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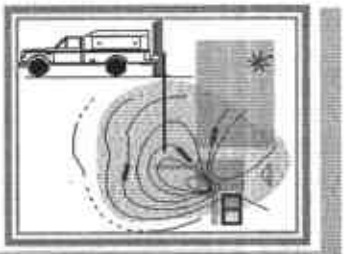


May 30, 2004

Barney M. Chan
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-9335

Telephone: (510) 567-6765
FAX: (510) 337-9335

Subject: **Groundwater Monitoring of Hydrocarbons related to the Former Underground Storage Tanks at the FORMER BILL CHUN SERVICE STATION @ 2301 SANTA CLARA AVENUE, ALAMEDA, CA 94501**

Dear Barney:

This report summarizes the groundwater level measurements and laboratory results of analyses performed for gasoline constituents in groundwater obtained from twelve (12) groundwater monitoring and three (3) groundwater extraction wells.

Although the overall trend in concentrations of TPHg and benzene identified in groundwater have decreased over time, some wells have undergone an increase. Most notably, TPHg and benzene were identified in MW-4.

If you have any questions, please call me.

Sincerely,

Franklin J. Goldman

REGISTERED GEOLOGIST FRANKLIN J. GOLDMAN CERTIFIED HYDROGEOLOGIST NO 466 STATE OF CALIFORNIA

Franklin J. Goldman
Registered Geologist No. 5557
Certified Hydrogeologist No. 466

GROUNDWATER FLOW DIRECTION

On April 26, 2004, a Slope Indicator water level meter was used to measure the depth to groundwater in the groundwater extraction wells prior to well development and sampling. The measurements were read to the nearest 100th of an inch from the top of casing.

Groundwater was encountered at depths of approximately 8 feet bgs in the vicinity of the former tank pit. The predominant groundwater gradient direction is to the south at 0.005 feet/foot (See Figure 1 for Gradient Map) and (Table 1 for Depth to Water Level Measurements). Water levels were measured with an electronic water level sounder after sampling and the water levels were allowed to stabilize. A Slope Indicator water level meter was used to measure the depth to groundwater prior to purging and sampling. The measurements were read to the nearest 100th of an inch. The groundwater gradient was determined by comparing water levels with elevations provided by a certified land survey.

WELL PURGING AND DEVELOPMENT

Depth to groundwater was measured prior to purging to use as a reference elevation. Purging of the wells was performed by the use of 1 3/4 inch diameter steel disposable check valve bailors. Each well was sampled after well development which entailed the removal of approximately three (3) or more borehole volumes from each well, allowing the water level to recover to at least 80% of the original, static water level. Temperature, electrical conductivity, and pH was monitored during the bailing process, so that the three parameters demonstrated an error difference of within 10% from one another, over three consecutive readings wells (See Appendix A for Sampling Event Sheets) . The recorded data was used to verify that a sufficient volume of groundwater had been removed from the each well casing so that anomalies caused by remnant well casing storage would not preclude us from obtaining a groundwater sample which would be more representative of the aquifer contaminant distribution as a whole.

GROUNDWATER SAMPLING FROM WELLS

Water samples were collected by lowering a plastic disposable bailer down the center of the well casing. Water samples were contained in 40-milliliter VOA vials for TPH-g, MTBE, and BTEX analyses. EPA Method 8260b for 5 oxygenates and two lead scavengers was used to confirm the presence of MTBE on other gasoline constituents. The samples were labeled and stored on ice until delivered, under chain-of-custody procedures, to American Analytics, Inc. of Chatsworth, California, a State-certified analytical laboratory.

LABORATORY RESULTS OF HYDROCARBONS IN GROUNDWATER

Although the overall trend in concentrations of TPHg and benzene identified in groundwater have decreased over time, some wells have undergone an increase. Most notably, TPHg and benzene were identified in MW-4 (See Appendix B for Laboratory Data Sheets) and (Table 2 for Lab Results). The plumes of benzene and TPHg in groundwater still appear to be centered in the general vicinity of the former USTs on site (See Figures 2 and 3 for TPHg and benzene concentration maps). The concentration of TPHg identified in SV-1 and the concentration of benzene identified in MW-7 do not appear to fit the overall trend established the remaining wells. There

have been some problems with the purging and development of SV-1 due to an insufficient volume of water available in the well. The recorded water level in SV-1 also appears to be anomalous. No problems with MW-7 have been encountered in the past.

Extraction wells EW-15, EW-16, and EW-17 were not sampled as part of this groundwater monitoring event because imminent groundwater extraction activities for remediation will render data obtained from these wells of little use since there is no long term monitoring trend available for past sampling events to make a useful comparison. Extraction wells EW-12, EW-13, and EW-14 were sampled as part of this groundwater monitoring event because there is sufficient data available to compare with past events to establish trends.

Field Cleanup

Well purge water was placed in properly labeled 55 gallon drums left on-site pending laboratory analysis to determine a legal point of disposal.

Conclusions

Dissolved benzene may still be migrating to the south in the direction of the predominant groundwater gradient direction. Considering, the significant decreases in concentrations over the past three years, however, the plume may be degrading at a rate greater than its migration to the east.

Recommendations

Perform an additional round of groundwater sampling and exclude Well SV-1 for sampling. It is proposed that the six (6) extraction wells no longer be included in the monitoring program to establish long term trends. This means that they will no longer be purged and developed prior to sampling. Instead, these wells should be used to obtain grab samples to verify the effectiveness of groundwater extraction and treatment on a quarterly basis. In addition, it is proposed that MW-8, MW-9, and MW-10 be sampled semi-annually after groundwater extraction activities have been initiated and the remediation system is operating reliably.

Limitations

This report has been prepared in accordance with generally accepted environmental, geological and engineering practices. No warranty, either expressed or implied, is made as to the professional advice presented herein. The analyses, conclusions and recommendations contained in this report are based upon site conditions as they existed at the time of the investigation and they are subject to change.

The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity, and interpretation of available information as described in this report. Franklin J. Goldman, recognizes that the limited scope of services performed in execution of this investigation may not be appropriate to satisfy the needs, or requirements of other state agencies, or of other users. Any use or reuse of this document or its findings, conclusions or recommendations presented herein, is done so at the sole risk of the said user.

TABLE 1
Depth to round ater Measurements
April 26 2004

Well No	Depth to round ater from TOC (feet bgs)	TOC Elevation (feet) MSN	Water Table Elevation (feet)
MW-1	8.00	28.49	20.49
MW-2	8.02	28.47	20.45
MW-3	8.45	28.78	20.33
MW-4	8.11	28.53	20.42
MW-5	7.85	28.33	20.48
MW-6	7.83	28.36	20.53
MW-7	8.00	28.44	20.44
MW-8	7.91	28.17	20.26
MW-9	6.82	27.45	20.63
MW-10	6.74	27.32	20.58
MW-11	8.13	28.56	20.43
SV-1	8.02	28.42	20.40
EW-12	7.55	28.25	20.47
EW-13	8.21	28.64	20.43
EW-14	8.86	29.21	20.35
EW-15	8.30	28.71	20.41
EW-16	8.74	29.02	20.28
EW-17	8.57	28.95	20.38

TABLE 2
Representative Analytical for Gasoline in Groundwater (ppb)
Chun

Well No		TPHg	Benzene
MW-1	(04-24-04)	33,000	8,000
	(12-25-03)	12,000	3,400
	(09-20-03)	19,000	4,900
	(07-04-02)	*43,000*	*7,200*
	(09-17-00)	*65,000*	*15,000*
MW-2	(04-24-04)	44,000	8,400
	(12-25-03)	46,000	6,100
	(09-21-03)	*27,000*	*2,400*
	(07-04-02)	41,000	5,600
	(09-17-00)	*140,000*	*21,000*
MW-3	(04-24-04)	3,100	1,000
	(12-25-03)	3,300	290
	(09-21-03)	*2,700*	*320*
	(07-04-02)	10,000	2,300
	(09-17-00)	*9,300*	*3,000*
MW-4	(04-24-04)	3,000	0.97
	(12-25-03)	ND	ND
	(09-20-03)	*ND*	*ND*
	(07-04-02)	ND	ND
	(09-17-00)	*ND*	*ND*
MW-5	(04-24-04)	13,000	97
	(12-25-03)	2,300	140
	(09-21-03)	*8,700*	*ND*
	(07-04-02)	16,000	89
	(09-17-00)	*44,000*	*490*
MW-6	(04-24-04)	110	3.6
	(12-25-03)	1,200	18
	(09-20-03)	*500*	*15*

	(07-04-02)	3,900	29
	(09-17-00)	*10,000*	*110*
MW-7	(04-24-04)	100,000	10,000
	(12-25-03)	110,000	12,000
	(09-21-03)	*110,000*	*4,200*
	(07-04-02)	140,000	15,000
	(09-17-00)	*220,000*	*32,000*
MW-8	(04-24-04)	ND	ND
	(12-25-03)	ND	ND
	(09-20-03)	*ND*	*ND*
	(07-03-02)	ND	1.1
	(09-17-00)	*ND*	*1.4*
MW-9	(04-24-04)	ND	ND
	(12-25-03)	ND	ND
	(09-20-03)	*ND*	*ND*
	(07-03-02)	ND	ND
	(09-17-00)	*ND*	*ND*
MW-10	(04-24-04)	ND	ND
	(12-25-03)	ND	ND
	(09-20-03)	*ND*	*ND*
	(07-03-02)	ND	ND
	(09-17-00)	*ND*	*ND*
MW-11	(04-24-04)	38,000	5,000
	(12-25-03)	14,000	1,400
	(09-22-03)	46,000	1,700
	(10-24-02)	59,000	5,100
SV-1	(04-24-04)	9,600	740
	(12-25-03)	83,000	2,200
	(09-21-03)	*89,000*	*2,300*
	(07-04-02)	210,000	7,900
	(09-17-00)	560,000	10,000
EW-12	(04-24-04)	12,000	920

	(12-25-03)	9,900	790
	(09-21-03)	19,000	590
	(10-31-02)	5,840	75.7
EW-13	(04-24-04)	100,000	19,000
	(12-25-03)	110,000	17,000
	(09-21-03)	71,000	10,000
	(10-31-02)	109,200	9,120
EW-14	(04-24-04)	9,400	4,100
	(12-25-03)	26,000	5,300
	(09-22-03)	68,000	4,100
EW-15	(01-21-04)	72,000	8,400
EW-16	(01-21-04)	1,500	290
EW-17	(01-21-04)	18,000	2,600

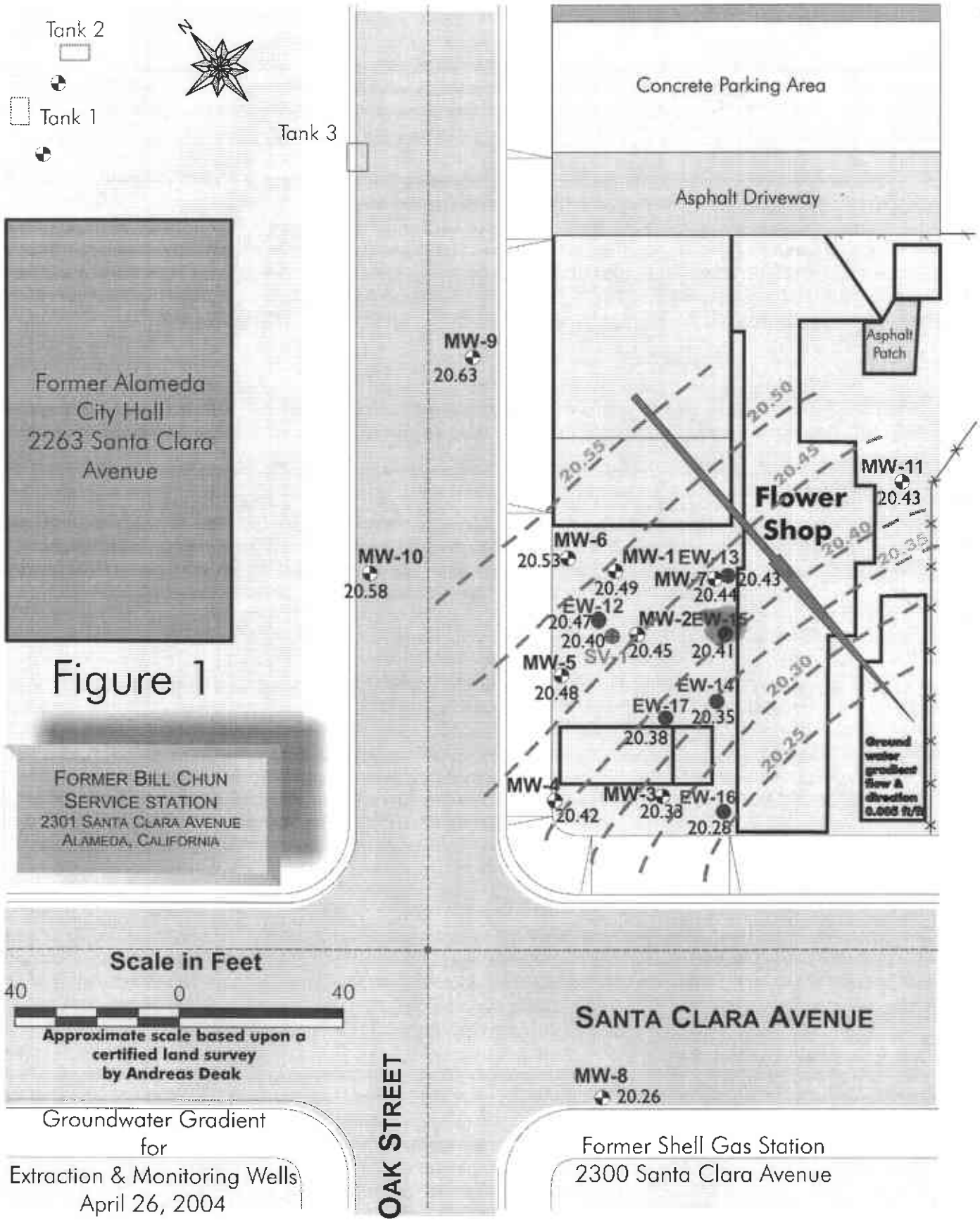
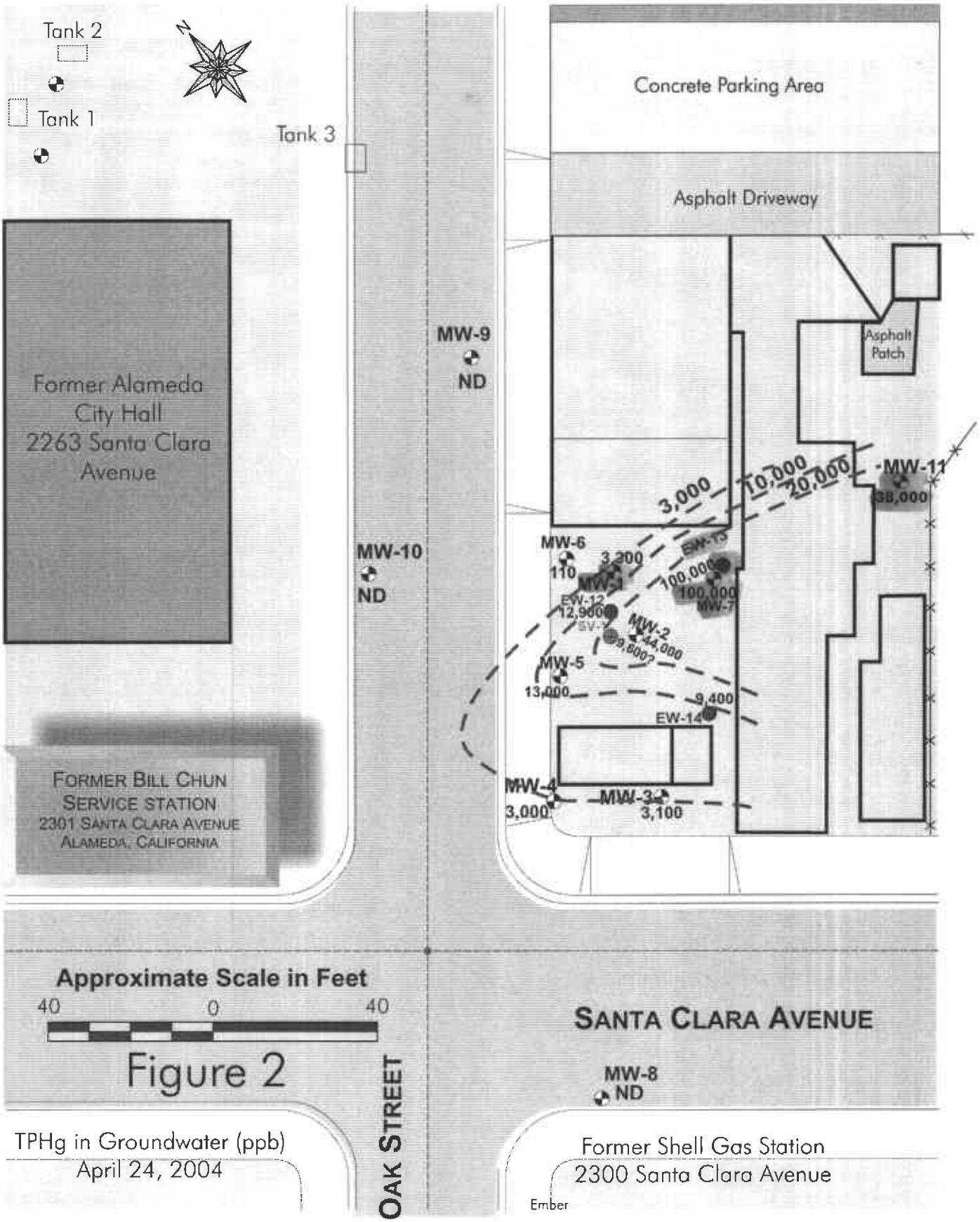


Figure 1

FORMER BILL CHUN SERVICE STATION
2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

Groundwater Gradient
for
Extraction & Monitoring Wells
April 26, 2004

Former Shell Gas Station
2300 Santa Clara Avenue


Tank 2
Tank 1
Tank 3
N
Concrete Parking Area
Asphalt Driveway
Asphalt Patch
Former Alameda City Hall 2263 Santa Clara Avenue
MW-9
ND
MW-10
ND
MW-11
38,000
10,000
20,000
3,000
MW-6
110
3,200
MW-1
EW-12
12,900
MW-2
44,000
9,600
MW-5
13,000
9,400
EW-14
MW-4
3,000
MW-3
3,100
MW-7
100,000
FORMER BILL CHUN SERVICE STATION
2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA
Approximate Scale in Feet
40
0
40
SANTA CLARA AVENUE
MW-8
ND
OAK STREET
Figure 2
TPHg in Groundwater (ppb)
April 24, 2004
Former Shell Gas Station
2300 Santa Clara Avenue
Ember

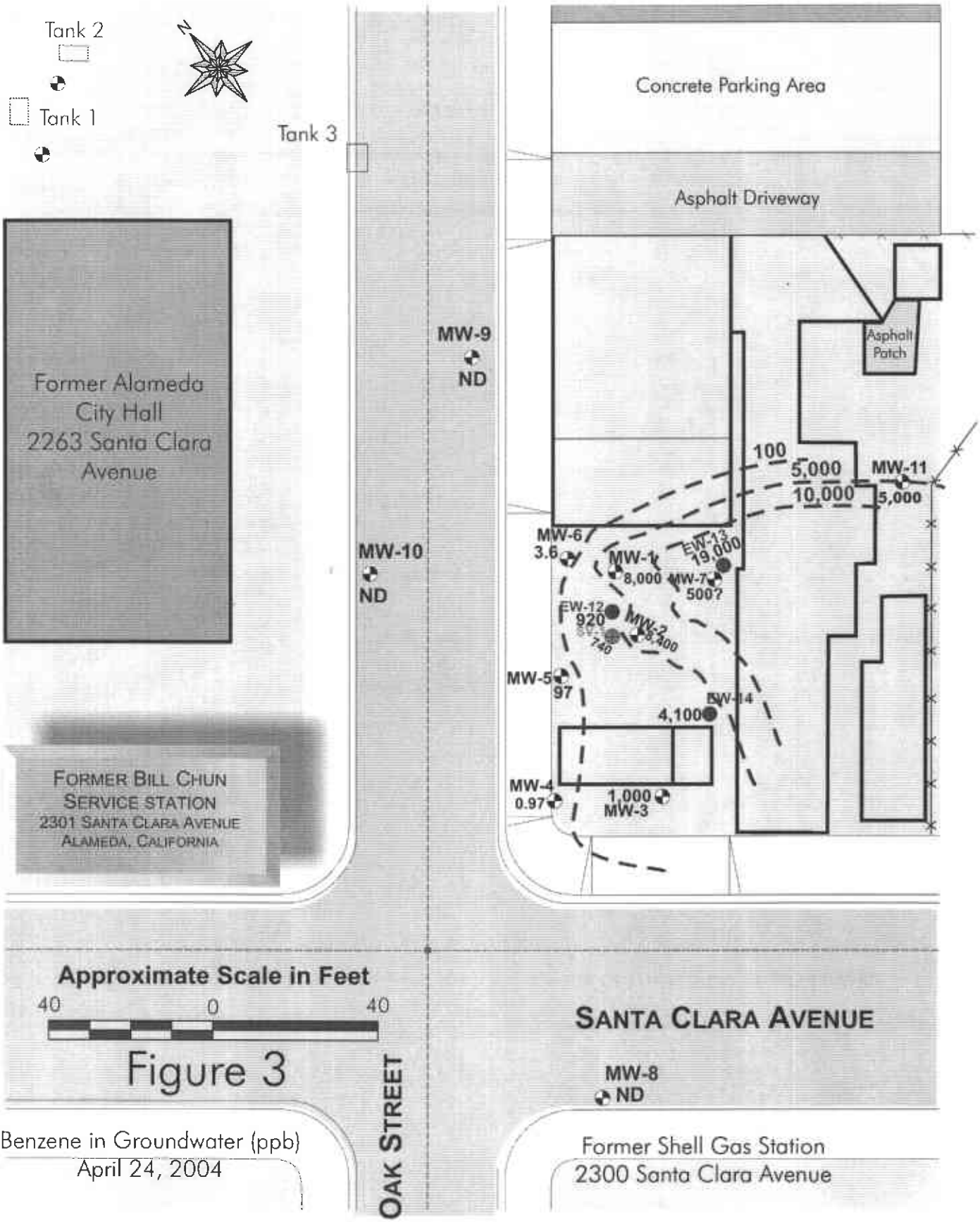


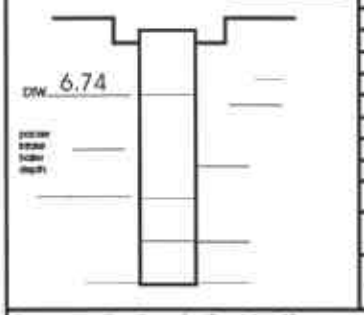
Figure 3

Benzene in Groundwater (ppb)
April 24, 2004

Appendix A
Sampling Event Sheets

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 24, 2004

WELL/HYDROLOGIC STATISTICS MW-10



Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculation
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Hand Purge Calculation (With Drdg)
_____ gal/ft. _____ ft. _____ gals
packer to SWL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____

Actual Volumes Purged: _____

Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

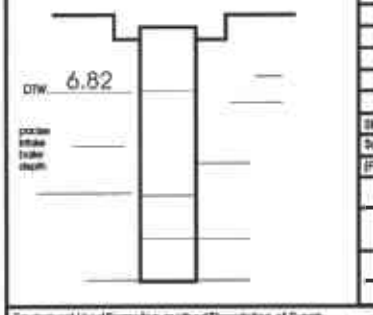
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	72.1	944	6.9			2:20
2. 1.5	72.5	954	7.0			3:05
3. 2.0	73.1	960	7.0			3:45 pm
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 24, 2004

WELL/HYDROLOGIC STATISTICS MW-9



Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculation
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Hand Purge Calculation (With Drdg)
_____ gal/ft. _____ ft. _____ gals
packer to SWL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____

Actual Volumes Purged: _____

Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

Clear no odor

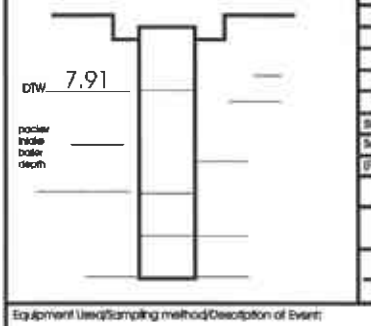
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	71.8	966	6.8			4:05
2. 2.0	72.8	978	7.0			4:25
3. 1.5	71.3	981	6.9			5:00pm
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 24, 2004

WELL/HYDROLOGIC STATISTICS MW-8



Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculation
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Hand Purge Calculation (With Drdg)
_____ gal/ft. _____ ft. _____ gals
packer to SWL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____

Actual Volumes Purged: _____

Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

Clear no odor

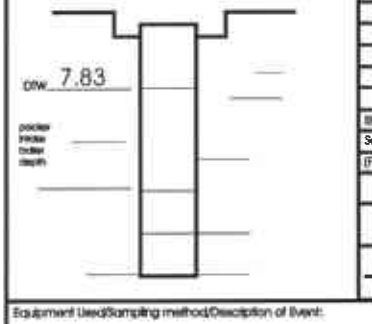
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.1	977	6.8			5:05
2. 1.5	70.8	979	7.0			5:45
3. 1.5	70.1	971	6.7			6:15pm
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS MW-6



Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculation
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Hand Purge Calculation (With Drdg)
_____ gal/ft. _____ ft. _____ gals
packer to SWL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____

Actual Volumes Purged: _____

Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

Clear slight odor, some turbidity

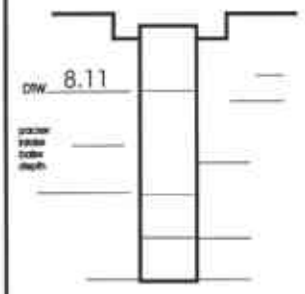
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.5	71.1	972	6.8			6:30 am
2. 1.5	71.4	973	6.9			7:05
3. 1.5	72.1	971	6.8			7:45
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS MW-4



Action	Time	Pump Rate	WL (flow yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Airlift Only)
_____ gal/ft. _____ ft. _____ gals
packer to WL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

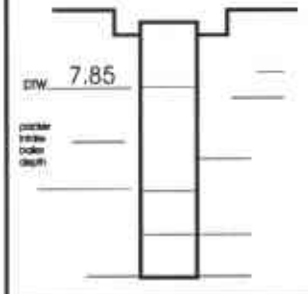
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.0	71.1	961	7.1			8:00
2. 1.5	71.8	967	7.0			8:25
3. 1.5	71.7	961	7.0			8:55am
4.						
5.						

*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. LY - able to purge 3 volumes by returning later or next day. VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS MW-5



Action	Time	Pump Rate	WL (flow yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Airlift Only)
_____ gal/ft. _____ ft. _____ gals
packer to WL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.4	969	6.8			9:15
2. 2.0	71.1	975	7.0			9:35
3. 1.5	71.6	981	7.0			10:10am
4.						
5.						

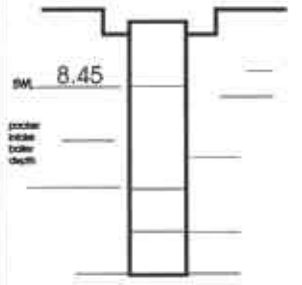
*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. LY - able to purge 3 volumes by returning later or next day. VLY - Minimal recharge unable to purge 3 volumes.

April 25, 2004

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: Dec 24, 2003

WELL/HYDROLOGIC STATISTICS MW-3



Action	Time	Pump Rate	WL (flow yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Airlift Only)
_____ gal/ft. _____ ft. _____ gals
packer to WL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.9	1016	6.9			2:20 pm
2. 1.5	70.8	1013	7.0			2:45
3. 1.5	71.1	1021	7.1			3:05
4.						
5.						

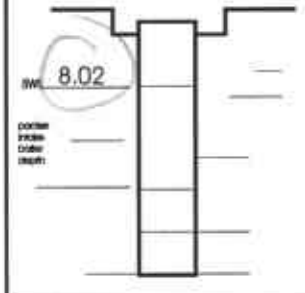
*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. LY - able to purge 3 volumes by returning later or next day. VLY - Minimal recharge unable to purge 3 volumes.

April 25, 2004

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: Dec 24, 2003

WELL/HYDROLOGIC STATISTICS MW-2



Action	Time	Pump Rate	WL (flow yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Airlift Only)
_____ gal/ft. _____ ft. _____ gals
packer to WL

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

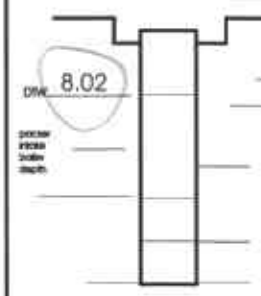
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	71.3	942	6.8			3:35 pm
2. 1.5	70.9	947	6.9			4:00
3. 1.5	70.9	950	6.9			4:30
4.						
5.						

*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. LY - able to purge 3 volumes by returning later or next day. VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS SV-1



Action	Time	Pump Rate	IWL (flow yield)
Stop			
Sampled			
(Final IWL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)
_____ gal/ft. _____ ft. _____ gals
(packer to SWL)

Equipment Used/Sampling method/Description of Event:
Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:
Not enough water to develop well

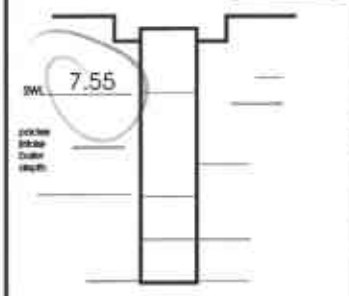
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 0.5	70.5	939	7.0			12:00 pm
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS EW-12



Action	Time	Pump Rate	IWL (flow yield)
Stop			
Sampled			
(Final IWL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)
_____ gal/ft. _____ ft. _____ gals
(packer to SWL)

Equipment Used/Sampling method/Description of Event:
Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

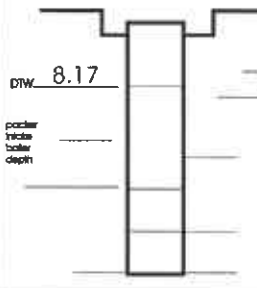
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.5	71.1	940	6.9			2:40
2. 2.0	71.1	939	7.1			3:05
3. 2.5	71.1	940	7.0			3:35pm
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS MW-1



Action	Time	Pump Rate	IWL (flow yield)
Stop			
Sampled			
(Final IWL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)
_____ gal/ft. _____ ft. _____ gals
(packer to SWL)

Equipment Used/Sampling method/Description of Event:
Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:
Clear moderate strong odor

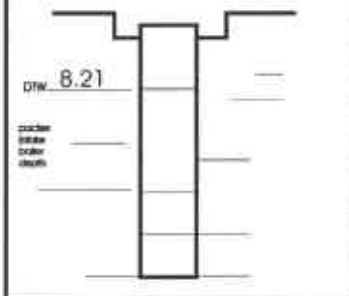
Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.0	71.3	960	6.8			3:50
2. 1.5	71.3	971	7.0			4:25
3. 1.5	70.4	987	7.1			4:40pm
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: April 25, 2004

WELL/HYDROLOGIC STATISTICS MW-7



Action	Time	Pump Rate	IWL (flow yield)
Stop			
Sampled			
(Final IWL)			

Purge Calculator
_____ gal/ft. _____ ft. _____ gals. X 3 = _____ gals
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)
_____ gal/ft. _____ ft. _____ gals
(packer to SWL)

Equipment Used/Sampling method/Description of Event:
Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: _____
Actual Volumes Purged: _____
Well Yield: ● _____
(See Below)

COC #: _____

Sample I.D.	Analysis	Lab

Additional Comments:

Gallons purged	TEMP C/F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.0	69.1	1202	7.0			5:00
2. 1.5	69.8	1201	7.1			5:25
3. 1.5	68.8	1209	7.2			5:45pm
4.						
5.						

* Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: SAMPLER: FG DATE: April 26, 2004

WELL/HYDROLOGIC STATISTICS EW-13

DTW 8.21

Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator

____ gal/ft. ____ ft. ____ gals. X 3 = ____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)

____ gal/ft. ____ ft. ____ gals
packer to BH

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: ____

Actual Volumes Purged: ____

Well Yield: ● ____
(See Below)

COC #: ____

Sample I.D.	Analysis	Lab

Additional Comments:

Gallons purged	TEMP °C / °F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.5	68.6	1200	7.1			6:25pm
2. 2.5	68.1	1211	7.1			6:50
3. 2.0	68.9	1213	7.1			7:20pm
4.						
5.						

*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: SAMPLER: FG DATE: April 26, 2004

WELL/HYDROLOGIC STATISTICS EW-14

DTW 8.86

Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator

____ gal/ft. ____ ft. ____ gals. X 3 = ____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)

____ gal/ft. ____ ft. ____ gals
packer to BH

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: ____

Actual Volumes Purged: ____

Well Yield: ● ____
(See Below)

COC #: ____

Sample I.D.	Analysis	Lab

Additional Comments:

Gallons purged	TEMP °C / °F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.5	70.1	1208	7.0			6:40
2. 2.5	69.5	1205	7.1			7:00
3. 2.5	69.9	1219	7.1			7:35am
4.						
5.						

*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: SAMPLER: FG DATE: April 26, 2004

WELL/HYDROLOGIC STATISTICS MW-11

DTW 8.13

Action	Time	Pump Rate	WL (low yield)
Stop			
Sampled			
(Final WL)			

Purge Calculator

____ gal/ft. ____ ft. ____ gals. X 3 = ____ gals.
SWL to BOP or packer to BOP | one volume | purge volume-3 casings

Head Purge Calculation (Refill Only)

____ gal/ft. ____ ft. ____ gals
packer to BH

Equipment Used/Sampling method/Description of Event:

Electronic water level indicator, weighted plastic disposable bailer, Hydac kit

Actual Gallons Purged: ____

Actual Volumes Purged: ____

Well Yield: ● ____
(See Below)

COC #: ____

Sample I.D.	Analysis	Lab

Additional Comments:

Gallons purged	TEMP °C / °F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 2.5	69.5	1006	6.9			8:05
2. 2.5	69.9	1009	7.1			8:35
3. 2.5	70.1	1029	7.1			9:15am
4.						
5.						

*Take measurement at approximately each casing volume purged

● HY-Minimal W.L. drop | MY - Wl. drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LY - able to purge 3 volumes by returning later or next day. | VLY - Minimal recharge unable to purge 3 volumes.

Appendix B
Laboratory Data Sheets

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Chun
Project No.: N/A
Project Name: Chun
Sample Matrix: Water
Method: EPA 8015M (GRO)

AA Project No.: A57204
Date Received: 04/27/04
Date Reported: 05/24/04
Units: mg/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	DF	Results	MRL
171074	MW-10	04/24/04	05/05/04	1.0	<0.1	0.1
171075	MW-9	04/24/04	05/05/04	1.0	<0.1	0.1
171076	MW-8	04/24/04	05/05/04	1.0	<0.1	0.1
171077	MW-6	04/25/04	05/05/04	1.0	**0.11**	0.1
171078	MW-4	04/25/04	05/05/04	1.0	**3.0**	0.1
171079	MW-5	04/25/04	05/05/04	5.0	**13**	0.1
171080	MW-3	04/25/04	05/05/04	2.0	**3.1**	0.1
171081	MW-2	04/25/04	05/05/04	50.0	**44**	0.1
171082	SV-1	04/25/04	05/05/04	10.0	**9.6**	0.1
171083	EW-12	04/25/04	05/05/04	10.0	**12**	0.1
171084	MW-1	04/25/04	05/05/04	50.0	**33**	0.1
171085	MW-7	04/25/04	05/05/04	200.0	**100**	0.1
171086	EW-13	04/25/04	05/05/04	200.0	**100**	0.1
171087	EW-14	04/26/04	05/05/04	10.0	**9.4**	0.1
171088	MW-11	04/26/04	05/05/04	50.0	**38**	0.1

MRL: Method Reporting Limit J: Estimated Value DF: Dilution Factor

NOTES:

GRO: Gasoline Range Organics

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AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57204
Project No.:	N/A	**Date Received:**	04/27/04
Project Name:	Chun	**Date Reported:**	05/24/04
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**04/24/04**	**04/24/04**	**04/24/04**	**04/25/04**	
Date Analyzed:	**05/05/04**	**05/05/04**	**05/05/04**	**05/05/04**	
AA ID No.:	**171074**	**171075**	**171076**	**171077**	
Client ID No.:	**MW-10**	**MW-9**	**MW-8**	**MW-6**	
Dilution Factor:	**1.0**	**1.0**	**1.0**	**1.0**	**MRL**
Compounds:					
Benzene	<0.5	<0.5	<0.5	**3.6**	0.5
Di-isopropyl Ether	<2	<2	<2	<2	2
1,2-Dibromoethane (EDB)	<0.5	<0.5	<0.5	<0.5	0.5
1,2-Dichloroethane (EDC)	<0.5	<0.5	<0.5	<0.5	0.5
Ethyl tert-Butyl Ether	<2	<2	<2	<2	2
Ethylbenzene	<0.5	<0.5	<0.5	<0.5	0.5
Methyl tert-Butyl Ether	<2	<2	<2	<2	2
Tert-Amyl Methyl Ether	<2	<2	<2	<2	2
Toluene	<0.5	<0.5	<0.5	<0.5	0.5
m,p-Xylenes	<1	<1	<1	<1	1
o-Xylene	<0.5	<0.5	<0.5	**0.61**	0.5
tert-Butanol	<10	<10	<10	<10	10

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Client:	Chun	**AA Project No.:**	A57204
Project No.:	N/A	**Date Received:**	04/27/04
Project Name:	Chun	**Date Reported:**	05/24/04
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**04/25/04**	**04/25/04**	**04/25/04**	**04/25/04**	
Date Analyzed:	**05/05/04**	**05/05/04**	**05/05/04**	**05/05/04**	
AA ID No.:	**171078**	**171079**	**171080**	**171081**	
Client ID No.:	**MW-4**	**MW-5**	**MW-3**	**MW-2**	
Dilution Factor:	**1.0**	**20.0**	**5.0**	**100.0**	**MRL**
Compounds:					
Benzene	**0.97**	**97**	**1000**	**8400**	0.5
Di-isopropyl Ether	<2	<40	<10	<200	2
1,2-Dibromoethane (EDB)	<0.5	<10	<2.5	<50	0.5
1,2-Dichloroethane (EDC)	<0.5	<10	**42**	<50	0.5
Ethyl tert-Butyl Ether	<2	<40	<10	<200	2
Ethylbenzene	**25**	**880**	**79**	**1400**	0.5
Methyl tert-Butyl Ether	<2	<40	<10	<200	2
Tert-Amyl Methyl Ether	<2	<40	<10	<200	2
Toluene	**1.5**	**480**	**24**	**5400**	0.5
m,p-Xylenes	**260**	**2800**	**200**	**4300**	1
o-Xylene	**140**	**840**	<2.5	**1900**	0.5
tert-Butanol	<10	<200	<50	<1000	10

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AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57204
Project No.:	N/A	**Date Received:**	04/27/04
Project Name:	Chun	**Date Reported:**	05/24/04
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**04/25/04**	**04/25/04**	**04/25/04**	**04/25/04**	
Date Analyzed:	**05/05/04**	**05/05/04**	**05/05/04**	**05/05/04**	
AA ID No.:	**171082**	**171083**	**171084**	**171085**	
Client ID No.:	**SV-1**	**EW-12**	**MW-1**	**MW-7**	
Dilution Factor:	**10.0**	**10.0**	**50.0**	**500.0**	**MRL**
Compounds:					
Benzene	**740**	**920**	**8000**	**10000**	0.5
Di-isopropyl Ether	<20	<20	<100	<1000	2
1,2-Dibromoethane (EDB)	<5	<5	<25	<250	0.5
1,2-Dichloroethane (EDC)	<5	<5	**28**	<250	0.5
Ethyl tert-Butyl Ether	<20	<20	<100	<1000	2
Ethylbenzene	**670**	**750**	**1300**	**3100**	0.5
Methyl tert-Butyl Ether	<20	<20	<100	<1000	2
Tert-Amyl Methyl Ether	<20	<20	<100	<1000	2
Toluene	**930**	**930**	**1600**	**28000**	0.5
m,p-Xylenes	**1300**	**1300**	**3100**	**12000**	1
o-Xylene	**870**	**970**	**480**	**5500**	0.5
tert-Butanol	<100	<100	<500	<5000	10

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Project Manager

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57204
Project No.:	N/A	**Date Received:**	04/27/04
Project Name:	Chun	**Date Reported:**	05/24/04
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**04/25/04**	**04/26/04**	**04/26/04**	
Date Analyzed:	**05/05/04**	**05/05/04**	**05/05/04**	
AA ID No.:	**171086**	**171087**	**171088**	
Client ID No.:	**EW-13**	**EW-14**	**MW-11**	
Dilution Factor:	**500.0**	**100.0**	**20.0**	**MRL**
Compounds:				
Benzene	**19000**	**4100**	**5000**	0.5
Di-isopropyl Ether	<1000	<200	<40	2
1,2-Dibromoethane (EDB)	<250	<50	<10	0.5
1,2-Dichloroethane (EDC)	<250	<50	<10	0.5
Ethyl tert-Butyl Ether	<1000	<200	<40	2
Ethylbenzene	**3800**	**880**	**1800**	0.5
Methyl tert-Butyl Ether	<1000	<200	<40	2
Tert-Amyl Methyl Ether	<1000	<200	<40	2
Toluene	**36000**	**1300**	**1700**	0.5
m,p-Xylenes	**13000**	**1000**	**9600**	1
o-Xylene	**5800**	**1300**	**2400**	0.5
tert-Butanol	<5000	<1000	<200	10

MRL: Method Reporting Limit J: Estimated Value

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LABORATORY QA/QC REPORT

Client: Chun
Project Name: Chun
Method: EPA 8260B
Sample ID: Reagent Blank

Project No.: N/A
AA Project No.: A57204
Date Analyzed: 05/05/04
Date Reported: 05/24/04

Compounds	Results ug/L	MRL
Benzene	<0.5	0.5
Di-isopropyl Ether	<2	2
1,2-Dibromoethane (EDB)	<0.5	0.5
1,2-Dichloroethane (EDC)	<0.5	0.5
Ethyl tert-Butyl Ether	<2	2
Ethylbenzene	<0.5	0.5
Methyl tert-Butyl Ether	<2	2
Tert-Amyl Methyl Ether	<2	2
Toluene	<0.5	0.5
m,p-Xylenes	<1	1
o-Xylene	<0.5	0.5
tert-Butanol	<10	10

MRL: Method Reporting Limit

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Project Manager

LABORATORY QA/QC REPORT

Client: Chun
Project Name: Chun
Method: EPA 8015M (GRO)
Sample ID: Reagent Blank

Project No.: N/A
AA Project No.: A57204
Date Analyzed: 05/05/04
Date Reported: 05/24/04

Compounds	Results mg/L	MRL
Gasoline Range Organics	<0.1	0.1

MRL: Method Reporting Limit

NOTES:

GRO: Gasoline Range Organics

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LABORATORY QA/QC REPORT

Client: Chun
Project Name: Chun
Method: EPA 8260B
Sample ID: Laboratory Control Standard
Concentration: 20 ug/L

Project No.: N/A
AA Project No. A57204
Date Analyzed: 05/05/04
Date Reported: 05/24/04

Compounds	Recovered Amount (ug/L)	Recovery (%)	Acceptable Range (%)
Benzene	15.3	77	50 - 150
Ethylbenzene	20.8	104	50 - 150
Methyl tert-Butyl Ether	18.6	93	50 - 150
Toluene	18.3	92	50 - 150
o-Xylene	20.7	104	50 - 150

Viorel Vasile
Project Manager

American Analytics • 9765 Eton Avenue, Chatsworth, California 91311
Tel: (818) 998 - 5547 • • Fax: (818) 998 - 7258

AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: Chun
Project Name: Chun
Method: EPA 8015M (GRO)
Sample ID: Laboratory Control Standard
Concentration: 0.5 mg/L

Project No.: N/A
AA Project No. A57204
Date Analyzed: 05/05/04
Date Reported: 05/24/04

Compounds	Recovered Amount (mg/L)	Recovery (%)	Acceptable Range (%)
Gasoline Range Organics	0.586	117.0	48.0 - 152

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AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

Client: Chun
Project Name: Chun
Method: EPA 8260B
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No: 171075
Project No.: N/A
AA Project No. A57204
Date Analyzed: 05/05/04
Date Reported: 05/24/04

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept. Rec. Range (%)
Benzene	16.0	80	15.3	77	4	50 - 150
Ethylbenzene	21.5	108	20.7	103	5	50 - 150
Methyl tert-Butyl Ether	19.4	97	18.9	95	2	50 - 150
Toluene	18.9	95	18.0	90	5	50 - 150
o-Xylene	21.5	108	20.5	103	5	50 - 150

Viorel Vasile
Project Manager

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AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311

Tel: 818-998-5547 FAX: 818-998-7258

№ 304489

DATE: 04/26/04

PAGE 1 OF 2

APR 22 2004 15:50 HP LASERJET 3200 P.2

AA Client: Lily and Wayne Chun	Phone (cell): 510 610 4889	Sampler's Name (Print): Franklin J. Goldman	
Project Manager: Frank Goldman	P.O. No.	Sampler's Signature: [signature]	
Project Name: Chun	Client's Project No.	Project Manager's Signature: [signature]	

Job Name and Address: Chun, 2301 Santa Clara Ave, Alameda CA

ANALYSIS REQUIRED (Test Name): TPH, BTEX 8015/8260B [illegible]

Client's Comment / Special Test Requirements / Comments (i.e., - Turnaround Time, Detection Limits, Data Package.....): Run tests after receipt of payment from Wayne Chun 5106104889 cell 9254392302 FAX Please FAX cost estimate to chun

Client's I.D.	A.A. I.D.#	Date	Time	Sample Type	Number of Containers	TPH/BTEX
MW-10	171074	04/24/04	4:45 PM	Water	4 VOAS	X
MW-9	171075	04/24/04	5:30 PM	↓	↓	↓
MW-8	171076	04/24/04	6:15 PM			
MW-6	171077	04/25/04	7:45 AM			
MW-4	171078	04/25/04	8:55 AM			
MW-5	171079	↓	10:10 AM			
MW-3	171080		11:30 AM			
MW-2	171081		12:50 PM			
SV-1	171082		2:05 PM			
EW-12	171083		3:25 PM			
MW-1	171084		4:45 PM			
MW-7	171085	↓	5:45 PM			
EW-13	171086	04/25/04	7:20 PM			
EW-14	171087	04/26/04	7:35 AM			
MW-11	171088	04/26/04	9:15 AM	↓	↓	↓

'04 APR 27 AM [illegible]

LAB COMMENTS

Approved as Work Order by: Print Name: VIORE VALLE Signature: [signature] Date: 04/27/04

AA Project No. A57204

Relinquished by	Date	Time	Received by
Franklin J Goldman	04/24/04	1:55 pm	FEDEX 845 [illegible]
FEDEX	4/27	1019	[signature]

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