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October 25, 2003

Barney M. Chan
Hazardous Materials Specialist
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Alameda, CA 94502-9335

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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.

Concentrations of TPHg and benzene identified in groundwater have decreased significantly in all of the groundwater monitoring wells since September 2000. Some minor increases in concentrations in the extraction wells may be due to activities associated with the recent pumping test. No free product was identified.

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

Groundwater was encountered at depths of approximately 9 feet bgs in the vicinity of the former tank pit during a low water table elevation period. The predominant groundwater gradient direction is to the east at 0.003 feet/foot (See Figures 1A and 1B for Gradient Maps) and (Table 1 for Depth to Water Table Measurements). Different gradient maps were produced for the monitoring and extraction wells because the benchmark elevations for the certified land surveys performed in 1995 and 2002 different. It is likely that the benchmark elevation located at the northwest corner of Oak and Santa Clara was read incorrectly by one of the two surveyors. Water levels were measured with an electronic water level sounder prior to sampling. 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

TPHg and BTEX concentrations indicate decreases in all groundwater monitoring wells(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). Concentrations of TPHg and benzene identified in SV-1 are likely anomalous as there was not enough water in the well to properly purge prior to sampling.

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 east 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

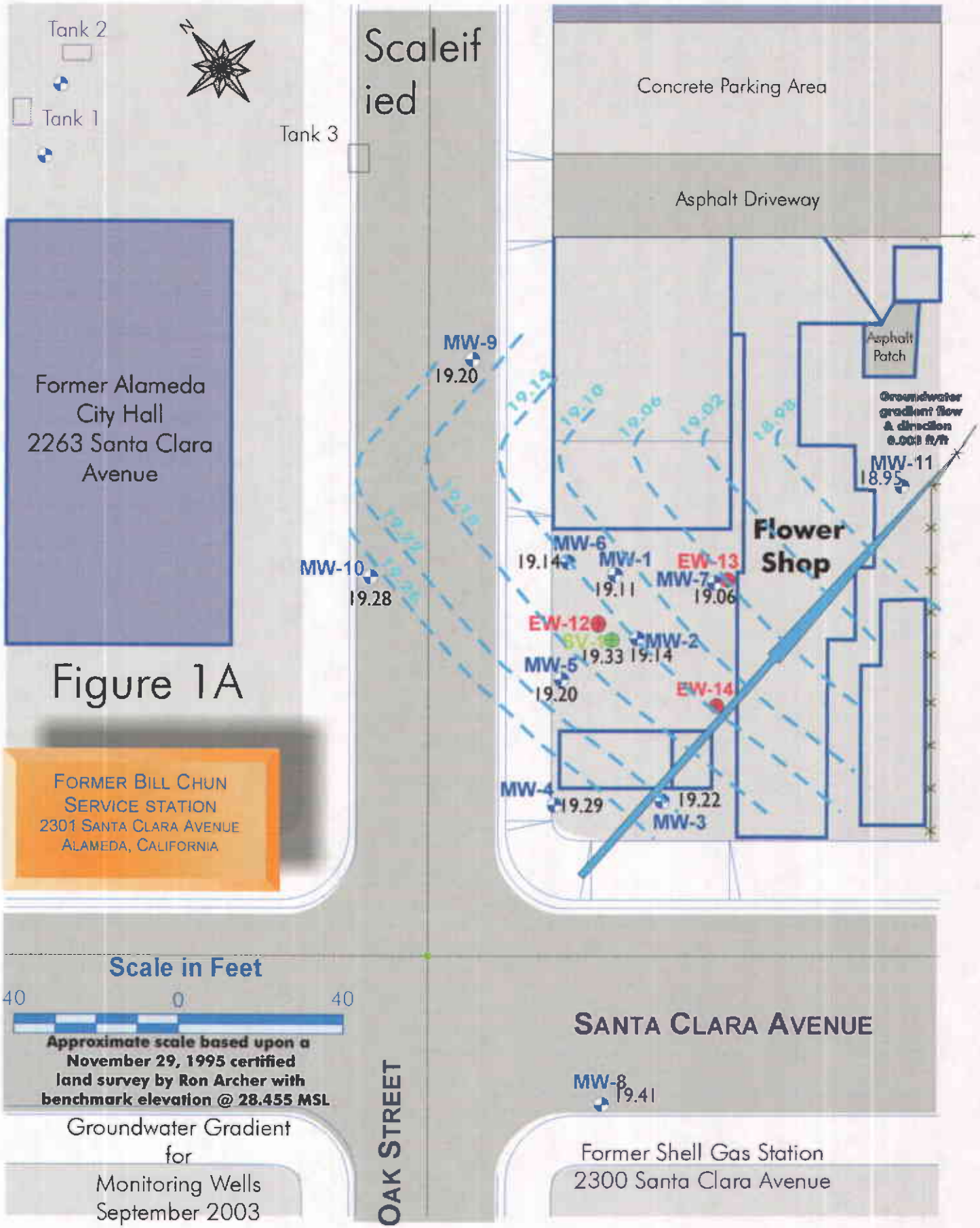
Δ to 3

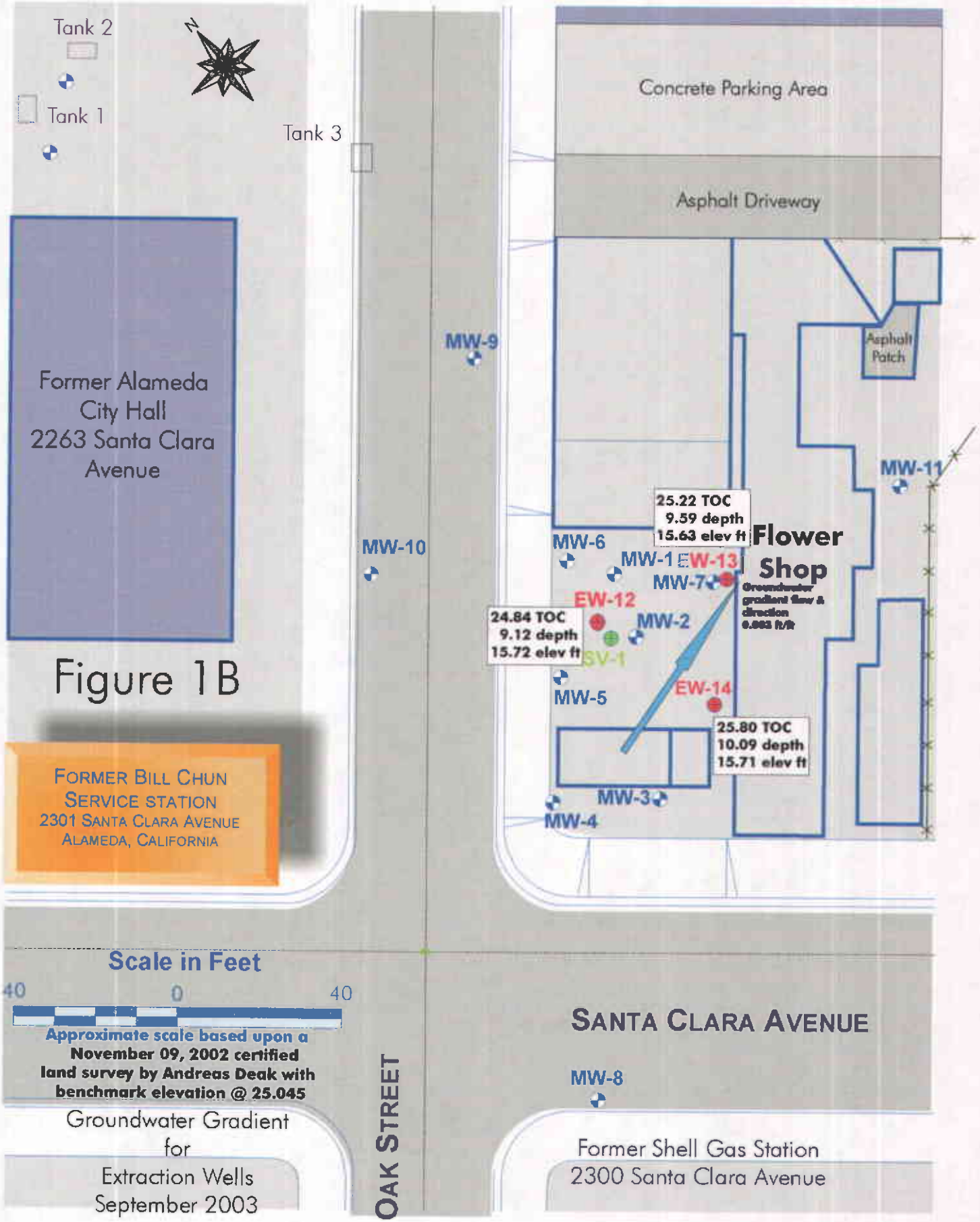
Perform an additional round of groundwater sampling and exclude Well SV-1 for sampling. Resolve the discrepancy in the benchmark elevations between the two certified land surveys. Install one additional groundwater extraction well at the south east corner of the site and extend the initial exploratory soil boring for the well to approximately 40 feet bgs to define the vertical extent of the aquifer. Since the estimates of the extraction well capture zones are dependant upon the results of the recent aquifer test, the vertical extent of the aquifer tested must be verified to validate the effectiveness of the proposed groundwater extraction system.

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.


Tank 2
Tank 1
Tank 3
Scaleif
ied
Concrete Parking Area
Asphalt Driveway
Asphalt
Patch
Former Alameda
City Hall
2263 Santa Clara
Avenue
MW-9
19.20
MW-10
19.28
MW-6
19.14
MW-1
19.11
EW-13
MW-7
19.06
EW-12
MW-2
19.33 19.14
MW-5
19.20
EW-14
MW-4
19.29
19.22
MW-3
MW-11
18.95
Flower
Shop
Groundwater
gradient flow
& direction
0.003 ft/ft
19.14
19.10
19.06
19.02
18.98
19.18
19.22
19.26
Figure 1A
FORMER BILL CHUN
SERVICE STATION
2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA
Scale in Feet
40
0
40
Approximate scale based upon a
November 29, 1995 certified
land survey by Ron Archer with
benchmark elevation @ 28.455 MSL
Groundwater Gradient
for
Monitoring Wells
September 2003
OAK STREET
SANTA CLARA AVENUE
MW-8
19.41
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
MW-10
MW-11
25.22 TOC
9.59 depth
15.63 elev ft
Flower Shop
MW-6
MW-1
EW-13
MW-7
EW-12
MW-2
24.84 TOC
9.12 depth
15.72 elev ft
SV-1
MW-5
EW-14
25.80 TOC
10.09 depth
15.71 elev ft
MW-3
MW-4
Figure 1B
FORMER BILL CHUN SERVICE STATION
2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA
Scale in Feet
40
0
40
Approximate scale based upon a November 09, 2002 certified land survey by Andreas Deak with benchmark elevation @ 25.045
Groundwater Gradient for Extraction Wells September 2003
OAK STREET
SANTA CLARA AVENUE
MW-8
Former Shell Gas Station
2300 Santa Clara Avenue

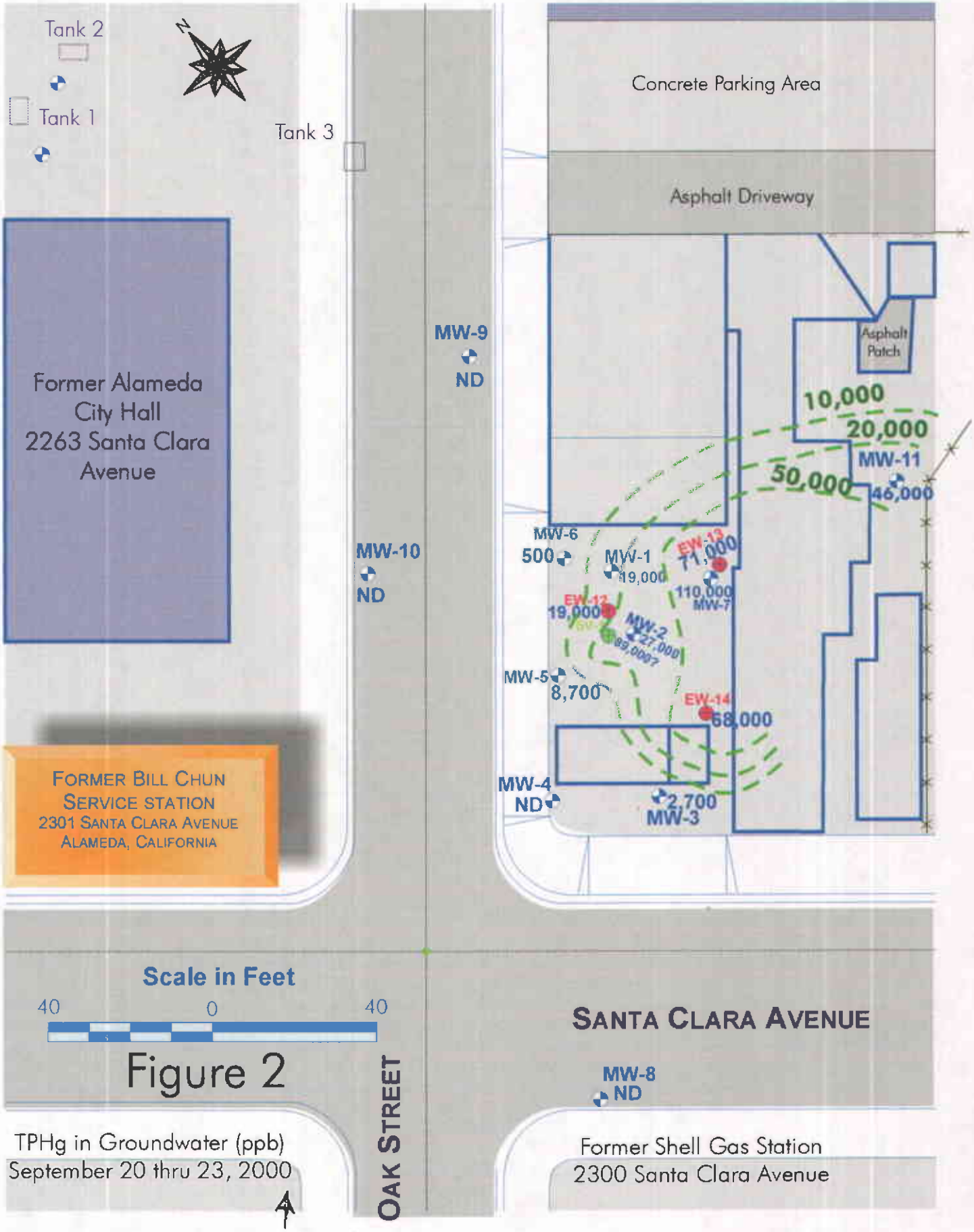


Figure 2

TPHg in Groundwater (ppb)
September 20 thru 23, 2000

2003

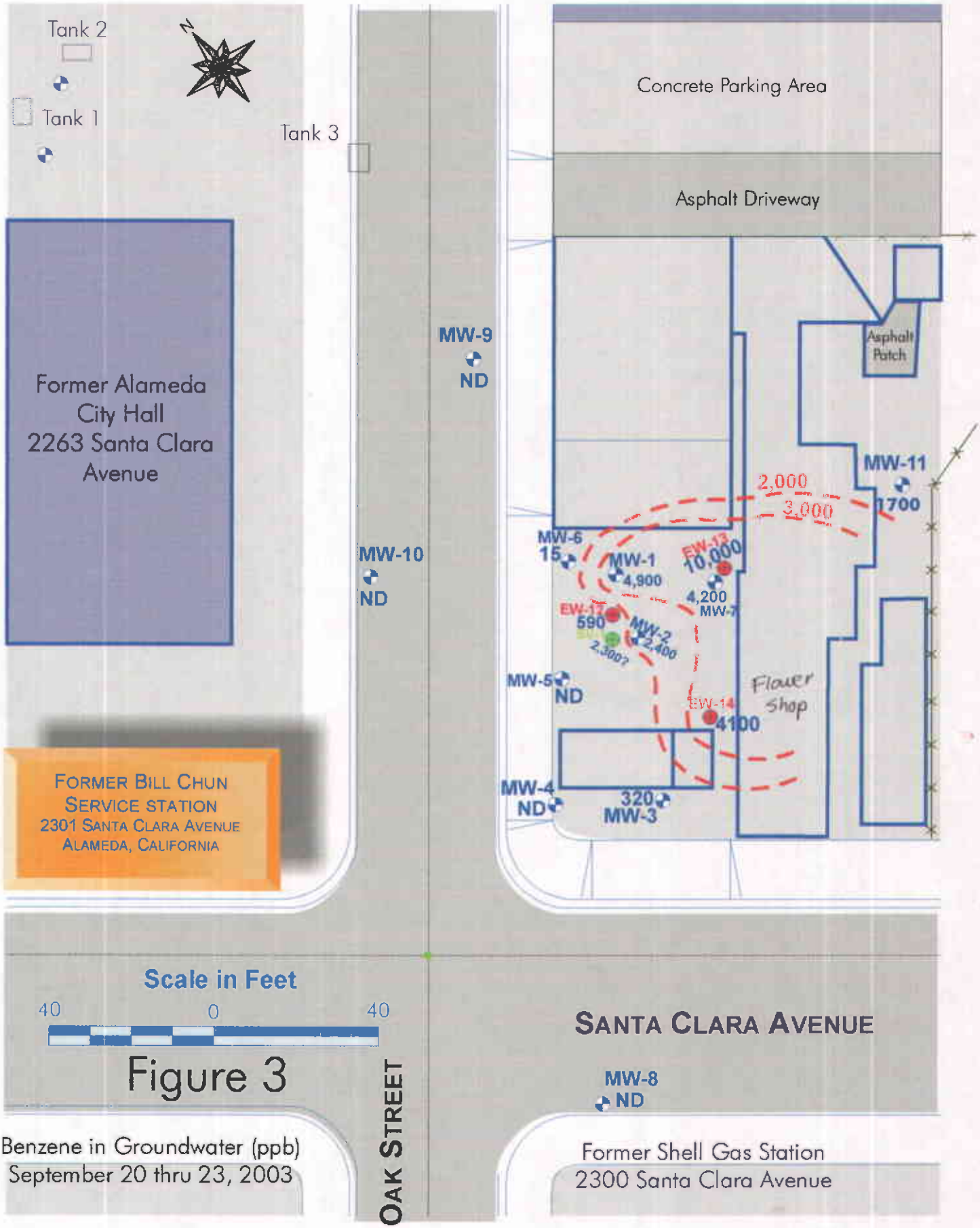


Figure 3

Benzene in Groundwater (ppb)
September 20 thru 23, 2003

TABLE 1
Depth to Groundwater Measurements
September 20, 2003

Well No	Depth to Groundwater from TOC (feet bgs)	TOC Elevation (feet)	Water Table Elevation (feet)
MW-1	9.38	28.49	19.11
MW-2	9.33	28.47	19.14
MW-3	9.56	28.78	19.22
MW-4	9.24	28.53	19.29
MW-5	9.13	28.33	19.20
MW-6	9.22	28.36	19.14
MW-7	9.38	28.44	19.06
MW-8	8.76	28.17	19.41
MW-9	8.25	27.45	19.20
MW-10	8.04	27.32	19.28
MW-11	9.61	28.56	18.95
SV-1	9.27	28.42	19.15
EW-12	9.12	24.84	15.72
EW-13	9.59	25.22	15.63
EW-14	10.09	25.80	15.71

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

Well No		TPHg	Benzene
MW-1	(09-20-03)	19,000	4,900
	(07-04-02)	43,000	7,200
	(09-17-00)	65,000	15,000
MW-2	(09-21-03)	27,000	2,400
	(07-04-02)	41,000	5,600
	(09-17-00)	140,000	21,000
MW-3	(09-21-03)	2,700	320
	(07-04-02)	10,000	2,300
	(09-17-00)	9,300	3,000
MW-4	(09-20-03)	ND	ND
	(07-04-02)	ND	ND
	(09-17-00)	ND	ND
MW-5	(09-21-03)	8,700	ND
	(07-04-02)	16,000	89
	(09-17-00)	44,000	490
MW-6	(09-20-03)	500	15
	(07-04-02)	3,900	29
	(09-17-00)	10,000	110
MW-7	(09-21-03)	110,000	4,200
	(07-04-02)	140,000	15,000
	(09-17-00)	220,000	32,000
MW-8	(09-20-03)	ND	ND
	(07-03-02)	ND	1.1
	(09-17-00)	ND	1.4
MW-9	(09-20-03)	ND	ND
	(07-03-02)	ND	ND
	(09-17-00)	ND	ND

		TPHg	ppb Benzene
MW-10	(09-20-03)	ND	ND
	(07-03-02)	ND	ND
	(09-17-00)	ND	ND
MW-11	(09-22-03)	46,000	1,700
	(10-24-02)	59,000	5,140
SV-1	(09-21-03)	89,000	2,300
	(07-04-02)	210,000	7,900
	(09-17-00)	560,000	10,000
EW-12	(09-21-03)	19,000	590
	(10-31-02)	5,840	75.7
EW-13	(09-21-03)	71,000	10,000
	(10-31-02)	109,200	9,120
EW MW-14	(09-22-03)	68,000	4,100
	(10-31-02)	101,880	7,360

Appendix A
Sampling Event Sheets

PROJECT: Chun EVENT: SAMPLER: FG DATE: Sept 20, 2003

WELL/HYDROLOGIC STATISTICS MW-10

SWL 8.04

packer intake bailer depth

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

Purge Calculation: ___ gal/ft. ___ ft. (SWL to BOP or packer to BOP) ___ gals. X 3 = ___ gals. (one volume; purge volume-3 casings)

Head Purge Calculation (Alt/ft Only): ___ gal/ft. ___ ft. (packer to SWL) ___ gals

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 (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	71.1	922	6.9			1:40
2. 1.0	70.4	932	7.0			2:05
3. 1.0	70.9	936	7.0			2:35
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: Sept 20, 2003

WELL/HYDROLOGIC STATISTICS MW-9

SWL 8.25

packer intake bailer depth

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

Purge Calculation: ___ gal/ft. ___ ft. (SWL to BOP or packer to BOP) ___ gals. X 3 = ___ gals. (one volume; purge volume-3 casings)

Head Purge Calculation (Alt/ft Only): ___ gal/ft. ___ ft. (packer to SWL) ___ gals

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 (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	71.1	967	6.8			2:55
2. 1.0	71.4	975	7.0			3:15
3. 1.0	71.9	980	6.9			3:45
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: Sept 20, 2003

WELL/HYDROLOGIC STATISTICS MW-8

SWL 8.76

packer intake bailer depth

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

Purge Calculation: ___ gal/ft. ___ ft. (SWL to BOP or packer to BOP) ___ gals. X 3 = ___ gals. (one volume; purge volume-3 casings)

Head Purge Calculation (Alt/ft Only): ___ gal/ft. ___ ft. (packer to SWL) ___ gals

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 (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.1	958	6.8			4:00
2. 1.0	70.4	952	7.0			4:20
3. 1.0	70.9	952	6.9			4:35
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: Sept 20, 2003

WELL/HYDROLOGIC STATISTICS MW-6

SWL 9.22

packer intake bailer depth

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

Purge Calculation: ___ gal/ft. ___ ft. (SWL to BOP or packer to BOP) ___ gals. X 3 = ___ gals. (one volume; purge volume-3 casings)

Head Purge Calculation (Alt/ft Only): ___ gal/ft. ___ ft. (packer to SWL) ___ gals

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 (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.4	942	6.8			5:00
2. 1.5	70.4	951	6.9			5:25
3. 1.0	70.9	960	6.9			5:50
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: Sept 20, 2003

WELL/HYDROLOGIC STATISTICS MW-4

SWL 9.24

packer inflate bailer depth

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 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 (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	71.1	942	7.2			6:10
2. 1.0	71.4	951	7.3			6:25
3. 1.0	71.9	956	7.3			6:45
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: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS MW-5

SWL 9.13

packer inflate bailer depth

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 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 strong hydrocarbon odor

Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	68.9	1003	6.8			8:00
2. 1.5	68.1	1010	7.0			8:35
3. 1.5	67.9	998	7.2			9:15
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: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS MW-3

SWL 9.56

packer inflate bailer depth

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 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 (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	71.1	1112	6.8			9:30
2. 1.0	71.4	1013	7.0			9:45
3. 1.0	71.9	1121	7.4			10:05
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: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS MW-2

SWL 9.33

packer inflate bailer depth

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 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:

Strong hydrocarbon odor,, some turbidity, sewage odor

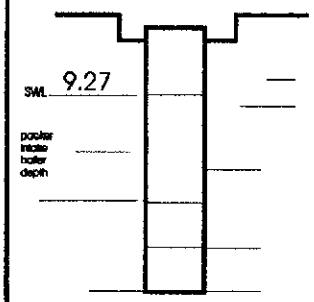
Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.3	932	6.8			10:20
2. 1.5	70.4	949	6.9			10:45
3. 2.0	70.9	950	6.9			11:00
4.						
5.						

*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: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS SV-1



Action	Time	Pump Rate	WL (flow rate)
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 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:

Strong hydrocarbon and sewage odor; not enough water to develop well

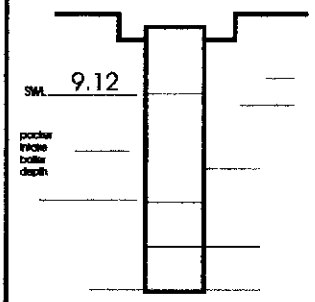
Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 0.5	71.1	930	7.0			11:20
2.						
3.						
4.						
5.						

*Take measurement at approximately each casing volume purged

● HV-Minimal W.L. drop | MV - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LV - able to purge 3 volumes by returning later or next day. | VLV - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS EW-12



Action	Time	Pump Rate	WL (flow rate)
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 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, strong hydrocarbon odor

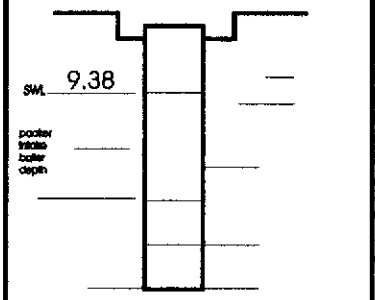
Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.1	944	6.8			11:40
2. 1.5	70.4	953	7.0			12:05
3. 1.5	70.7	958	7.2			12:50
4.						
5.						

*Take measurement at approximately each casing volume purged

● HV-Minimal W.L. drop | MV - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LV - able to purge 3 volumes by returning later or next day. | VLV - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS MW-1



Action	Time	Pump Rate	WL (flow rate)
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 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

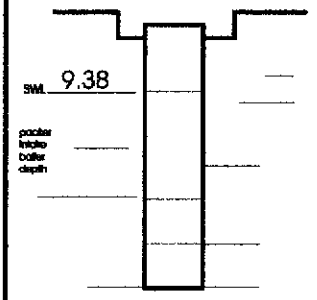
Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	70.1	979	6.8			1:20
2. 1.0	70.4	982	7.0			1:45
3. 1.0	70.8	988	7.1			2:00
4.						
6.						

*Take measurement at approximately each casing volume purged

● HV-Minimal W.L. drop | MV - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LV - able to purge 3 volumes by returning later or next day. | VLV - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: _____ SAMPLER: FG DATE: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS MW-7



Action	Time	Pump Rate	WL (flow rate)
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 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:

Strong hydrocarbon odor, some turbidity

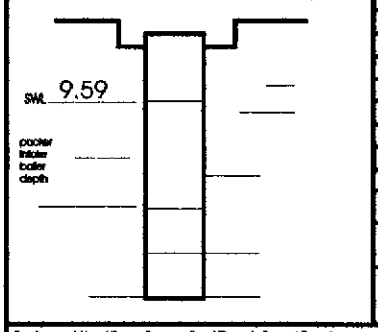
Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.0	67.3	1302	7.3			2:20
2. 1.5	67.4	1322	7.2			2:45
3. 2.0	68.1	1331	7.2			3:15
4.						
5.						

*Take measurement at approximately each casing volume purged

● HV-Minimal W.L. drop | MV - W.L drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump. | LV - able to purge 3 volumes by returning later or next day. | VLV - Minimal recharge unable to purge 3 volumes.

PROJECT: Chun EVENT: SAMPLER: EG DATE: Sept 21, 2003

WELL/HYDROLOGIC STATISTICS: EW-13



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

Purge Calculator: ____ gal/ft. ____ ft. (SWL to BOP or packer to BOP) ____ gals. X 3 = ____ gals. (one volume) (purge volume-3 casings)

Head Purge Calculation (AMIT Only): ____ gal/ft. ____ ft. (packer to SWL) ____ gals

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, strong hydrocarbon odor

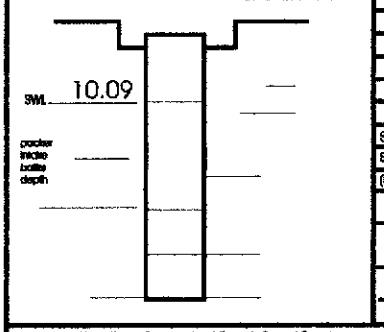
Gallons purged	TEMP °C/°F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	66.8	1322	7.2			3:30
2. 1.5	67.2	1333	7.2			4:00
3. 2.0	67.6	1352	7.2			4:40
4.						
5.						

*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: EG DATE: Sept 22, 2003

WELL/HYDROLOGIC STATISTICS: EW-14



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

Purge Calculator: ____ gal/ft. ____ ft. (SWL to BOP or packer to BOP) ____ gals. X 3 = ____ gals. (one volume) (purge volume-3 casings)

Head Purge Calculation (AMIT Only): ____ gal/ft. ____ ft. (packer to SWL) ____ gals

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, strong hydrocarbon odor

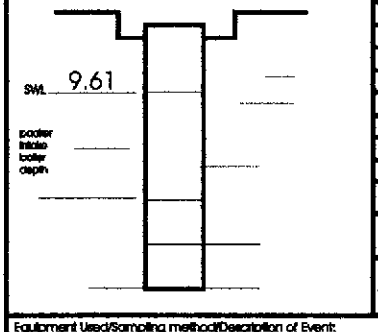
Gallons purged	TEMP °C/°F (Circle One)	EC (µs/cm)	PH	TURBIDITY (NTU)	HEAD (FT)	TIME
1. 1.5	69.1	1211	6.9			5:40
2. 1.5	69.4	1233	7.0			6:05
3. 1.5	69.7	1245	7.1			6:45
4.						
5.						

*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: EG DATE: Sept 22, 2003

WELL/HYDROLOGIC STATISTICS: MW-11



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

Purge Calculator: ____ gal/ft. ____ ft. (SWL to BOP or packer to BOP) ____ gals. X 3 = ____ gals. (one volume) (purge volume-3 casings)

Head Purge Calculation (AMIT Only): ____ gal/ft. ____ ft. (packer to SWL) ____ gals

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. 1.5	68.6	1009	6.8			7:00
2. 1.0	69.1	1024	7.0			7:35
3. 1.0	70.2	1033	7.1			8:15
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.

Appendix B
Laboratory Data Sheets

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8020 (BTEX)		

Date Sampled:	09/20/03	09/20/03	09/20/03	09/20/03	
Date Analyzed:	09/30/03	09/30/03	09/30/03	09/30/03	
AA ID No.:	160934	160935	160936	160937	
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	**15**	0.5
Ethylbenzene	<0.5	<0.5	<0.5	**19**	0.5
Toluene	**0.63**	<0.5	<0.5	**0.99**	0.5
Xylenes	<1	<1	<1	**4.0**	1

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8020 (BTEX)		

Date Sampled:	09/20/03	09/21/03	09/21/03	09/21/03	
Date Analyzed:	09/30/03	10/03/03	10/03/03	10/03/03	
AA ID No.:	160938	160939	160940	160941	
Client ID No.:	MW-4	MW-5	MW-3	MW-2	
Dilution Factor:	1.0	10.0	5.0	50.0	**MRL**
Compounds:					
Benzene	<0.5	<5	320	3600	0.5
Ethylbenzene	<0.5	<5	2.6	30	0.5
Toluene	<0.5	5.4	3.0	2400	0.5
Xylenes	<1	990	7.6	3500	1

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8020 (BTEX)		

Date Sampled:	09/21/03	09/21/03	09/21/03	09/21/03	
Date Analyzed:	10/03/03	10/03/03	10/03/03	10/03/03	
AA ID No.:	160942	160943	160944	160945	
Client ID No.:	SV-1	EW-12	MW-1	MW-7	
Dilution Factor:	100.0	100.0	50.0	50.0	**MRL**
Compounds:					
Benzene	2300	590	4900	4200	0.5
Ethylbenzene	1300	490	680	1400	0.5
Toluene	7200	790	3000	13000	0.5
Xylenes	9600	1600	3100	8400	1

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8020 (BTEX)		

Date Sampled:	**09/21/03**	**09/22/03**	**09/22/03**	
Date Analyzed:	**10/03/03**	**10/03/03**	**10/03/03**	
AA ID No.:	**160946**	**160947**	**160948**	
Client ID No.:	**EW-13**	**EW-14**	**MW-11**	
Dilution Factor:	**50.0**	**50.0**	**50.0**	**MRL**
Compounds:				
Benzene	**10000**	**4100**	**1700**	0.5
Ethylbenzene	**1900**	**1100**	**890**	0.5
Toluene	**21000**	**7100**	**2200**	0.5
Xylenes	**9700**	**4200**	**4900**	1

MRL: Method Reporting Limit J: Estimated Value

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LABORATORY ANALYSIS RESULTS

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

AA Project No.: A57201
Date Received: 09/24/03
Date Reported: 10/13/03
Units: mg/L

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	DF	Results	MRL
160934	MW-10	09/20/03	09/30/03	1.0	<0.1	0.1
160935	MW-9	09/20/03	09/30/03	1.0	<0.1	0.1
160936	MW-8	09/20/03	09/30/03	1.0	<0.1	0.1
160937	MW-6	09/20/03	09/30/03	1.0	**0.50**	0.1
160938	MW-4	09/20/03	09/30/03	1.0	<0.1	0.1
160939	MW-5	09/21/03	10/03/03	10.0	**8.7**	0.1
160940	MW-3	09/21/03	10/03/03	5.0	**2.7**	0.1
160941	MW-2	09/21/03	10/03/03	50.0	**27**	0.1
160942	SV-1	09/21/03	10/03/03	100.0	**89**	0.1
160943	EW-12	09/21/03	10/03/03	100.0	**19**	0.1
160944	MW-1	09/21/03	10/03/03	50.0	**19**	0.1
160945	MW-7	09/21/03	10/03/03	50.0	**110**	0.1
160946	EW-13	09/21/03	10/03/03	50.0	**71**	0.1
160947	EW-14	09/22/03	10/03/03	50.0	**68**	0.1
160948	MW-11	09/22/03	10/03/03	50.0	**46**	0.1

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

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	09/20/03	09/20/03	09/20/03	09/20/03	
Date Analyzed:	09/29/03	09/29/03	09/29/03	09/29/03	
AA ID No.:	160934	160935	160936	160937	
Client ID No.:	MW-10	MW-9	MW-8	MW-6	
Dilution Factor:	1.0	1.0	1.0	1.0	**MRL**
Compounds:					
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
Methyl tert-Butyl Ether	<2	<2	<2	<2	2
Tert-Amyl Methyl Ether	<2	<2	<2	<2	2
Tert-Butanol	<10	<10	<10	<10	10

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	09/20/03	09/21/03	09/21/03	09/21/03	
Date Analyzed:	09/29/03	09/29/03	09/29/03	09/29/03	
AA ID No.:	160938	160939	160940	160941	
Client ID No.:	MW-4	MW-5	MW-3	MW-2	
Dilution Factor:	1.0	1.0	5.0	100.0	**MRL**
Compounds:					
Di-isopropyl Ether	<2	<2	<10	<200	2
1,2-Dibromoethane (EDB)	<0.5	<0.5	<2.5	<50	0.5
1,2-Dichloroethane (EDC)	<0.5	<0.5	43	<50	0.5
Ethyl tert-Butyl Ether	<2	<2	<10	<200	2
Methyl tert-Butyl Ether	<2	<2	<10	<200	2
Tert-Amyl Methyl Ether	<2	<2	<10	<200	2
Tert-Butanol	<10	<10	<50	<1000	10

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	09/21/03	09/21/03	09/21/03	09/21/03	
Date Analyzed:	09/30/03	09/30/03	09/30/03	09/30/03	
AA ID No.:	160942	160943	160944	160945	
Client ID No.:	SV-1	EW-12	MW-1	MW-7	
Dilution Factor:	100.0	10.0	100.0	100.0	**MRL**
Compounds:					
Di-isopropyl Ether	<200	<20	<200	<200	2
1,2-Dibromoethane (EDB)	<50	<5	<50	<50	0.5
1,2-Dichloroethane (EDC)	<50	<5	<50	<50	0.5
Ethyl tert-Butyl Ether	<200	<20	<200	<200	2
Methyl tert-Butyl Ether	<200	<20	<200	<200	2
Tert-Amyl Methyl Ether	<200	<20	<200	<200	2
Tert-Butanol	<1000	<100	<1000	<1000	10

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LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57201
Project No.:	N/A	**Date Received:**	09/24/03
Project Name:	Chun	**Date Reported:**	10/13/03
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**09/21/03**	**09/22/03**	**09/22/03**	
Date Analyzed:	**10/01/03**	**10/01/03**	**10/01/03**	
AA ID No.:	**160946**	**160947**	**160948**	
Client ID No.:	**EW-13**	**EW-14**	**MW-11**	
Dilution Factor:	**100.0**	**100.0**	**100.0**	**MRL**
Compounds:				
Di-isopropyl Ether	<200	<200	<200	2
1,2-Dibromoethane (EDB)	<50	<50	<50	0.5
1,2-Dichloroethane (EDC)	<50	<50	<50	0.5
Ethyl tert-Butyl Ether	<200	<200	<200	2
Methyl tert-Butyl Ether	<200	<200	<200	2
Tert-Amyl Methyl Ether	<200	<200	<200	2
Tert-Butanol	<1000	<1000	<1000	10

MRL: Method Reporting Limit J: Estimated Value

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AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

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

Project No.: N/A
AA Project No.: A57201
Date Analyzed: 09/29/03
Date Reported: 10/13/03

Compounds	Results ug/L	MRL
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
Methyl tert-Butyl Ether	<2	2
Tert-Amyl Methyl Ether	<2	2
Tert-Butanol	<10	10

MRL: Method Reporting Limit

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AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

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

Project No.: N/A
AA Project No.: A57201
Date Analyzed: 09/30/03
Date Reported: 10/13/03

Compounds	Results ug/L	MRL
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
Methyl tert-Butyl Ether	<2	2
Tert-Amyl Methyl Ether	<2	2
Tert-Butanol	<10	10

MRL: Method Reporting Limit

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AMERICAN ANALYTICS

LABORATORY QA/QC REPORT

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

Project No.: N/A
AA Project No.: A57201
Date Analyzed: 10/01/03
Date Reported: 10/13/03

Compounds	Results ug/L	MRL
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
Methyl tert-Butyl Ether	<2	2
Tert-Amyl Methyl Ether	<2	2
Tert-Butanol	<10	10

MRL: Method Reporting Limit

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 8260B
Sample ID: Matrix Spike
Concentration: 20 ug/L

AA ID No: 160934
Project No.: N/A
AA Project No. A57201
Date Analyzed: 09/29/03
Date Reported: 10/13/03

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept. Rec. Range (%)
1,2-Dibromoethane (EDB)	20.4	102	20.8	104	2	50 - 150
1,2-Dichloroethane (EDC)	20.3	102	21.2	106	4	50 - 150
Methyl tert-Butyl Ether	19.7	99	20.8	104	5	50 - 150

Viorel Vasile
Project Manager

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Franklin J. Goldman
PO BOX 725, Sebastopol, CA 95473
FJGoldman@SBCGlobal.net
Phone: (707) 996-4199 leave message
Cell: (707) 235-9979

CHAIN OF CUSTODY RECORD

A57201

Laboratory Analysis P.O. No.
Laboratory Please Call Accounts Payable for P.O. No.

Date: 09/22/03 Sheet 1 Of 2

Project Name Chun
Project Number
Address 2301 SANTA CLARA
ALAMEDA, CA 94501
Sampler's Name: Frank Goldman
Sampler's Signature: Franklin J Goldman

Sample Number	Location Lab #	Date	Time
MW-10	160934	09/2/03	2:35 PM
MW-9	160935		3:45
MW-8	160936		4:35
MW-6	160937		5:50
MW-4	160938		6:45
MW-5	160939	09/2/03	9:45 AM
MW-3	160940		10:05
MW-2	160941		11:00
SV-1	160942		11:30
EW-12	160943		12:50

Parameters

TPH as Gasoline 8015	TPH as Diesel 8015	TPH-g/BTEX 8015/8020 & MTBE	BTEX & EPA 8020	Oil and Grease 5520	Volitile Organics (8010)	CAM Metals (17)	Pr. Pollutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides 8140/8141	Method 8260b for 5 oxygenates & 2 lead scavengers	Bulk density, moisture, porosity fraction of organic carbon	SOIL SAMPLE	WATER SAMPLE
		X								X			X

American Analytics
9765 Eton Ave
Chatsworth, CA 91311
Phone: (818) 998-5547

Phone

Turnaround Time
☐ Rush ☐ 24 Hour ☐ 48 Hour ☒ 5-Day

Repeat to: Frank

Comments

Run tests after receipt of Payment from:
Wayne Chun
265 Heron Drive
Pittsburg, CA 94565

Also, Fax cost estimate prior to running samples

Relinquished By	Date	Time
Franklin J Goldman	09/2/03	2:45 PM
Dispatched By	Date	Time

Received By	Date	Time
	9/3	
Received In Lab By	Date	Time

Total Number of Containers this Sheet:

'03 SEP 24 10:31

Method of Shipment:

Special Shipment/Handling or Storage Requirements:
Keep on Ice

Approved as work order 09/25/03 V. Hamlet

Franklin J. Goldman
PO BOX 725, Sebastopol, CA 95473
FJGoldman@SBCGlobal.net
Phone: (707) 996-4199 leave message
Cell: (707) 235-9979

CHAIN OF CUSTODY RECORD

AS7201

Laboratory Analysis P.O. No.
Laboratory Please Call Accounts Payable for P.O. No.

Date: 9/22/03 Sheet 1 Of 2

Project Name Chun
Project Number
Address 2301 SANTA CLARA ALAMEDA, CA 94501
Sampler's Name: Frank Goldman
Sampler's Signature:

Sample Number	Location	Date	Time
MW-1	160944	9/21/03	2:00 PM
MW-7	160945		3:15
EW-13	160946		4:40
EW-14	160947	9/22/03	6:45 AM
MW-11	160948	9/22/03	8:15 AM

Parameters

TPH as Gasoline 8015	TPH as Diesel 8015	TPH-g/BTEX 8015/8020 & MTBE	BTEX & EPA 8020	Oil and Grease 5520	Volitile Organics (8010)	CAM Metals (17)	Pr. Pollutant Metals (13)	Base/Neu/Acids (Organic)	Pesticides 8140/8141	Method 8260b for 5 oxygenates & 2 lead scavengers	Bulk density, moisture, porosity fraction of organic carbon	SOIL SAMPLE	WATER SAMPLE
		X								X			X

American Analytics
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Chatsworth, CA 91311
Phone: (818) 998-5547
Phone

Turnaround Time
☐ Rush ☐ 24 Hour ☐ 48 Hour ☒ 5-Day
Repeat to: Frank

Comments
Note: Call Frank Goldman to review costs prior to running samples

'03 SEP 24 AM 8:51

Relinquished By	Date	Time
	9/23/03	2:45 PM

Received By	Date	Time
	9/25	

Dispatched By	Date	Time

Received In Lab By	Date	Time

Total Number of Containers this Sheet:
Method of Shipment:
Special Shipment/Handling or Storage Requirements: **Keep on Ice**

approved as work order 09/25/03 V. Vanzile