bailer:			
Well	Diameter:	2" 🗶	3"	4"	6"	8"	•
Purae Voi.	Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.
	•						
Initial Measurme	<u>ent</u>		Recharge	<u>Measurement</u>			
Time: <u>のほろも</u>	_		Time:		Calcul	ated purge	
Depth of well:	<u> 27.90</u>		Depth to	water:	Ac	tual purge	
Depth to wate	F. 8.56	•	•				
Start purge:		Samr	oling time	*	Sam	pling Date	: 5/६/वि
otart purgot,					•		
	Time	Temp (F)	E.C.	pН	Turbidity	O (ppm)	Votutile (Gai.)
_							
	•						
•		Sample an	Destance		m, DE 58,	c .2 4. 2	, 1
				· NC ZA	MILE DE	i naci	C DOLPAIN
QC sample	s collected	at this well:	MOHE			LOCA	r DOFI-ITA
Equipment rep	olaced:	(Check all th	nat appiy)	Note condition	on of replaced	item.	
2" Locking Ca	p:	L	ock #235	i7:		Lock #090	9:
3" Locking Ca	•		_ock #375		L	.ock-Doiph	in:
	-		ron Lock				
4" Locking Ca	۲۰	Olica		he.			
Domostic-	- A.A.	LEALL IN	771 N:1	No. 19:1 1	Shileh in	chaic c	H65.)
		•	_	SPONANCE !	BAILER VI	17440FC >	Color NADO
8 P) 1	MATER	1 1/2 - 10-2	A SELECT	- 102C P	est nu	<u>(4,4844) . 0</u>	1' wliate About
			· · · · · · · · · · · · · · · · · · ·				· ·
	(در ل	>	·- <u></u>	_			
Signature	/4 I				Review		





Client:	Warne (wh			Project No:	87004	88,100	
	2201 Jan		٧.	- Weil [Designation:	- Mis-	2	
	Alamed			_	Ū			
Is setup of traffic	control devic	es required? :	(NO)	YES	Setup & Takedo	own time:	hours	
•	anding water i	· · · · · · · · · · · · · · · · · · ·	NO	YES	(Above TOC	Below TOC)	l	
	Top of Casin	~	No	YES YES	(If NO please	=	•	
	ii cap sealed a		NO	YES	(if NO please of	explain in rema	ırks)	
Height of Weil General conditi			Excellent	Good	Fair	Boor (Evo	lain in remarks)	
General condition		u assembly .		able bailer	Fall	Submersit		
-arging Equit	Allieries .	X	2" PVC ba			Dedicated	•	
		_ **	4" PVC ba			Degloried	buildi	
			- PYCD	21161				ĺ
Sampled wi	th: Disp	osal bailer:	 ✓ Te	flon Bailer:	<u>- </u>			
Well	Diameter:	2" 📉	3"	4"	6"	8"	•	
Purge Vol.	. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.	
Initial Measurme	<u>ent</u>			<u>Measurement</u>		- 4		
rime: <u> </u>		-	Time:			ated purge		
Depth of well:			Depth to	water:	Ad	ctual purge		
Depth to water	r: 8.41	<u> </u>						
Start purge:	2/4	Samı	oling time:		Sam	pling Date	: 5/8/98	
- , , , ,	Time	Temp (F)	E.C.	Hq	Turbidity	O (ppm)		
	Tittle	Temp (T)	2.0.) pri	dibidity	O (ppiii)	Volume (dan)	
				<u> </u>				
			_					·
	,							
								:
•		Sample ap	pearance:	110 Chair	DIE SEE R	FLE C		
QC sample	s collected				<u> </u>		: DOLALIN	
				•				
quipment rep	olaced:	(Check all ti	nat apply) N	vote condition	on of replaced	i item.		
" Locking Ca	p:	1	.ock #2357	7:		Lock #090	9:	
" Locking Ca	p:	L	Lock #3753	3:	L	.ock-Dolph	in:	
" Locking Ca	p:	Chev	ron Lock:					
_	•			,				
Remarks:	N.D OU	ألعة فهمتا	Aicbosta	1 RANSA	VISABLE	SHEEN ON	WATER	
	524 BARS			12/4 CSI 10		<u> </u>		
100 11	CA XI MAN	L FFEE F	-1 11/C/	<u> </u>				1
						<u> </u>		
	\ . N							
lianatura	777	<u>-</u>			Daviaw			

	M.

·	11				Denicat Mar	00.00	20 1CJ
	Wagne (4			_	Project No:		
₩ Site:	2201 Jan		<u>e</u>	- well D	esignation:	Mu	<u></u>
	_Alameda			-			
is setup of traffic				YES	Setup & Takedo		hours
	anding water i		NO Nú	YES	{ Above TOC (If NO please e	Below TOC) explain in rema	rics)
	s Top of Casing II cap sealed a	-	NO NO	YES	(If NO please e		
	ill cap sealed a I Casing Riser				, produce c	,	•
General conditi			Excellent	Good	Fair		ain in remarks)
urging Equip			- *	able bailer		Submersib	
	•	X	2" PVC ba			Dedicated	bailer
•	•		4" PVC ba	iler			
Sampled wi	th: Dispo	osal bailer:		flon Bailer:	<u> </u>	 	
	Diameter:		3"	4"	6"	8"	•
	. Multiplier:	·	0.367	0.653	1.47	2.61	gal/ft.
•				-			
Initial Measurm	ent		=	<u>Measurement</u>	_	ادعي	. ^ -
Fime: <u>F1/3-3</u>			Time: [810			ated purge	
Depth of well:	140		Depth to v	water: <u>٩، ځ</u> د	Ac	tual purge:	<u> </u>
Depth to wate	11: 8.62	-				<u>.</u>	
Start purge:		Samı	pling time:	15/5-	Sam	inling Date	5/8/48
			Emily mine.	1010	 		
	Time	Temp (F)	E.C.	pH	Turbidity	O (ppm)	
_		· 			•		
-	Time 1001	Temp (F)	E.C.	pH 7.0 ≤	•	O (ppm)	
-	Time 1001	Temp (F) たし、4 はら、5	E.C. 364 a)	7.05 7.09	•	O (ppm)	
-	Time 1001	Temp (F)	E.C.	pH 7.0 ≤	•	O (ppm)	
-	Time 1001	Temp (F) たし、4 はら、5	E.C. 364 a)	7.05 7.09	•	O (ppm)	
	Time 1001	Temp (F) たし、4 はら、5	E.C. 364 a)	7.05 7.09	•	O (ppm)	
 ·	Time 1001	Temp (F) Sulve Sul	E.C. 3/34 &) 3/1 \ 3/60 \	7.05 7.09 7.12	•	O (ppm)	
	Time 1001 1003 1005	Temp (F)	E.C. 3/4 &) 3/4 \(\) 3/6 \(\)	7.05 7.09 7.12	•	O (ppm)	Volume (Gal.)
	Time POOL 1003 locs	Temp (F) ジューリー ジューリー ジューリー Sample ap at this well:	E.C. 3134 a 1 3160 V pearance: NONE	PH 7.05 7.09 7.12	Turbidity	O (ppm)	
QC sample	Time POOL 1003 locs	Temp (F) ジューリー ジューリー ジューリー Sample ap at this well:	E.C. 3134 a 1 3160 V pearance: NONE	PH 7.05 7.09 7.12	•	O (ppm)	Volume (Gal.)
quipment re	Time 1001 1005 locs es collected placed:	Temp (F)	E.C. 3134 a 1 3160 V pearance: NONE	pH 7.05 7.09 7.12 Note condition	Turbidity	O (ppm)	Volume (Gal.)
Equipment re 2" Locking Ca	Time DOL DOC LOCS LO	Temp (F)	E.C. 3/4 () 3/4 () 3/6 () pearance: NOPE hat apply) N	pH 7.05 7.09 7.12 Note condition 7:	Turbidity	O (ppm)	Volume (Gal.) 2 2 2 2 3: Aclaun
Equipment re 2" Locking Ca 3" Locking Ca	Time 1001 1005 locs es collected placed: ap:	Sample ap at this well:	E.C. 3/4 &) 3/4 \(\) 3/6 \(\) Spearance: NOPE hat apply) N Lock #2357	pH 7.05 7.09 7.12 Note condition 7:	Turbidity	O (ppm)	Volume (Gal.) 2 2 2 2 3: Aclaun
quipment re 2" Locking Ca 3" Locking Ca	Time 1001 1005 locs es collected placed: ap:	Sample ap at this well:	E.C. 3/4 () 3/4 () 3/6 () pearance: NOPE hat apply) N	pH 7.05 7.09 7.12 Note condition 7:	Turbidity	O (ppm)	Volume (Gal.) 2 2 2 2 3: Aclaun
Equipment re 2" Locking Ca 3" Locking Ca 4" Locking Ca	Time 1001 1005 locs es collected placed: ap: ap: ap:	Sample ap at this well: (Check all the Chec	E.C. 3/4 &) 3/4 \ 3/6 \ 3/6 \ Deperation PE hat apply) N Lock #2357 Lock #3753 vron Lock:	pH 7.05 7.09 7.12 Note condition 7:	Turbidity on of replaced	Lock #090s	Volume (Gal.) 2 2 2 2 3: Aclaun
Equipment re 2" Locking Ca 3" Locking Ca 4" Locking Ca	Time 1001 1005 locs es collected placed: ap: ap: ap:	Sample ap at this well: (Check all the Chec	E.C. 3/4 &) 3/4 \ 3/6 \ 3/6 \ Deperation PE hat apply) N Lock #2357 Lock #3753 vron Lock:	pH 7.05 7.09 7.12 Note condition 7:	Turbidity	Lock #090s	Volume (Gal.) 2 2 2 2 3: Aclaun
Equipment re 2" Locking Ca 3" Locking Ca 4" Locking Ca	Time 1001 1005 locs es collected placed: ap: ap: ap:	Sample ap at this well: (Check all the Chec	E.C. 3/4 &) 3/4 \ 3/6 \ 3/6 \ Deperation PE hat apply) N Lock #2357 Lock #3753 vron Lock:	pH 7.05 7.09 7.12 Note condition 7:	Turbidity on of replaced	Lock #090s	Volume (Gal.) 2 2 2 2 3: Aclaun
Equipment re 2" Locking Ca 3" Locking Ca 4" Locking Ca	Time 1001 1005 locs es collected placed: ap: ap: ap:	Sample ap at this well:	E.C. 3/4 &) 3/4 \ 3/6 \ 3/6 \ Deperation PE hat apply) N Lock #2357 Lock #3753 vron Lock:	pH 7.05 7.09 7.12 Note condition 7:	Turbidity on of replaced	Lock #090s	Volume (Gal.) 2 2 2 2 3: Aclaun
Equipment re 2" Locking Ca 3" Locking Ca 4" Locking Ca	Time 1001 1005 locs es collected placed: ap: ap: ap:	Sample ap at this well:	E.C. 3/4 &) 3/4 \ 3/6 \ 3/6 \ Deperation PE hat apply) N Lock #2357 Lock #3753 vron Lock:	pH 7.05 7.09 7.12 Note condition 7:	Turbidity on of replaced	Lock #090s	Volume (Gal.) 2 2 2 2 3: Aclaun
quipment re 2" Locking Ca 3" Locking Ca 4" Locking Ca	Time 1001 1005 locs es collected placed: ap: ap: ap:	Sample ap at this well:	E.C. 3/4 &) 3/4 \ 3/6 \ 3/6 \ Deperation PE hat apply) N Lock #2357 Lock #3753 vron Lock:	pH 7.05 7.09 7.12 Note condition 7:	Turbidity on of replaced	Lock #090s	Volume (Gal.) 2 2 2 2 3: Aclaun



Client:							
	Warne (wh		-	Project No:	87006	88.169
Site:	2201 Jan	ta Clava An	ve	_ Well D	esignation:	الراب ال	
	Alamed	<u> </u>		- ,			
Is	anding water is Top of Casin II cap sealed a I Casing Riser	in well box? g cut level? and locked? (in inches)	NO NO NO SECULIAR SECU	YES YES YES YES	Above TOC (If NO please e (If NO please e	Below TOC) xplain in rema xplain in rema Poor (Expl	arks) arks) (ain in remarks)
Purging Equip	oment:		_	able bailer		Submersit	•
		X	2" PVC ba			Dedicated	bailer
			4" PVC ba	ailer			
Sampled wi	th: Disp	osal bailer:	: √ Te	flon Bailer:			
	Diameter:	2" 🗶	3"	4"	6"	8"	•
	. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.
Initial Measurm Time: Cle 19 Depth of well: Depth to wate	21.05	· .	Time: <u>09</u>	<u>Measurement</u> <u>3</u> water: 뜻 .중		ated purge tual purge	6.5
Start purge:		Sam	pling time:	0935	Sam	pling Date	: <u>5/8/98</u>
	Time	Temp (F)	E.C.	рН	Turbidity	O (ppm)	Volume (Gal.)
	9919	<i>ڏ</i> ٺ , ^ن	469 45	7.31		1.5	٧
	0919 10873		469 4 5		-	1,5	3
••	1773	(ele	464	7,41	-	1,2	3
·							
	1773	(ele	464	7,41	-	1,2	
	1773	leb. Z leb. Z	461 V	7.41	-	1,2	
·	0925	ابال کے ازدان کے Sample ar	461 V pearance:	7.41	-	1,5	2
QC sample	1773	ابال کے ازدان کے Sample ar	461 V pearance:	7.41		1,5	
<u> </u>	09≥ 5	Sample at this well:	461 V pearance:	7.41	n of replaced	Lock	2
Equipment rep 2" Locking Ca 3" Locking Ca	og > 5 s collected placed: p:	Sample at this well:	461 V pearance:	7.41 7.50 lote condition	1	Lock	: Dorban
QC sample Equipment rep 2" Locking Ca 3" Locking Ca 4" Locking Ca Remarks:	of 23 of 25 es collected placed: ap: ap:	Sample at this well:	HeI W pearance: NONE hat apply) N Lock #2357	7.41 7.50 lote condition	1	Lock item.	: Dorban
Equipment reposition of the Equipment of	of 23 of 25 es collected placed: ap: ap:	Sample at this well:	HeI W pearance: NONE hat apply) N Lock #2357	7.41 7.50 lote condition	1	Lock item.	: Dorban



Client	Warne (wn			Project No:	87006	88,16g	
Site:	2201 Jan	ta Clava A	ve.	- Well (Designation:	الريث را	\	
	Alamed		•	_	_			<u></u>
Is setup of traffic	c control devic	es required?	: (NO)	YES	Setup & Takedo	wn time:	hours	
'	tanding water i	•	: NO	(ES)	(Above TOC		<u> </u>	
Į.	s Top of Casin	g cut level?	: (NÇ)	YÉS	(If NO please	xplain in rema	rks)	
	eil cap sealed a		: NO	YES	(if NO please e	xplain in rema	rks)	
•	II Casing Riser	•	•					
General condit		d assembly	: Excellent	Good	Fair		ain in remarks)	
Purging Equi	pment:			able bailer		Submersit		
		<u> </u>	2" PVC ba			Dedicated	bailer	
			ີ4" PVC ba	ailer				
Sampled wi	ith: Disno	ngal hailes	- ->/_ Te	flon Bailer:				
	Diameter:	2" 🔀	3"	4"	6"	8"		
		0.163		•		<u> </u>	, 	
Purge voi	. Multiplier:	0.103	0.367	0.653	1.47	2.61	gal/ft.	
Initial Measurm	ent		Recharge I	Meas∷rement				
Time: <u>0645</u>			Time:			ated purge	•	
Depth of well:								-
		•	Depth to v	water:	Ac	tual purge	************************************	_
Depth to wate	: <u> </u>		·					
Start purge:	MA	Sam	pling time:		Sam	pling Date	5/8/98	
	Time	Temp (F)	ı E.C.	рH	Turbidity	O (ppm)	Volume (Gal.	71
*-					,	- (-1)		7
								4
	[_	_	
;		· · · - u					1	7
								┪
								_
								1
		Sample an	Dearance:	No Sami): <i>(</i> .			_
OC sample				NO SAME	7	Lagie	N. Kinl	
QC sample	s collected :	at tills well:	MCHE	•		LOCK	DOLPHIN	
Equipment re	placed:	(Check all ti	hat apply) N	ote conditio	n of replaced	item.		
2" Locking Ca	ıp:	i	ock #2357	':	1	Lock #0909) <u>:</u>	
3" Locking Ca	·		_ock #3753	_		ock-Dolphi		
4" Locking Ca	•	_	ron Lock:	·	_	oon bonpin	• • •	
+ Lucking Ca		Office	MON LUCK.					
Remarks:	7cm 6.4	306 J [18	Schuc	CAA : IN	LIAZIO LU	El Aich	SABLE BALLER	۷
VISARLE						<u>~[₽(X)~0.</u>	ample muller	=
ULSMYLE	74564 DH	What sir	ا عن مروطي	ituall 7	follot_		· · · · · · · · · · · · · · · · · · ·	-
						·		
31	ع دي ب	•						



Client: Wane (hun				Project No: <u>৪২ ০০ ১ ৪৪ । ১৫ </u>					
Site: 2201 Janta Clara Ave				Well [Well Designation: MW- (
	Alameda			-					
is setup of traffic co	ontrol device	es required? :	(NO)	YES	Setup & Takedo				
Is there stand	-		NO	YES		Below TOC)	1		
	op of Casing	_	Nú	YES	(If NO please e	· •	· ·		
•	ap sealed a		_∼ NO	YES	(If NO please e	xpiain in rema	irks)		
Height of Well Casing Riser (in inches) :									
Purging Equipm		√		able bailer		Submersit			
. 4.53 -4			2" PVC ba			Dedicated	, i		
	•		4" PVC ba						
	•								
Sampled with				fion Bailer:					
Well D	iameter:	2" 💢	3"	4"	6"	8"	•		
Purge Vol. M	lultiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.		
Initial Measurmen	t		Recharge M	<u>Measurement</u>	•				
Time: 0635	=		Time:			ated purge	:		
Depth of well:	21 97			 vater:	_	tual purge			
· ·			peha: to 1	Tale:		Addi pai go			
Depth to water:							HAI'A		
Start purge:	4/4	Sam	oling time:		_ Sam	pling Date	: 5/8/98		
	Time	Temp (F)	E.C.	рН	Turbidity	O (ppm)	Volume (Gal.)		
			-						
<u> </u>									
 					-				
· <u>_</u>									
		Sample ap	pearance:	NC Shub	LT SEE BEL	Ch.			
QC samples				<u>; </u>		Lock	: DOLALIN		
				· · · · · · · · · · · · · · · · · · ·					
Equipment repla	aced:		• • • • •		on of replaced		_		
2" Locking Cap:	!		.ock #2357	_		Lock #090			
3" Locking Cap:		l	.ock #3753	3:	L	.ock-Dolph	in:		
4" Locking Cap:	,	Chev	ron Lock:						
Remarks:	BID CH	8067 m/D	5405222E	- V1543LE	SHEE: 0 P	WATER			
LO M	<u> </u>	E PRODUC	T			·			
		· · · · · · · · · · · · · · · · · · ·					· .		
	الله ل	>			–				
Signature	J4 1	-			Review				





and the second s							
Client: W	some (h	wh			Project No:	87006	88,160
Site: 22	301 Jan	ta Clava Av	૯	Well D	esignation:	mu-	·
<u></u>	Haureda						
is setup of traffic cor is there stand is To	ing water i		NO NO Nú	YES	Setup & Takedo Above TOC (If NO please e	Below TOC)	
is well ca Height of Well Cas	•	nd locked? : (in inches) :	NO LI	YES	(If NO please e	xplain in rema	ırks)
General condition		d assembly :	Excellent	Good	Fair		ain in remarks)
Purging Equipme	ent:	X		sable bailer		Submersit	•
		*	2" PVC b			Dedicated	bailer
			4" PVC ba	ailer			
Sampled with:		osal bailer:		flon Bailer:			
Well Dia		2" <u>×</u>	3"	4"	6"	8"	•
Purge Vol. Mt	ultiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.
Initial Measurment				<u>Measurement</u>	0 .1	-4- - 4	
Time: <u> </u>			Time:			ated purge	
Depth of well: 15	<u> </u>		Depth to	water:	Ac	tual purge	
Depth to water:	٥. ١				······································		
Start purge: $\underline{\nu}$	12	Samp	oling time:				: 5/8/98
	Time	Temp (F)	E.C.	pН	Turbidity	O (ppm)	Volume (Gal.)
		Ţ,					
· }							
<u> </u>							
		·	<u></u>				
		Sample ap	pearance:	: NC SANA	¿ 588 BELG	n we	
QC samples c				- 			: DOLPHIN
Equipment replac	ced:	(Check all th	nat apply) i	Vote conditio	n of replaced	item.	
2" Locking Cap:			ock #2357			Lock #090!	
3" Locking Cap:			_ock #375:		L	ock-Doiph	in:
4" Locking Cap:		Chev	ron Lock:	:			
		1.		<u> </u>			. A .
	10 CHE	Ct m Dis	PUSABLE	HEAUY SET	ووبت وابد س	HER-140	mc4suBable
PPODICT		····					,
SKI	nmek_	إبن سيان					
Signature	74X	_			Review		



							• • • •
Client: Wayne			_	Project No:		88,169	
Site: 2201 J	anta Clava Av	ح	Well D	esignation:	mw.	<u> </u>	
Alane	da		-		الما المارات المارات المارات المارات المارات المارات المارات المارات المارات المارات المارات المارات المارات ا		
is setup of traffic control de is there standing wate is Top of Cas		NO NO NC	YES YES YES	Setup & Takedo (Above TOC (If NO please e	Below TOC		
Is well cap seale Height of Well Casing Ris General condition of Wellh	er (in inches) :	NO Excellent	YÈS . Good	(If NO please of	xplain in remi		
Purging Equipment:	X		able bailer ailer	<u> </u>	Submersil Dedicated	ole pump	
Sampled with: Dis	posal bailer:	√ Te	flon Bailer:				
Well Diamete	r: 2" 🗶	3"	4"	6"	8"	•	
Purge Vol. Multiplie	er: 0.163	0.367	0.653	1.47	2.61	gal/ft_	
Initial Measurment Time: <u>○6≥ \</u> Depth of well: \(\frac{14.3\}{6.04}\) Depth to water: \(\frac{6.04}{6.04}\)	-	Time:	Measurement		ated purge ctual purge	**************************************	•
Start purge: <u>CC</u>	··	pling time:	<u>C</u> &>C	Sam	pling Date	: 5/8/98	
Time	Temp (F)	E.C.	pН	Turbidity	O (ppm)	Volume (Gal.)	1
5230	66.2	406 45	10.43		(.7	(1
k EC 5	67.1	4091	6.96		7.0	ک	
5606	(07.6	414 1	1:57		1.8	(
]
	-						1
<u> </u>	Sample on		ou a dai		· · · · · · · · · · · · · · · · · · ·	······································	
QC samples collecte	Sample aped at this well:		CLOSIN		Lock	: DOLALIN	_
Equipment replaced:	(Check all ti	hat apply) N	lote conditio	n of replaced	item		
2" Locking Cap: 3" Locking Cap:		_ock #2357 _ock #3753			Lock #090 .ock-Doiph	•	
4" Locking Cap:	Chev	ron Lock:			•		1
Remarks:							



							<u> </u>	
Client:	Wayne (1	wh		(E	Project No:	87006	88.10D	
Site:	2201 Jan	ta Clava An	re		esignation:	_ min_c		
	Alamed			<u>_</u>				
l: Is we Height of Wel	tanding water i s Top of Casin ell cap sealed a Il Casing Riser	n well box? g cut level? and locked? (in inches)	: NO : NC : NO	YES YES YES	Setup & Takedo (Above TOC (If NO please e (If NO please e	Below TOC explain in rema	rks)	
General condit		d assembly	Excellent	Good	(Fair		ain in remarks)	_
Purging Equip	pment:	. ,				1	•	
ν.		X	_			Dedicated	paller	
	,		-4" PVC B	aller	•			
Sampled wi	ith: Dispo	osal bailer:	. ✓ Te	efion Bailer:				
			3"	4"	6"	8"	•	\exists
		Y	_	· —		-	gal/ft.	
, 4.30				0.000	••••		3	
Initial Measum	<u>ent</u>						•	
Time: ©623			Time: C	140	Calcul	ated purge	3,5	
Depth of well:	15.23		Depth to	water: 2		tual purge	4	
Depth to wate		_	·	_ _				1
		Sami	nling time	• 2715	Sam	nling Date	. 5/8/aa	
Start purge.					•			
	Time	Temp (F)	E.C.	pH	Turbidity	,	Volume (Gal.)	
	0734	63.4	64545	6.91		1.9	2	
	0736	64.1	633 1	6.91		2.0		•
	C738	212	6391			1.8		
•	Z PVC bailer Dedicated bailer A" PVC bailer							
						,		
		Sample ap	pearance	: Clashi				
QC sample	s collected					Lock	: Karbarn	
Equipment re	piacea:	(Check all t	hat apply)	Note condition	in of replaced	item.		
2" Locking Ca	ip:		Lock #235	7: 🦂		Lock #0909):	
3" Locking Ca	ip:	!	Lock #375	3:	Ŀ	ock-Dolphi	n:	
4" Locking Ca	ip:	Che	vron Lock	:				
Remarks:	•					 .		
								
						<u> </u>		
		···						
	1 - N					<u> </u>		*. *
Signature	74	<u> </u>			Review			





Client:	Wayne (1	wh			Project No:	87004	58,160	
Site:	2201 Jan	ta Clava Av	ب	Well D	esignation:	mi-	0	_
	Alamedo		Berne	_				_
Is setup of traffic	control devic	es required? :		YES	Setup & Takedo	own time:	hours	
	anding water i		NO	YES	(Above TOC	Below TOC)		
	Top of Casin	_	NC .	YES	(If NO please	•	•	
	Il cap sealed a		≥ NO	YES	(If NO please e	explain in rema	arks)	
Height of Well General conditi	_		Excellent	– Good	Fair	Poor (Exp	lain in remarks)	
Purging Equip				sable bailer		Submersil		
3 3 ,	•	$\overline{}$				•	• •	
	•					• 5.		
			•					
					0.0			
				· · · · · · · · · · · · · · · · · · ·	· —			
Purge Vol.	Multiplier:	0.163	0.367	0.653	- 1.47	2.61	gal/ft.	
Initial Measurme	<u>ent</u>		Recharge	Measurement			_	
Time: <u>○७┌</u>	_		Time: 🦸	117	Calcul	ated purge	: 3	
	13.55				Ac	ctual purge	: 3	-
Depth to water	r: 7:56							-
		Same	olina tima	- ~77>~	Sam	anling Date	· 5/8/60	
Start purge.								- 7
_				 	lurbialty		voiume (Gal.)	
	0706	63.1		Colt				-
	د 110	1933	7761	6.09		ها ۲۰	(
	0713	53.5	698	6.11		2.6	(
								1
*		Sample an	nearance	LAwrin.				-
OC cample	e collected	•		•		Lock	· Nac Salan	
					سيودية المستجور		- DOLLING	-
Equipment rep	placed:	(Check all ti	nat apply)	Note conditio	n of replaced	i item.		
2" Locking Ca	p:	1	.ock #235	7:		Lock #0909	9:	
3" Locking Ca	p:	1	.ock #375	3:	L	.ock-Dolph	in:	
4" Locking Ca	p:	Chev	ron Lock	•				į
Remarks:				·		· <u></u>		
		· · · · · · · · · · · · · · · · · · ·						-
	epth of well: 13.55 epth to water: 6.11 Start purge: 705 Sampling time: 700 Sampling Date: 5668 Time Temp (F) E.C. pH Turbidity O (ppm) Volume (Gal.) 0006 03.1 793.5 110 2.6 110 2.6						-	
								ب ن-
· <u></u>	11.11							-
Cianaturo	75				Daviaw			



	Wayne (Project No: 8구 00 4 8용, 16 간					
Site: 2201 Janta Clava Ave				Well Designation:					
	Alamid	4							
Is setup of traffic	c control devic	es required?	: (NO)	YES	Setup & Takedo	own time:	hours		
	tanding water		: NO	YES	(Above TOC	•			
	s Top of Casin	_	: NC	YES	•	explain in rema	•		
1	ell cap sealed a Il Casing Riser	-	: NO	YES	(If NO please	explain in rema	rks)		
General condit	_	•	Excellent	Good	A DECEMBER OF THE PROPERTY OF	Poor (Expl	ain in remarks)		
Purging Equi	فعالك المتحادث المتحادث والمتحادث	14		sable bailer		Submersib			
	,	$\overline{}$	2" PVC ba			Dedicated			
			4" PVC ba		•		Mano.		
				211C1					
Sampled wi	ith: Disp	osal bailer:		fion Bailer:					
Weil	Diameter:	2" 💢	3"	4"	6"	8"	•		
Purge Voi	. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.		
			<u>.</u>				•		
Initial Measurm	<u>ent</u>			Measurement		•	. 3		
Time: <u>૾૾૾ૢ૽૱ઌ</u>	_ - ii きか		Time:			ated purge:	·		
Depth of well:		,	Depth to	water: <u>﴿ کِ ک</u> َ	<u> </u>	ctual purge:	: <u></u>		
Depth to wate	۳: <u> څ. ۲ ۱</u>	-	<u> </u>						
Start purge:	્રક્ષ્મર્	Samı	pling time:	090° 0	San	pling Date:	5/8/98		
	Time	Temp (F)	E.C.	рΗ	Turbidity	O (ppm)	Volume (Gal.)		
_	6820	62.5	27045	6,79		2.1	(''		
	c852	63,2	ZIEE 1	6.84		2.1			
<u>.</u>	0854	63.5	270V	6.84		7.2			
·				W-01					
							-		
		Sample ap	pearance:	Cloud-		=			
QC sample		at this well:		,		Lock:	: DOLPAIN		
Equipment re	placed:	(Check all ti	nat apply) N	lote conditio	n of replaced				
2" Locking Ca			_ock #2357		-	Lock #0909	•		
3" Locking Ca	•		_ock #3753	_		.ock-Dolphi			
4" Locking Ca	•		ron Lock:	74			•••		
				<u>.</u>					
Remarks:									
									
							· · · · · · · · · · · · · · · · · · ·		
	12.11								
Signature	\sim \sim 4 K				Review				

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (650) 364-9600 FAX (650) 364-9263 ☐ 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: 5,5	· · · · · · · · · · · · · · · · · · ·	Pro	oject Name:	BILL C	uon		, v
Address: 10324 PLAME LN #200			s (if different):				
City: SAETO State: CA.	Zip Code:958	>>			***		
	#(916)362-8100		O. #: 3 70	est am	0-688.102	<u> </u>	
				Level D (Star			IB □ Level A
Report To: KURT MARTIN Sampler: T				Level D (Star		s Requested	10 CLEVELY
Turnaround № 10 Working Days ☐ 3 Working Days Time: ☐ 7 Working Days ☐ 2 Working Days ☐ 5 Working Days ☐ 24 Hours	□ 2 - 8 Hours	□ Drinkin □ Waste □ Olher	Water	\	Allalyses	s riequesieu [
Client Date/Time Matrix # 6 Sample I.D. Sampled Desc. Co	nt. Type Sa	quoia's mple #	737 C				Comments
1 MW 3 7498 1015 HSD 4	40mlums WHIL		XX				
2. MW4 0935							
3. MWB 0828							
4. MW9 0745	Y M						
5. mw 10 0720	W de la lance	to the			* A A		
6. MWIL VERRO				AAF		F AN A	<u> </u>
7.							
8.	M IN M	****	A M		M		
9.							
10.)			
Relinquished By: Wee Pal	Date: 18 Time	1600	Received	By:	Cheer	Date:5/4/90	F Time://00
Relinquished By:	Date: Time	9:	Received	By:	1	Date:	Time:
Relinquished By:	Date: Time	e:	Received	By Lab:		Date:	Time:

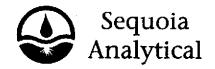
Samples on Ice? Des De No Method of Shipment

Page 1 of 1

ATTACHMENT C

LABORATORY REPORTS GROUNDWATER SAMPLE ANALYSIS

SUPERIOR ANALYTICAL LABORATORY MARTINEZ, CALIFORNIA



680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

(650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR 10324 Placer Ln., Ste. 200 Sacramento, CA 95827

Project: Bill Chun Project Number: 8700-688.100 Project Manager: Kurt Martin

Sampled: 5/8/98 Received: 5/11/98 Reported: 6/5/98

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW 3	\$805135-00	Water	5/8/98
MW 4	S805135-01	Water	5/8/98
MW 8	S805135-02	Water	5/8/98
MW 9	S805135-03	Water	5/8/98
MW 10	S805135-04	Water	5/8/98
MW 11	S805135-05	Water	5/8/98

Sequoia Analytical - Sacramento

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Redwood City, CA 94063 Walnut Creek, CA 94598

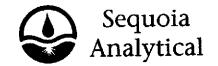
(650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR Project: Bill Chun Sampled: 5/8/98 10324 Placer Ln., Ste. 200 Project Number: 8700-688.100 Received: 5/11/98 Sacramento, CA 95827 Project Manager: Kurt Martin Reported: 6/5/98

Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT Sequoia Analytical - Sacramento

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
MW 3			S8051.	2 <i>5</i> :00			Water	
Purgeable Hydrocarbons	8050154	5/14/98	5/14/98	<u> </u>	250	2170		1
Benzene	8030134	J/14/70	J/1 4 /70				ug/l	1
Toluene	n ·	п	*1		2.50	4.92	R	
Ethylbenzene	II.	п	*1		2.50	ND		
Xylenes (total)	ıı .	п	*1		2.50	ND		
Surrogate: a,a,a-Trifluorotoluene	II	11	. <u>n</u>	60.0-140	2.50	5.43 89.6	%	
ourroguec. u,u,u irginorototuene				00.0-740		09.0	70	
MW 4	٠		S8051	<u>35-01</u>			<u>Water</u>	
Purgeable Hydrocarbons	8050154	5/14/98	5/14/98		50.0	ND	ug/l	
Benzene	и	н	н		0.500	ND	n ¯	
Toluene	п	н	10		0.500	ND	II .	
Ethylbenzene	11	*	11		0.500	ND	п	
Xylenes (total)	11	#1	**		0.500	'ND	н	
Surrogate: a,a,a-Trifluorotoluene	п	n	"	60.0-140		109	%	
MW 8			S80513	25.02			Water	
Purgeable Hydrocarbons	8050154	5/14/98	5/14/98) 	50.0	178		1
Benzene	**	J/ (4/36	3/14/30		0.500	17.6	ug/l	1
Toluene	**	н	*		0.500			
Ethylbenzene	**	17				3.29	10	
Xylenes (total)		и	Ie .		0.500	3.65)r	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	60.0-140	0.500	4.34 106	%	
Surrogaie. u,u,a-17ijiuoroioiuene				00.0-140		100	70	
<u>MW 9</u>			S80513	<u>35-03</u>			<u>Water</u>	
Purgeable Hydrocarbons	8050154	5/14/98	5/14/98		1000	1500	ug/l	1
Benzene	19		п		10.0	891	li .	
Toluene	••	17	н		10.0	18.2	II .	
Ethylbenzene	**	. 17	н		10.0	14.1	ıı	
Xylenes (total)	**	If .	н		10.0	ND	II	
Surrogate: a,a,a-Trifluorotoluene	"	n .	11	60.0-140		101	%	
MW 10			S80513	\$5_0 <i>4</i>			Water	
Purgeable Hydrocarbons	8050154	5/14/98	5/14/98	<u> </u>	50.0	ND	<u>vvater</u> ug/l	
Benzene	"	J/ 14/ 30	J/ 17/ 20		0.500	ND	пg/1	
Toluene	10	н	79		0.500	ND ND	н	
Ethylbenzene	If.	п	н		0.500	ND	19	
Xylenes (total)	Di .	11	M		0.500	ND ND	н	
Surrogate: a,a,a-Trifluorotoluene	n	n		60.0-140	0.500	110	%	. <u> </u>
BATTU 1 1							***	
MW 11	9050154	C /1 4/00	S80513	55-05	252	4050	Water	,
Purgeable Hydrocarbons	8050154	5/14/98	5/14/98		250	2050	ug/l	1

Sequoia Analytical - Sacramento



Redwood City, CA 94063 Walnut Creek, CA 94598

(650) 364-9600 (510) 988-9600 (916) 921-9600

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

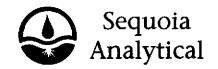
ENSR	Project:	Bill Chun	Sampled:	5/8/98
10324 Placer Ln., Ste. 200	Project Number:	8700-688.100	Received:	5/11/98
Sacramento, CA 95827	Project Manager:	Kurt Martin	Reported:	6/5/98

Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT Sequoia Analytical - Sacramento

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW 11 (continued)			S8051:	35-05			Water	
Benzene	8050154	5/14/98	5/14/98		2.50	15.3	ug/l	
Toluene	*1	#	п		2.50	6.11	п	
Ethylbenzene	н	ri .	п		2.50	118	1¢	
Xylenes (total)	II .	"	lt .		2.50	179	16	
Surrogate: a.a.a-Trifluorotoluene	"	11	"	60.0-140		116	%	

Sequoia Analytical - Sacramento





Redwood City, CA 94063 Walnut Creek, CA 94598

(650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR 10324 Placer Ln., Ste. 200 Sacramento, CA 95827

Project: Bill Chun Project Number: 8700-688.100 Project Manager: Kurt Martin

Sampled: 5/8/98 Received: 5/11/98 Reported: 6/5/98

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Sacramento

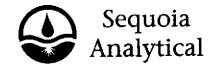
A	Batch	Date	Date	Surrogate	Reporting		: - 	
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
<u>MW 3</u>			S8051	35-00			<u>Water</u>	
Bromodichloromethane	8050235	5/21/98	5/21/98		0.500	ND	ug/l	
Bromoform	**	ıt	11		0.500	ND	"	
Bromomethane	**	п	п		1.00	ND	н	
Carbon tetrachloride	11	11	"		0.500	ND	II.	
Chlorobenzene	H	н	**		0.500	ND	If	
Chloroethane	18		14		1.00	ND	11	
2-Chloroethylvinyl ether	IF	н	#		1.00	ND	11	
Chloroform	п	U	II.		0.500	ND	**	
Chloromethane	15	R	II .		1.00	ND	**	
Dibromochloromethane	**	11	п		0.500	ND	u	
1,3-Dichlorobenzene	**	п	n		0.500	ND	u .	
1,4-Dichlorobenzene	**	н	**		0.500	ND	II .	
1,2-Dichlorobenzene	I I				0.500	ND	11	
I,l-Dichloroethane	It	+1	н		0.500	ND	н	
1,2-Dichloroethane	н	**	н		0.500	ND	11	
l,1-Dichloroethene	11	O.	D		0.500	ND	**	
cis-1,2-Dichloroethene	**	P	It		0.500	ND	н	
rans-1,2-Dichloroethene	11	II	п		0.500	ND	u .	
1,2-Dichloropropane	**	н	••		0.500	ND	п	
cis-1,3-Dichloropropene	H	**	10		0.500	ND	н	
rans-1,3-Dichloropropene	n	17	0		0.500	ND	**	
Methylene chloride	n	**	H		5.00	ND	ır	
,1,1,2-Tetrachloroethane	11	0	II .		0.500	ND	n	
Tetrachloroethene	•	п	If		0.500	ND	II .	
,1,1-Trichloroethane	n.	II	н		0.500	ND	lt	
,1,2-Trichloroethane	79	н	н		0.500	ND	н	
Trichloroethene	re-	**	н		0.500	ND	**	
richlorofluoromethane	10	**	"		0.500	ND	н	
Vinyl chloride	D	**	**		1.00	ND	"	
Surrogate: Bromochloromethane	н	tt	н	70.0-130	1100	129	%	
Surrogate: 2-Chlorotoluene	n	"	"	70.0-130		109	"	

Sequoia Analytical - Sacramento

*Refer to end of report for text of notes and definitions.

Ronald W Bobel, Client Services Representative





680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

(650) 364-9600 (510) 988-9600 (916) 921-9600

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR 5/8/98 Project: Bill Chun Sampled: Received: 5/11/98 10324 Placer Ln., Ste. 200 Project Number: 8700-688.100 6/5/98 Sacramento, CA 95827 Project Manager: Kurt Martin Reported:

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Sacramento

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
MW 4			S80513	35-01			Water	
Bromodichloromethane	8050235	5/21/98	5/21/98	_	0.500	ND	ug/l	
Bromoform	**	*1	н		0.500	ND	"	
Bromomethane	н	н	н		1.00	ND	10	
Carbon tetrachloride	**	п	н		0.500	ND	"	
Chlorobenzene	**	ii	11		0.500	ND	79	
Chloroethane	11	П	11		1.00	ND	**	
2-Chloroethylvinyl ether	n	II.	п		1.00	ND	н	
Chloroform		II.	lı		0.500	ND	H .	
Chloromethane	**	n	11		1.00	ND	**	
Dibromochloromethane	**	It	п		0.500	ND	н	
1,3-Dichlorobenzene	н	10	п		0.500	ND	н	
1,4-Dichlorobenzene	**		If		0.500	ND	н	
1,2-Dichlorobenzene	41		It		0.500	ND	**	
1,1-Dichloroethane	41	#	II.		0.500	ND	71	
1,2-Dichloroethane	II .	**	н		0.500	ND	11	
1,1-Dichloroethene	п	**	II .		0.500	ND	II	
cis-1,2-Dichloroethene	п	IT	*	4	0.500	ND	11	
trans-1,2-Dichloroethene	II.	н.,	Ħ		0.500	ND	И	
1,2-Dichloropropane	It		н		0.500	ND	II	
cis-1,3-Dichloropropene	II.	10	**		0.500	ND		
trans-1,3-Dichloropropene	II.	10	n		0.500	ND	II .	
Methylene chloride	III	н	11		5.00	ND	II II	
1,1,1,2-Tetrachloroethane	ti	н	17		0.500	ND	II	
Tetrachloroethene	н	"	10		0.500	ND	1f	
1,1,1-Trichloroethane	98	71	ri		0.500	ND	IF.	
1,1,2-Trichloroethane	**	11	**		0.500	ND	(f	
Trichloroethene	10	н	**		0.500	ND	H	
Trichlorofluoromethane	17	11	**		0.500	ND	**	
Vinyl chloride	н	11	И		1.00	ND	**	
Surrogate: Bromochloromethane	"	п	li .	70.0-130		102	%	
Surrogate: 2-Chlorotoluene	"	rr .	11	70.0-130		92.0	"	

Sequoia Analytical - Sacramento



Redwood City, CA 94063 Walnut Creek, CA 94598

(650) 364-9600 (510) 988-9600 (916) 921-9600

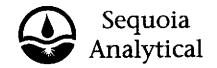
FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR Project: Bill Chun Sampled: 5/8/98 Received: 5/11/98 Project Number: 8700-688.100 10324 Placer Ln., Ste. 200 Reported: 6/5/98 Sacramento, CA 95827 Project Manager: Kurt Martin

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Sacramento

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	_Limit	Result	Units	Notes*
MW 8			S8051	35-02			Water	
Bromodichloromethane	8050235	5/21/98	5/21/98		0.500	ND	ug/l	
Bromoform	н		**		0.500	ND	11	
Bromomethane	н	11	н		1.00	ND	н	
Carbon tetrachloride	n	11	ч		0.500	ND	н	
Chlorobenzene	ar .	п	*11		0.500	ND	74	
Chloroethane	n .	II.	11		1.00	ND	н	
2-Chloroethylvinyl ether	II.	1f	п		1.00	ND	Ħ	
Chloroform	II.	H			0.500	ND	П	
Chloromethane	**	**	11		1.00	ND	п	
Dibromochloromethane	H.	**	н		0.500	ND	IF.	
1,3-Dichlorobenzene	**	17	н		0.500	NĎ	n	
1,4-Dichlorobenzene	11 1	н	19		0.500	ND	19	
1,2-Dichlorobenzene	н	•	н		0.500	ND	19	
1,1-Dichloroethane	ij	11			0.500	ND	11	
1,2-Dichloroethane	n	II .	11		0.500	ND	н	
1,1-Dichloroethene	n		п		0.500	ND	**	
cis-1,2-Dichloroethene	IF	D	j t		0.500	ND	н	
trans-1,2-Dichloroethene	rr ·	"	R		0.500	ND	п	
1,2-Dichloropropane	**	n	10		0.500	ND	п	
cis-1,3-Dichloropropene	n	**	**		0.500	ND	ц	
trans-1,3-Dichloropropene	+T	*I	**		0.500	ND	п	
Methylene chloride	19	17	#		5.00	ND	lt.	
1,1,1,2-Tetrachloroethane	72	11	**		0.500	ND	11	
Tetrachloroethene	10	10	**		0.500	ND	19	
1,1,1-Trichloroethane	11	•	17		0.500	ND	**	
1,1,2-Trichloroethane	••	#	н		0.500	ND	H	
Trichloroethene	11	n			0.500	ND	**	
Trichlorofluoromethane	п	n	11		0.500	ND	**	
Vinyl chloride	п	п	ij		1.00	ND	11	
Surrogate: Bromochloromethane	tr	ır	"	70.0-130		89.0	%	
Surrogate: 2-Chlorotoluene	ft	r	"	70.0-130		84.0	"	

Sequoia Analytical - Sacramento



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR	Project:	Bill Chun	Sampled:	5/8/98
10324 Placer Ln., Ste. 200	Project Number:	8700-688.100	Received:	5/11/98
Sacramento, CA 95827	Project Manager:	Kurt Martin	Reported:	6/5/98

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Sacramento

MW-9 S895135-03 Water Bromodichloromethane 8050235 5/21/98 5/21/98 0.500 ND ug/l Bromoform " " " 0.500 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " 1.00 ND " " " " " 1.00 ND " " " " " 1.00 ND " " " " " " " " " "		Batch	Date	Date	Surrogate	Reporting			
Bromodichloromethane 8050235 5/21/98 5/21/98 0.500 ND Ug/l	Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
Bromofich Bromofich Bromofich Bromofich Bromofich Bromofich Bromofich Bromofich Bromofich Bromofich Bromomethane Brom	MW 9			S80513	35 <u>-03</u>			Water	
Bromoform	Bromodichloromethane	8050235	5/21/98			0.500	ND		
Carbon tetrachloride	Bromoform	п	tr.	H		0.500	ND		
Chlorobenzene	Bromomethane	II	If	P		1.00	ND	**	
Chloroethane " " " 1.00 ND " Chloroethane " " 1.00 ND " Chloroethane " " 1.00 ND " Chloroftylvinyl ether " 1.00 ND "	Carbon tetrachloride	11	п	lt .		0.500	ND	**	
Chloroethane	Chlorobenzene	*1	п	п			ND		
2-Chloroethylvinyl ether " " " 0.500 ND " Chloroform 0.500 ND " 0.500 ND " 1.00 ND " 1	Chloroethane	**	11	II				n	
Chloroform " " " 1.00 ND " Chloromethane " " " 1.00 ND "	2-Chloroethylvinyl ether	11	н	#				II .	
Chloromethane	Chloroform	**	"	#				ш	
Dibromochloromethane 1,3-Dichlorobenzene 1,14-Dichlorobenzene 1,12-Dichlorobenzene 1,12-Dichlorobenzene 1,11-Dichlorosethane 1,11-Dichl	Chloromethane	17	**	н				п	
1,3-Dichlorobenzene " " " " 0.500 ND " 1.2-Dichlorobenzene 1,2-Dichlorobenzene " " " 0.500 ND " 1.2-Dichlorobenzene 1,1-Dichloroethane " " 0.500 ND " 1.2-Dichloroethane 1,1-Dichloroethane " " 0.500 ND " 1.2-Dichloroethene 1,1-Dichloroethene " " 0.500 ND " 1.2-Dichloroethene 1,2-Dichloropropane " " 0.500 ND " 1.2-Dichloropropane 1,3-Dichloropropane " " 0.500 ND " 1.2-Dichloropropene 1,3-Dichloropropene " " 0.500 ND " 1.2-Dichloropropene 1,3-Dichloropropene " " 0.500 ND " 1.2-Dichloropropene 1,1-1,2-Tetrachloroethane " " 0.500 ND " 1.2-Dichloropropene 1,1,1,2-Tetrachloroethane " " 0.500 ND " 1.2-Dichloropropene 1,1,1,2-Trichloroethane " " 0.500 ND " 1.2-Dichloropropene	Dibromochloromethane	17	н	n				н	
1,4-Dichlorobenzene " " " " " " " " " " " " " " " " " " "	1,3-Dichlorobenzene	18	n	*				н	
1,2-Dichlorobenzene 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloropropane	1,4-Dichlorobenzene	17	**	11				**	
1,1-Dichloroethane " " " " "	1,2-Dichlorobenzene	tt.	**	10				u	
1,2-Dichloroethane " " " " 0.500	1,1-Dichloroethane	0	m	н				19	
1,1-Dichloroethene " " " " D.500 ND " cis-1,2-Dichloroethene " " " " D.500 ND " trans-1,2-Dichloroptopene " " " D.500 ND " 1,2-Dichloropropane " " " D.500 ND " cis-1,3-Dichloropropene " " D.500 ND " trans-1,3-Dichloropropene " " D.500 ND " Methylene chloride " " D.500 ND " 1,1,1,2-Tetrachloroethane " " D.500 ND " Tetrachloroethene " " D.500 ND " 1,1,1-Trichloroethane " " D.500 ND " 1,1,1,2-Trichloroethane " " D.500 ND " 1,1,2-Trichloroethane " " D.500 ND " Trichloroethene " " D.500 ND " Trichlorofluoromethane " " D.500 ND " Vinyl chloride " " " 70.0-130 116 %	1,2-Dichloroethane	ır	**	н				79	
	1,1-Dichloroethene	D.						**	
trans-1,2-Dichloroethene 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropene 1,3-Dichloropropene 1,3-Dichloropropene 1,3-Dichloropropene 1,1,1,2-Tetrachloroethane 1,1,1,1-Trichloroethane 1,1,1,1-Trichloroethane 1,1,1,2-Trichloroethane 1,1,1,2-Trichloroethane 1,1,1,2-Trichloroethane 1,1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,1,2-Trichloroethane 1,1	cis-1,2-Dichloroethene	п	D	lt.					
1,2-Dichloropropane " " " " 0.500 ND " cis-1,3-Dichloropropene " " " 0.500 ND " trans-1,3-Dichloropropene " " " 0.500 ND " Methylene chloride " " " 0.500 ND " 1,1,1,2-Tetrachloroethane " " " 0.500 ND " 1ctrachloroethane " " " 0.500 ND " 1,1,1-Trichloroethane " " " 0.500 ND " 1,1,2-Trichloroethane " " " 0.500 ND " 1,1,2-Trichloroethane " " " 0.500 ND " Trichloroethene " " " 0.500 ND " Trichlorofluoromethane " " " 0.500 ND " Vinyl chloride " " 70.0-130 116 %	trans-1,2-Dichloroethene	#1	II .	If .				TP.	
Cis-1,3-Dichloropropene	1,2-Dichloropropane	*1		п				IF	
trans-1,3-Dichloropropene " " " 5.00 ND " Methylene chloride " " " 5.00 ND " 1,1,1,2-Tetrachloroethane " " " 5.00 ND " Tetrachloroethene " " " 5.00 ND " 1,1,1-Trichloroethane " " " 5.00 ND " 1,1,1-Trichloroethane " " " 5.00 ND " 1,1,2-Trichloroethane " " " 5.00 ND " Trichloroethane " " " 5.00 ND " Trichloroethane " " " 5.00 ND " Trichlorofluoromethane " " " 5.00 ND " Trichlorofluoromethane " " " 70.0-130 ND " Surrogate: Bromochloromethane " " 70.0-130 116 %		•	н	IJ				ш	
Methylene chloride " " " " " 0.500 ND " 1,1,1,2-Tetrachloroethane " " " 0.500 ND " Tetrachloroethene " " " 0.500 ND " 1,1,1-Trichloroethane " " " 0.500 ND " 1,1,2-Trichloroethane " " " 0.500 ND " Trichloroethene " " " 0.500 ND " Trichlorofluoromethane " " " 0.500 ND " Vinyl chloride " " 70.0-130 ND "		н	#	11				и	
1,1,1,2-Tetrachloroethane " " " 0.500 ND " Tetrachloroethene " " 0.500 ND " 1,1,1-Trichloroethane " " 0.500 ND " 1,1,2-Trichloroethane " " 0.500 ND " Trichloroethene " " 0.500 ND " Trichlorofluoromethane " " 0.500 ND " Vinyl chloride " " 70.0-130 ND "		n	•	я.,				н	
Tetrachloroethene " " " 0.500 ND " 1,1,1-Trichloroethane " " " 0.500 ND " 1,1,2-Trichloroethane " " " 0.500 ND " Trichloroethane " " " 0.500 ND " Trichloroethane " " " 0.500 ND " ND " ND " ND " ND " ND " ND " ND	1,1,2-Tetrachloroethane	10	н	н				11	
1,1,1-Trichloroethane " " " 0.500 ND " 1,1,2-Trichloroethane " " " 0.500 ND " Trichloroethene " " " 0.500 ND " Trichlorofluoromethane " " " 0.500 ND " Vinyl chloride " " 70.0-130 ND " Surrogate: Bromochloromethane " " 70.0-130 116 %	Tetrachloroethene	**	**	n				н	
1,1,2-Trichloroethane " " " 0.500 ND " Trichloroethene " " 0.500 ND " Trichlorofluoromethane " " 0.500 ND " Vinyl chloride " " 1.00 ND " Surrogate: Bromochloromethane " " 70.0-130 116 %	1,1,1-Trichloroethane	**	10	н				II.	
Trichloroethene " " " 0.500 ND " Trichlorofluoromethane " " " 0.500 ND " Vinyl chloride " " " 1.00 ND " Surrogate: Bromochloromethane " " 70.0-130 116 %	• •	п	11	If				16	
Trichlorofluoromethane " " " 0.500 ND " Vinyl chloride " " " 1.00 ND " Surrogate: Bromochloromethane " " 70.0-130 116 %	Trichloroethene	**		**				**	
Vinyl chloride " " " 1.00 ND " Surrogate: Bromochloromethane " " " 70.0-130 116 %	Trichlorofluoromethane	u•	**	**				IT	
Surrogate: Bromochloromethane " " " 70.0-130 116 %	Vinyl chloride	11	III	**				n	
	Surrogate: Bromochloromethane	rr	н	"	70.0-130			%	
	Surrogate: 2-Chlorotoluene	n	"	rr ·	70.0-130		106		

Sequoia Analytical - Sacramento

Pull Miller

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

Pull

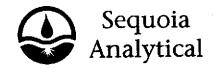
Pull

Pull

Pull

Pull

Pu



Redwood City, CA 94063 Walnut Creek, CA 94598

(650) 364-9600 (510) 988-9600 (916) 921-9600

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR 10324 Placer Ln., Ste. 200 Sacramento, CA 95827

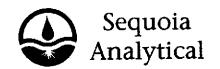
Project: Bill Chun Project Number: 8700-688.100 Project Manager: Kurt Martin

Sampled: 5/8/98 Received: 5/11/98 Reported: 6/5/98

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Sacramento

·	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
MW 10			S80513	35-04			Water	
Bromodichloromethane	8050235	5/21/98	5/21/98		0.500	ND	ug/l	
Bromoform	II	Ir	D		0.500	·ND	п -	
Bromomethane	ii .	п	IF.		1.00	ND	п	
Carbon tetrachloride	II.	It	R		0.500	ND	н	
Chlorobenzene	I+	IF	16		0.500	ND	н	
Chloroethane	II	Ir	D		1.00	ND	н	
2-Chloroethylvinyl ether	rr .	If	II.		1.00	ND	п	
Chloroform	II .	If	ır .		0.500	ND	*1	
Chloromethane	ii .	if .	D		1.00	ND	#1	
Dibromochloromethane	11	п	D		0.500	ND	н	
1,3-Dichlorobenzene	II.	ır	17		0.500	ND	н	
1,4-Dichlorobenzene		tr			0.500	ND	n	
1,2-Dichlorobenzene	u	u·	u.		0.500	ND	11	
1,1-Dichloroethane	u	10	o	•	0.500	ND	1 1	
1,2-Dichloroethane	11	u	•		0.500	ND	п	
1,1-Dichloroethene	11	II .	e		0.500	ND	"	
cis-1,2-Dichloroethene	**	II.	**		0.500	ND	п	
trans-1,2-Dichloroethene		ıt.	н		0.500	ND	n	
1,2-Dichloropropane	н	æ	**		0.500	ND	11	
cis-1,3-Dichloropropene	н		**		0.500	ND	и	
trans-1,3-Dichloropropene	स	u	**		0.500	ND	IJ	
Methylene chloride	**	н	н		5.00	ND	н	
1,1,1,2-Tetrachloroethane	**	u	**		0.500	ND	п	
Tetrachloroethene	**	Ħ	••		0.500	ND	п	
l,l,l-Trichloroethane	19	**	11		0.500	ND	ш	
1,1,2-Trichloroethane	11	н	**		0.500	ND	n	
Trichloroethene	16	**	**		0.500	ND	п	
Trichlorofluoromethane	u .	**	10		0.500	ND	п	
Vinyl chloride	19	**	n		1.00	ND	п	
Surrogate: Bromochloromethane	"	"	"	70.0-130		108	%	
Surrogate: 2-Chlorotoluene	"	"	#	70.0-130		91.0	"	

Sequoia Analytical - Sacramento



680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

(650) 364-9600 (510) 988-9600 (916) 921-9600

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR 10324 Placer Ln., Ste. 200 Sacramento, CA 95827

Project: Bill Chun Project Number: 8700-688.100 Project Manager: Kurt Martin

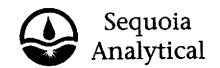
5/8/98 Sampled: 5/11/98 Received: Reported: 6/5/98

Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Sacramento

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
MW 11			S80513	35-05			Water	
Bromodichloromethane	8050235	5/21/98	5/21/98		0.500	ND	ug/l	
Bromoform	11	H	11		0.500	ND	**	
Bromomethane	п	n	19		1.00	ND	н	
Carbon tetrachloride	H	10	IF		0.500	ND	п	
Chlorobenzene	H	"	11		0.500	ND	н	
Chloroethane	н	++	•		1.00	ND	н	
2-Chloroethylvinyl ether	н	н	H		1.00	ND	+1	
Chloroform	н	Ħ	**		0.500	ND	11	
Chloromethane	**	41	11		1.00	ND	11	
Dibromochloromethane	11	ш	11		0.500	ND	11	
1,3-Dichlorobenzene	ш	п	ш		0.500	ND	11	
1,4-Dichlorobenzene	п	и	11		0.500	ND	П	
1,2-Dichlorobenzene	п	п	п		0.500	ND	11	
1,1-Dichloroethane	п	It	п		0.500	ND	п	
1,2-Dichloroethane	II:	IF	It		0.500	ND	It	
1,1-Dichloroethene	IF.	17	n .		0.500	ND	II .	
cis-1,2-Dichloroethene	l#	11	It		0.500	ND	ıt .	
trans-1,2-Dichloroethene	tt.	•	u		0.500	ND	11	
1,2-Dichloropropane	10	(+	II.		0.500	ND	R	
cis-1,3-Dichloropropene	H	н	10		0.500	ND	II.	
trans-1,3-Dichloropropene	U	"	II.		0.500	ND	D	
Methylene chloride	11	"	II.		5.00	ND	II .	
1,1,1,2-Tetrachloroethane	**	н	II .		0.500	ND	II .	
Tetrachloroethene	n	"	17		0.500	ND	ıı.	
1,1,1-Trichloroethane	**	17	"		0.500	ND	11	
1,1,2-Trichloroethane	79	17	H		0.500	ND	10	
Trichloroethene	**	n	**		0.500	NĎ	10	
Trichlorofluoromethane	19	14	**		0.500	ND		
Vinyl chloride	n	i†	**		1.00	ND	10	
Surrogate: Bromochloromethane	н	н	ri	70.0-130		109	%	
Surrogate: 2-Chlorotoluene	#	"	"	70.0-130		106	"	

Sequoia Analytical - Sacramento





Redwood City, CA 94063 Walnut Creek, CA 94598

(650) 364-9600 (510) 988-9600 (916) 921-9600

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR	Project:	Bill Chun	Sampled:	5/8/98
10324 Placer Ln., Ste. 200	Project Number:	8700-688-100	Received:	5/11/98
Sacramento, CA 95827	Project Manager:	Kurt Martin	Reported:	6/5/98

Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT/Quality Control Sequoia Analytical - Sacramento

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 8050154	Date Prepared: 5/14/98			Extraction Method: EPA 5030B ((P/T)			
Blank	8050154-BL	K1								
Purgeable Hydrocarbons	5/14/98			ND	ug/l	50.0				
Benzene	н			ND	IF	0.500				
Toluene	n			ND	D	0.500				
Ethylbenzene	**			ND	16	0.500				
Xylenes (total)	**			ND	11	0.500				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.0	ff.	60.0-140	110			
LCS	8050154-BS	l								
Benzene	5/14/98	10.0		11.1	ug/l	70.0-130	111			
Toluene	**	10.0		10.3	н	70.0-130	103			
Ethylbenzene	н	10.0		10.1		70.0-130	101			
Xylenes (total)	•	30.0		29.9	11	70.0-130	99.7			
Surrogate: a,a,a-Trifluorotoluene	н	10.0		10.0	"	60.0-140	100			
Matrix Spike	8050154-MS	1 S	805136-00							
Benzene	5/14/98	10.0	ND	11.2	ug/l	60.0-140	112			
Toluene	11	10.0	ND	10.6	11	60.0-140	106			
Ethylbenzene	н	10.0	ND	10.1	11	60.0-140	101			
Xylenes (total)	11	30.0	ND	30.2	**	60.0-140	101			
Surrogate: a,a,a-Trifluorotoluene	,,	10.0		10.1	"	60.0-140	101			
Matrix Spike Dup	8050154-MS	D1 S	805136-00							
Benzene	5/14/98	10.0	ND	11.1	ug/l	60.0-140	111	25.0	0.897	
Toluene	U	10.0	ND	10.4	**	60.0-140	104	25.0	1.90	
Ethylbenzene	u ·	10.0	ND	10.1	н	60.0-140	101	25.0	0	
Xylenes (total)	0	30.0	ND	30.1	**	60.0-140	100	25.0	0.995	
Surrogate: a,a,a-Trifluorotoluene	11	10.0		10.1	11	60.0-140	101			

Sequoia Analytical - Sacramento





Redwood City, CA 94063 Walnut Creek, CA 94598

(650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

5/8/98 5/11/98

6/5/98

Project: Bill Chun **ENSR** Sampled: 10324 Placer Ln., Ste. 200 Project Number: Received: 8700-688.100 Sacramento, CA 95827 Project Manager: Kurt Martin Reported:

Volatile Organic Compounds by EPA Method 8010B/Quality Control Sequoia Analytical - Sacramento

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 8050235	Date Prepa		<u>98</u>		Extrac	tion Method: EPA	5030B	[P/T]		
Blank	8050235-BI	.K1								
Bromodichloromethane	5/21/98			ND	ug/l	0.500				
Bromoform	**			ND	Ц	0.500				
Bromomethane	**			ND	11	1.00				
Carbon tetrachloride	**			ND	II.	0.500				
Chlorobenzene	19			ND	D	0.500				
Chloroethane	7*			ND	th .	1.00				
2-Chloroethylvinyl ether	11			ND	II .	1.00				
Chloroform	**			ND	ij	0.500				
Chloromethane	R			ND	II	1.00				
Dibromochloromethane	**			ND	II .	0.500				
1,3-Dichlorobenzene	**			ND	H	0.500				
1,4-Dichlorobenzene	н			ND	н	0.500				
1,2-Dichlorobenzene	н			ND	II .	0.500				
1,1-Dichloroethane	H			ND	II .	0.500				
1,2-Dichloroethane	**			ND	11	0.500				
1,1-Dichloroethene	**			ND	н	0.500				
cis-1,2-Dichloroethene	**			ND	н	0.500				
trans-1,2-Dichloroethene	**			ND	11	0.500				
1,2-Dichloropropane	**			ND	"	0.500				
cis-1,3-Dichloropropene	**			NĐ	н	0.500				
trans-1,3-Dichloropropene	R			ND	н	0.500				
Methylene chloride	rr .			ND	*1	5.00				
1,1,1,2-Tetrachloroethane	† *			ND	11	0,500				
Tetrachloroethene	**			ND	#	0.500				
1,1,1-Trichloroethane	•			ND	H	0.500				
1,1,2-Trichloroethane	**			ND	**	0.500				
Trichloroethene	**			ND	*	0.500				
Trichlorofluoromethane	**			ND	n	0.500				
Vinyl chloride	11			ND	n	1.00				
Surrogate: Bromochloromethane	,,	10.0		12.3	"	70.0-130	123	· · · · · · · · · · · · · · · · · · ·		
Surrogate: 2-Chlorotoluene	"	10.0		10.2	n	70.0-130	102			-
LCS	8050235-BS	31								
Chlorobenzene	5/21/98	20.0		22.9	ug/l	70.0-130	114			
1,1-Dichloroethane	18	10.0		11.1	"	65.0-135	111			
Trichloroethene	н	10.0		10.9	#1	70.0-130	109			
Surrogate: Bromochloromethane	"	10.0		10.6	11	70.0-130	106			
Surrogate: 2-Chlorotoluene	"	10.0		10.7	n	70.0-130	107			

Sequoia Analytical - Sacramento





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR 10324 Placer Ln., Ste. 200 Sacramento, CA 95827

Project: Bill Chun
Project Number: 8700-688.100
Project Manager: Kurt Martin

Sampled: 5/8/98 Received: 5/11/98 Reported: 6/5/98

Volatile Organic Compounds by EPA Method 8010B/Quality Control Sequoia Analytical - Sacramento

-	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	<u>%</u>	Limit	%	Notes*
Matrix Spike	8050235-M	S1 S	805109-01							
Chlorobenzene	5/21/98	20.0	ND	21.4	ug/l	60.0-140	107			
1,1-Dichloroethane	•	10.0	ND	10.6	"	60.0-140	106			
Trichloroethene	H	10.0	ND	10.2	D.	60.0-140	102			
Surrogate: Bromochloromethane	n	10.0		10.3	ır.	70.0-130	103			.
Surrogate: 2-Chlorotoluene	"	10.0		9.90	n	70.0-130	99.0			
Matrix Spike Dup	8050235-M	SD1 S	805109-01							
Chlorobenzene	5/21/98	20.0	ND	21.1	ug/l	60.0-140	106	25.0	0.939	
1,1-Dichloroethane	11	10.0	ND	10.2	, ~	60.0-140	102	25.0	3.85	
Trichloroethene	II .	10.0	ND	9.90	**	60.0-140	99.0	25.0	2.99	
Surrogate: Bromochloromethane	п	10.0		10.3	H	70.0-130	103			
Surrogate: 2-Chlorotoluene	H	10.0		9.90	#	70.0-130	99.0			

Sequoia Analytical - Sacramento





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

ENSR Project: Bill Chun Sampled: 5/8/98
10324 Placer Ln., Ste. 200 Project Number: 8700-688.100 Received: 5/11/98
Sacramento, CA 95827 Project Manager: Kurt Martin Reported: 6/5/98

Notes and Definitions

#	Note
1	Chromatogram Pattern: Weathered Gasoline C6-C12
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

Sequoia Analytical - Sacramento

B



☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (650) 364-9600 FAX (650) 364-9233 2-819 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: 8,54		Р	Project Name: BILL CHON							
Address: 10324 PLACEL LN	#200		Billing Address (if different):							
1		9.5827								
Telephone (916) 362-7100	FAX #(916)362-	8100 P	P.O. #: 1501-74 & 700-688.100							
Report To: KUET MARTIN	Sampler: The PA	NKIN O	QC Data: Level D (Standard) Level C Level B Level A							
	3 Working Days 🔲 2 - 8 H		inking Water Analyses Requested							
	2 Working Days 24 Hours	☐ Waste	aste Water her							
Client Date/Time Sample I.D. Sampled	Matrix # of Cont. Desc. Cont. Type	Sequoia's Sample #			Comments					
1. MW 3 Flegg 1015	HO 4 HOMEN	\$	XX 580	5135.00	<u>.</u>					
2 MW4 0935				01	Sequoia					
3. MWB 0870				-02	Yellow -					
4. MW9 0745	-			-03	Xell Xell					
5. mw 10 0720				-04						
6. mwll V 0900	V V V		VV	-05						
7.					- io					
8.					Seducial Segucian					
9.					White					
10.					>					
Relinquished By:	Date: 148	Time:/600	Received By: John (Date:5/1/98	Time: /600					
Relinquished By: John Yor	velo Date5/11/4.	r Time:/730		Date:	Time:					
Relinquished By:	Date:	Time:	Received By Lab:	Date 5/11/98	Time: 1730					

Were Samples Received in Good Condition? 1/2 Yes LI No.

Samples on Ice? Li Yes Li No Method of Shipment SCC/107/1

Page 1 of 1