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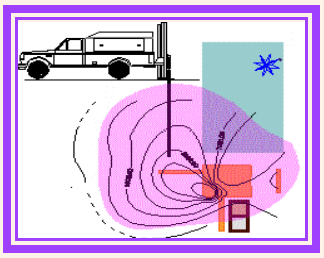


RECEIVED
By DEHLOPTOXIC at 9:26 am, Jul 05, 2006

September 30, 2005

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 laboratory results of analyses performed for gasoline constituents in groundwater. This groundwater monitoring event represents a compilation of data covering the onsite wells and the down gradient wells installed on the Towata property. The lateral extent of the dissolved gasoline constituent plumes has been defined except for some low concentrations of MTBE identified down gradient.

In addition, the current location of the groundwater extraction wells is appropriately positioned to extract the highest dissolved concentrations identified to date.

Call me if you have any questions.

Sincerely,

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

Franklin J. Goldman
Certified Hydrogeologist No. 466

GROUNDWATER FLOW DIRECTION

On June 07, 2005, the groundwater monitoring wells recently installed on the Towata property were developed by Blaine Technical Services (See Appendix A for Well Development Logs). On August 19, 2005, a Slope Indicator water level meter was used to measure the depth to groundwater in the groundwater monitoring and extraction wells prior to well purging and sampling to use as a reference elevation to determine the progress of purging. The measurements were read to the nearest 100th of an inch from the top of the casing elevation as established by a certified land survey. Groundwater monitoring wells BK and BJ were resurveyed after the casings were recently cut down to below grade to be fitted with well boxes that had not been originally constructed upon completion. The latest certified land survey by Deak Andreas will be Faxed separately to Alameda County Health as soon as it becomes available.

Note: The current land survey of groundwater monitoring and extraction wells will have to be re-evaluated to fit the format required by the State Geotracker database. Another land surveyor, more familiar with electronic data submittals, has been contacted to perform this work and the task of entering the site into the Geotracker database has been initiated to obtain a Global ID number.

Groundwater was encountered at depths ranging from approximately six (6) feet bgs at the west end of the site to approximately 14 feet bgs at the east end of the investigation area. The predominant groundwater gradient flow direction is to the east at 0.05 feet/foot (See Figure 1 for Groundwater Gradient Flow and Direction Map) and (Table 1 for Depth to Water Level Measurements). The groundwater gradient is also shown to exhibit a much steeper slope on the Towata property relative to the Chun property. This may be a reflection of the fact that the soils beneath the Towata property are predominantly sand and the soils beneath the Chun property are predominantly finer grained.

Groundwater monitoring well BH exhibited a shallow groundwater level that was approximately three feet shallower than the adjacent area wide water level. Since the screened interval for BH is deeper than adjacent wells, this may be indicative of another deeper groundwater zone with some confining characteristics.

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 bailor. Each well was sampled after the well purging process which entailed the removal of approximately three (3) or more well 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 were monitored so that the three parameters demonstrated an error difference of within 10% from one another, over three consecutive readings (See Appendix B for Sampling Event Logs). The recorded data was used to verify that a sufficient volume of groundwater had been removed from 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 through a low flow bottom draining plastic tube inserted into the bottom of the bailer 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 and 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 gasoline ranged organics (GRO) and benzene identified in groundwater have decreased over time, some extraction wells in the vicinity of the former tank location have demonstrated an increase in concentrations (See Appendix C for Laboratory Data Sheets) and (Table 2 for Historical Trends of GRO and Benzene concentrations). The plumes of benzene and GRO in groundwater still appear to be centered in the general vicinity of the former USTs on site (See Figures 2 and 3 for GRO and benzene concentration maps). Some low levels of oxygenates such as MTBE were identified in down gradient wells and TBA was identified at 80 ppb in groundwater monitoring well BF (See Figure 4 for oxygenates concentration map).

FIELD CLEANUP

Well purge water was placed in properly labeled 55 gallon drums left on-site for transport to a legal point of disposal.

CONCLUSIONS

The lateral extent of the dissolved GRO and benzene plumes has been defined and is centered around the former UST location and the west central portion of the Towata flower shop two-story building structure. Some low levels of oxygenates were identified in down gradient wells and appear to represent the leading edge of the dissolved gasoline plume.

RECOMMENDATIONS

Perform an additional round of groundwater sampling. Conduct soil gas and indoor air sampling and analyses.

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 Groundwater Measurements
August 19, 2005
Chun/Towata Properties - 2301 Santa Clara Avenue, Alameda

Well No	Depth to Groundwater from TOC (feet bgs)	TOC Elevation (feet) MSN	Water Table Elevation (feet)
MW-1	8.47	28.49	20.02
MW-2	8.43	28.47	20.04
MW-3	8.67	28.78	20.11
MW-4	8.47	28.53	20.06
MW-5	8.20	28.33	20.13
MW-6	8.24	28.36	20.12
MW-7	8.47	28.44	19.97
MW-8	8.16	28.17	20.01
MW-9	6.98	27.45	20.47
MW-10	5.94	27.32	21.38
MW-11	9.80	25.17	15.37
EW-12	8.16	28.25	20.09
EW-13	8.71	28.64	19.93
EW-14	9.26	29.21	19.95
EW-15	8.73	28.71	19.98
EW-16	9.10	29.02	19.92
EW-17	8.96	28.95	19.99
BL	9.66	25.37	15.71
BK	7.14	25.02	17.88

BJ	6.34	25.03	18.69
BH	13.78	25.18	11.40
BM	10.30	25.17	14.87
BF	9.22	25.66	16.44
BG	10.90	25.85	14.95

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

Well No		TPHg	Benzene
MW-1	(08-20-05)	35,000	14,000
	(08-08-04)	29,000	9,700
	(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	(08-20-05)	31,000	10,000
	(08-08-04)	21,000	6,800
	(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	(08-20-05)	5,500	3,000
	(08-08-04)	2,500	400
	(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	(08-20-05)	1,100	1.5
	(08-08-04)	ND	ND
	(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	(08-20-05)	19,000	130
	(08-08-04)	13,000	82
	(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	(08-20-05)	810	<0.5
	(08-08-04)	320	2.7
	(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	(08-08-04)	92,000	9,300
	(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	(08-22-05)	<100	<0.5
	(08-08-04)	NA	NA
	(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	(08-22-05)	<100	<0.5
	(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	(08-22-04)	<100	<0.5
	(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	(08-20-05)	31,000	5,100
	(08-08-04)	29,000	3,100
	(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	(08-08-04)	NA	NA
	(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	(08-08-04)	NA	NA
	(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	(08-20-05)	130,000	27,000
	(08-08-04)	NA	NA
	(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	(08-22-05)	26,000	7,100
	(08-08-04)	14,000	6,300

	(04-24-04)	9,400	4,100
	(12-25-03)	26,000	5,300
	(09-22-03)	68,000	4,100
EW-15	(08-22-05)	670,000	11,000
	(08-08-04)	36,000	3,300
	(01-21-04)	72,000	8,400
EW-16	(08-20-05)	1,600	410
	(08-08-04)	2,500	590
	(01-21-04)	1,500	290
EW-17	(08-22-05)	42,000	13,000
	(08-08-04)	30,000	6,800
	(01-21-04)	18,000	2,600
BM	(08-20-05)	<100	<0.5
BH	(08-20-05)	<100	<0.5
BF	(08-20-05)	3,800	89
BL	(08-22-05)	<100	17
BG	(08-22-05)	100	59
BK	(08-22-05)	3,600	22
BJ	(08-22-05)	1,500	14

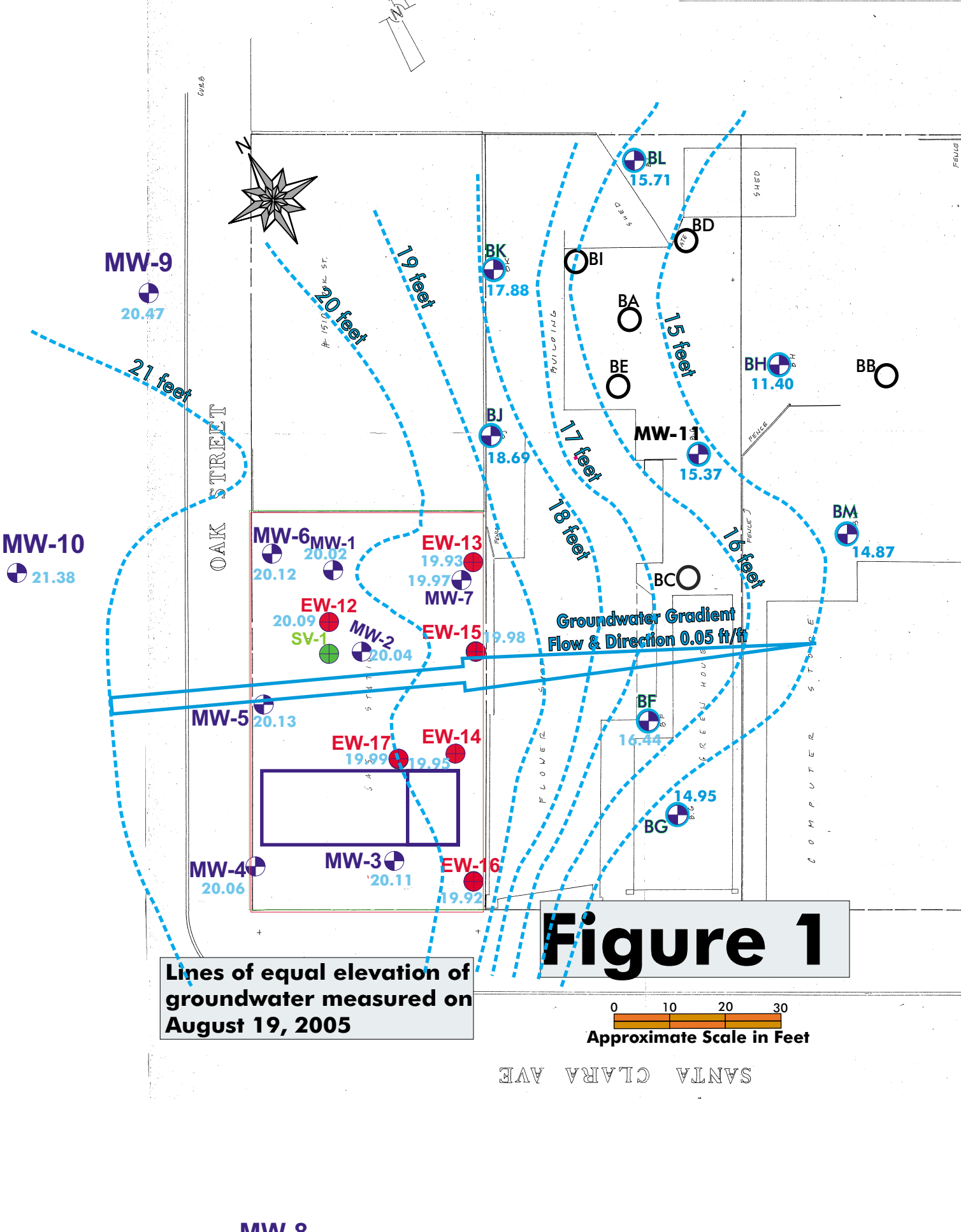
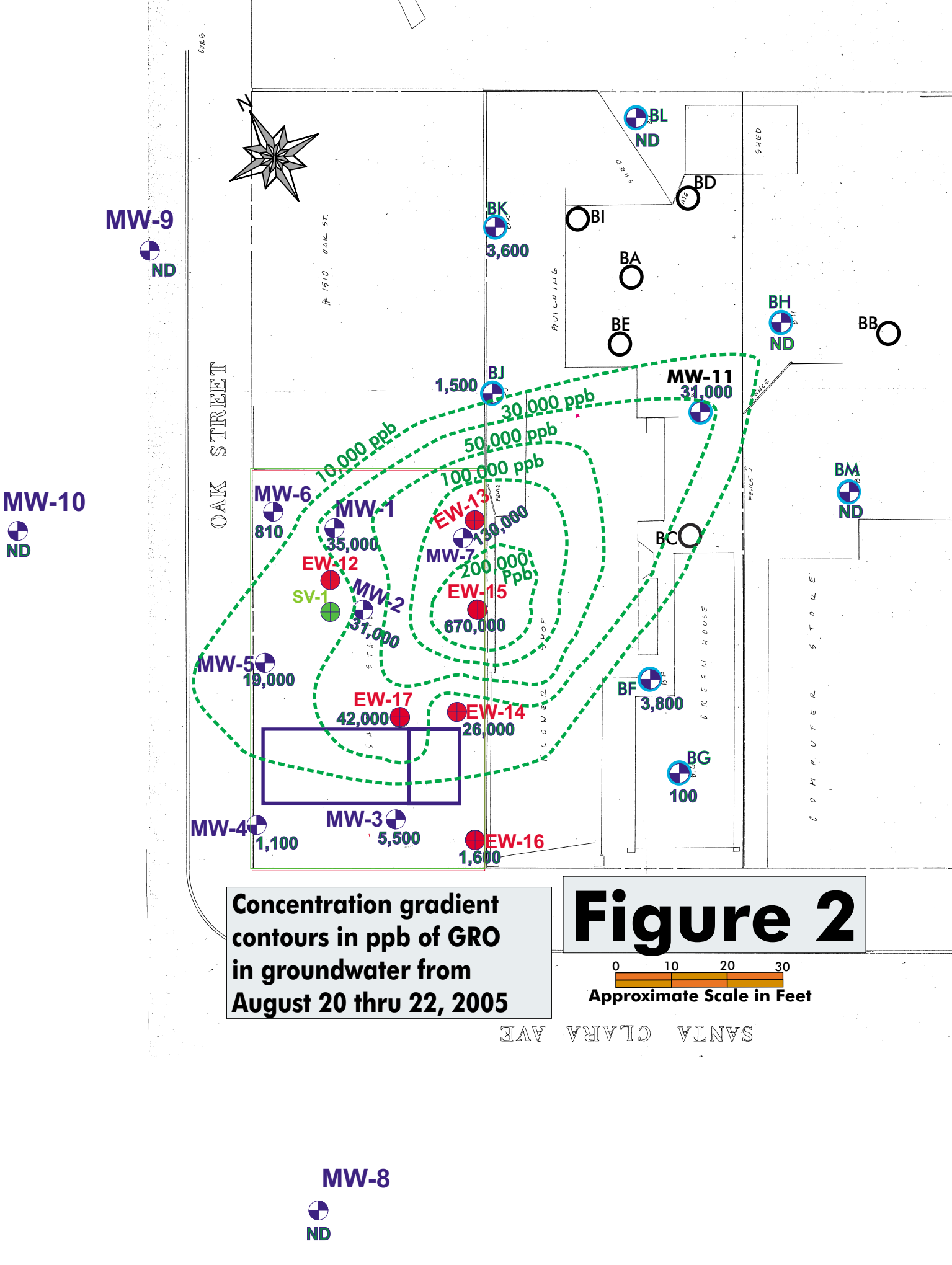
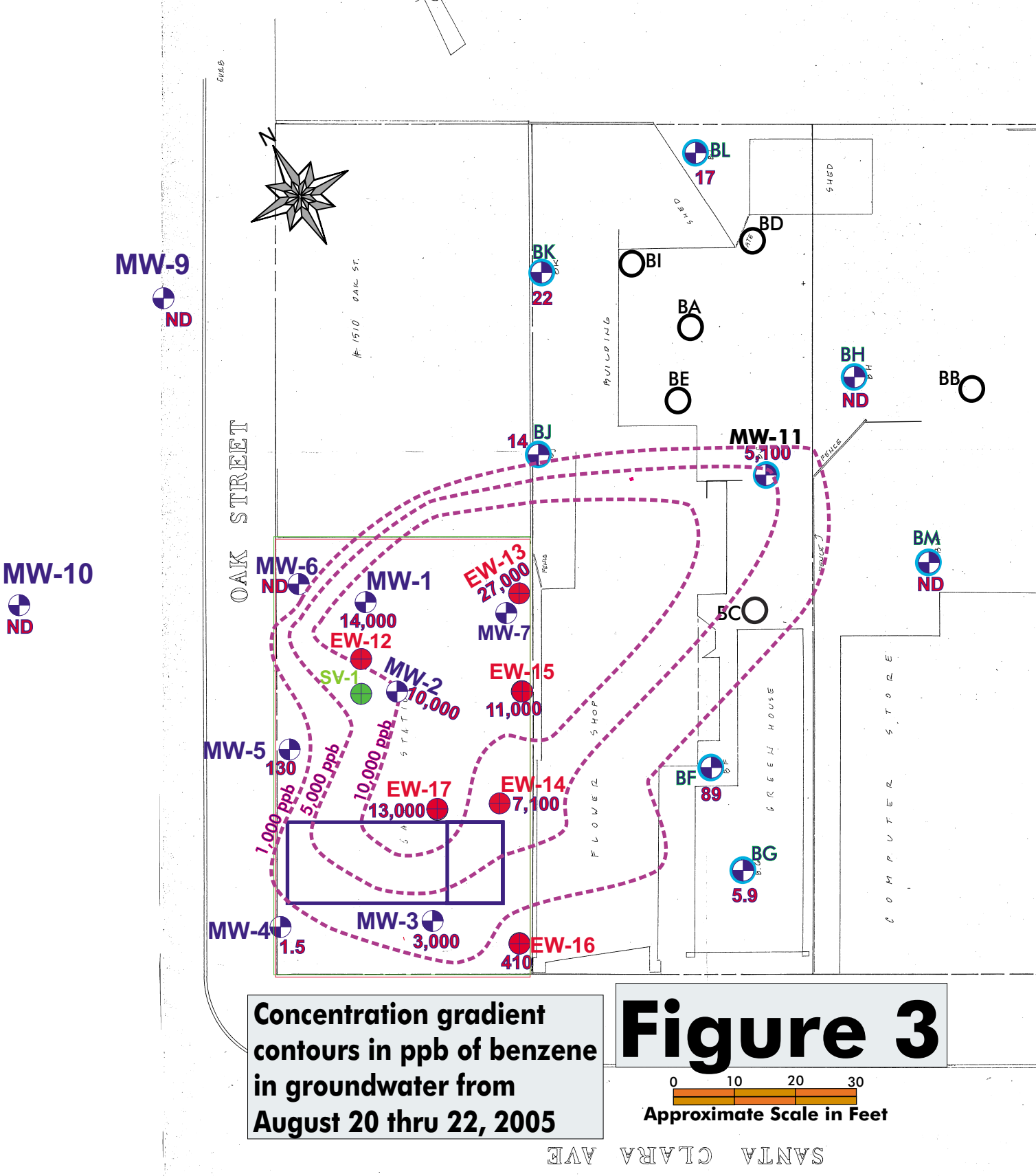

MW-9
20.47
MW-10
21.38
MW-8
20.01
OAK STREET
SANTA CLARA AVE
21 feet
20 feet
19 feet
17 feet
18 feet
16 feet
15 feet
MW-6
20.12
MW-1
20.02
EW-13
19.93
19.97
MW-7
EW-12
20.09
SV-1
MW-2
20.04
EW-15
19.98
MW-5
20.13
EW-17
19.99
EW-14
19.95
MW-4
20.06
MW-3
20.11
EW-16
19.92
BL
15.71
BD
BK
17.88
BI
BA
BE
BH
11.40
BB
BJ
18.69
MW-11
15.37
BM
14.87
BC
BF
16.44
14.95
BG
Groundwater Gradient
Flow & Direction 0.05 ft/ft
Lines of equal elevation of groundwater measured on August 19, 2005
0
10
20
30
Approximate Scale in Feet

Figure 1



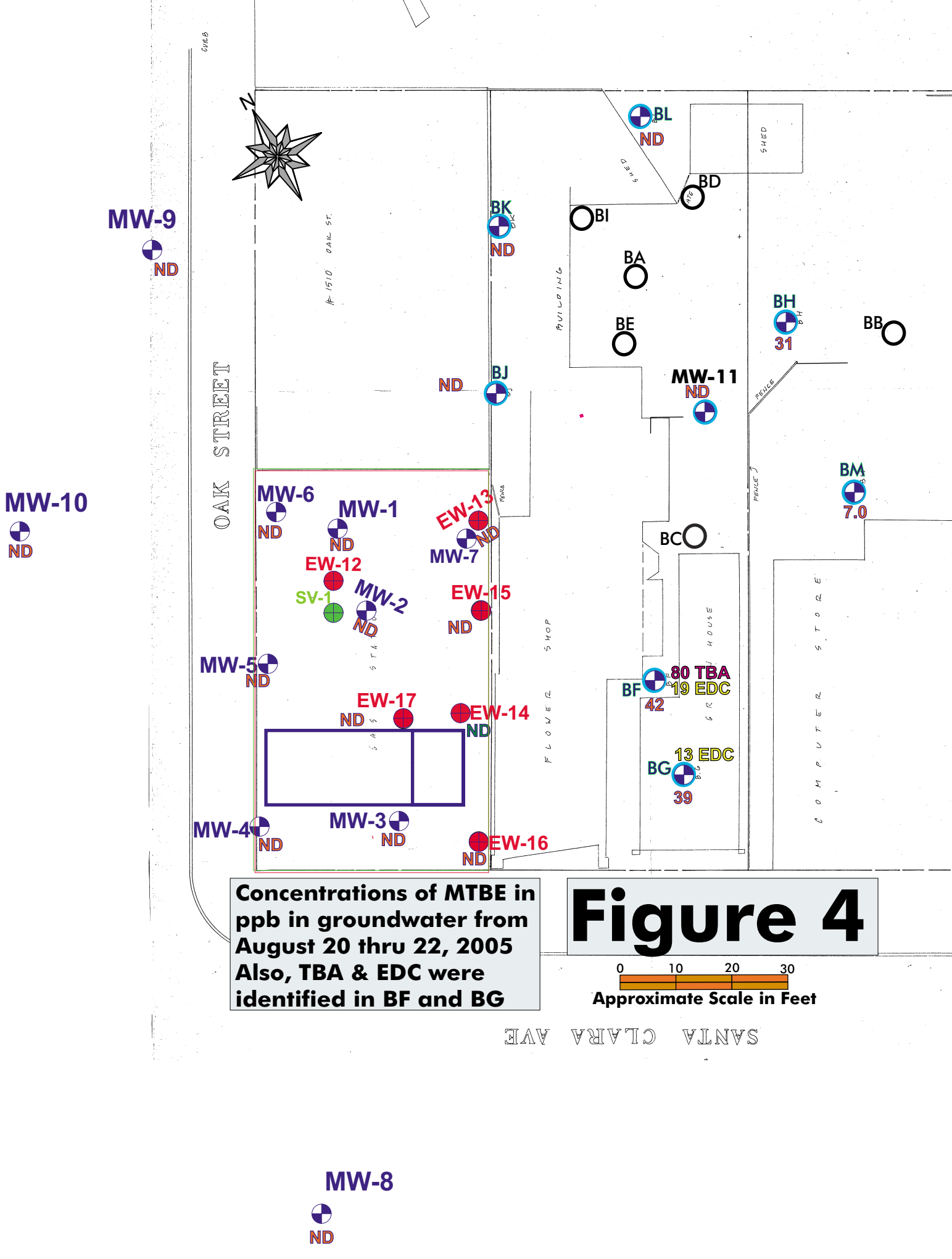
Concentration gradient contours in ppb of GRO in groundwater from August 20 thru 22, 2005

Figure 2



Concentration gradient contours in ppb of benzene in groundwater from August 20 thru 22, 2005

Figure 3



Concentrations of MTBE in ppb in groundwater from August 20 thru 22, 2005 Also, TBA & EDC were identified in BF and BG

Figure 4

Appendix A
Blaine Well Development Sheets

WELLHEAD INSPECTION CHECKLIST

Date 6/7/05 Client Frank Goldman

Site Address 2305 Santa Clara Ave, Alameda

Job Number 050607-MP1 Technician MP

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
BG	✓							
BF	✓							
BH	✓							
BJ	* ✓							
BK	* ✓							
BL	~~✓~~					No Lock		
BM	✓							

NOTES: * No Box just Casing

WELL GAUGING DATA

Project # 050607-M01 Date 6/7/05 Client Frank Gobaran

Site 2305 Santa Clara Ave, Alameda

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
BG	2					8.79	20.15		
BF	2					8.56	14.65		
BH	2					8.29	29.54		
BJ	2					9.62	14.44		
BK	2					10.31	14.12		
BL	2					8.19	24.53		
BM	2					8.15	29.55		

WELL DEVELOPMENT DATA SHEET

Project #: 050607-MW1	Client: Frank Goldman (2305 Santa Clara Ave
Developer: MW	Date Developed: 6/7/05
Well I.D. BM	Well Diameter: (circle one) (2) 3 4 6
Total Well Depth: Before 29.55 After 29.56	Depth to Water: Before 8.15 After 13.68
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 min. prior to purging	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	(2")	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

3.4	X	~~3~~ 10	=	34
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☐ Electric Submersible
- ☑ Positive Air Displacement

Type of Installed Pump
Other equipment used 2" Surge Block

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0802	63.9	6.3	805	71000	3.4	Placed pump on Bottom, Brown, turbid
0806	63.7	6.4	713	71000	6.8	Moved pump around on Bottom, turbid, Not silty
0811	63.5	6.4	684	71000	10.2	Hard Bottom, less turbid, Brown
0816	63.3	6.4	685	71000	13.6	light Brown, No odor
0820	63.2	6.5	678	71000	17.0	less turbid, tan
0825	63.2	6.5	672	71000	20.4	cloudy, tan, No odor
0830	63.0	6.5	657	850	23.8	Cloudy, less turbid
0836	62.7	6.7	660	996	27.2	" turbid
0841	63.2	6.8	650	427	30.6	cloudy, less turbid
0846	63.1	6.7	650	368	34.0	cloudy

Did Well Dewater? No | If yes, note above. | Gallons Actually Evacuated: 34.0

→ only ~500 ml of sediment was removed @ 3rd case vol. No sediment particles were being removed.

WELL DEVELOPMENT DATA SHEET

Project #: 050607-MW1	Client: Frank Goldman (2305 Scenic Cloverleaf, Alexandria)
Developer: MW	Date Developed: 6/7/05
Well I.D. BL	Well Diameter: (circle one) (2) 3 4 6
Total Well Depth: Before 24.85 After 24.55	Depth to Water: Before 8.19 After 15.31
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 Min Before Purging	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	(2")	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

2.6	X	10	=	26
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☑ Suction Pump
- ☐ Electric Submersible
- ☑ ~~Positive Air Displacement~~

Type of Installed Pump
Other equipment used 2" Surge Block, Masterflex & 30 ft of Tubing

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1025	65.7	7.8	517	7000	2.6	1.5 Masterflex on Bottom
1032	65.7	7.2	343	7000	5.2	Moved tubing around on Bottom, less Silt
1038	65.7	7.1	373	852	7.8	Hard Bottom, No Silt, Cloudy
1044	66.5	6.9	392	368	10.4	cloudy, lig Mt tan color
1048	65.9	6.8	393	~~393~~ 7000	13	Spd pump up
1053	66.2	6.8	448	209	15.6	tan, cloudy
1103	66.9	7.1	462	79	18.2	clear
1108	66.9	7.0	461	33	20.8	clear
1112	65.9	6.8	464	24	23.4	"
1117	65.7	6.7	474	21	26.0	clear

Did Well Dewater? No — If yes, note above. — Gallons Actually Evacuated: 26 gal

removed ~300ml of Silt Before Hard Bottom (Fine Sand)

Note- Many Wasp Nests Near well Be Careful!

WELL DEVELOPMENT DATA SHEET

Project #: 050607-MW1	Client: Frank Goldman (2305 Santa Clara Ave., Alameda)
Developer: MD	Date Developed: 6/7/05
Well I.D. BF	Well Diameter: (circle one) 2 3 4 6
Total Well Depth: Before 14.65 After 14.67	Depth to Water: Before 8.56 After 9.91
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged well for 15 min prior to purging	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

1 Case Volume	X	Specified Volumes	=	gallons
1		10		10gal

Purging Device:
- ☐ Bailer
- ☑ Suction Pump
- ☐ Electric Submersible
- ☐ Positive Air Displacement

Type of Installed Pump
Other equipment used 2" Surge Block, 25' tubing

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1253	65.0	6.9	737	>1000	1	very silty, coarse grain, Brown
1258	65.4	6.8	753	>1000	2	moved pump around on bottom,
1259	65.0	6.7	701	>1000	3	tan, less turbid, less silt, hard Bottom
1301	65.0	6.6	722	435	4	tan, less turbid, less silt
1303	64.7	6.6	736	472	5	tan, cloudy, slight odor
1306	64.8	6.5	727	187	6	cloudy, slight odor
1309	64.7	6.5	730	73	7	clear, odor
1311	64.6	6.4	734	23	8	clear, odor
1313	64.8	6.5	727	28	9	" "
1315	64.6	6.5	725	24	10	clear, odor
				Final	TDS = 488	

Did Well Dewater? No	If yes, note above.	Gallons Actually Evacuated:	10

→ Thick silt removed ~ 700ml of silt → hard bottom @ 3rd Case Vol.

WELL DEVELOPMENT DATA SHEET

Project #: 050607 - MW1	Client: Frank Goldman (2305 Santa Clara Ave, Alameda)
Developer: MD	Date Developed: 6/7/05
Well I.D. B11	Well Diameter: (circle one) (2) 3 4 6
Total Well Depth: Before 29.54 After 29.60	Depth to Water: Before 8.29 After 25.51
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for ~5min prior to purging	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	(2")	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

3.4	X	10	=	34
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☐ Suction Pump
- ☐ Electric Submersible
- ☑ Positive Air Displacement

Type of Installed Pump
Other equipment used 2" Surge Block

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0914	64.2	7.1	1152	>1000	3.4	cloudy, placed pump on Bottom, turbi
0919	65.0	7.1	980	>1000	6.8	cloudy, tan, moved pump around on Bottom
0926	65.3	6.9	1373	>1000	10.2	turbid, Brown, slowed pump Due to Drawdo
0940	64.4	7.3	1466	>1000	13.6	turbid, tan, cloudy
1143 return DTW=8.41	well dewatered @		→	17.0 gal		
1149	66.7	6.9	1364	>1000	17.0	turbid, tan, No silt
1155	67.2	6.9	1351	>1000	20.4	" " "
1202	67.6	7.3	1199	>1000	23.8	tan, turbid
	well dewatered @				25.5	(1403 return DTW=8.35)
1408	67.5	7.4	1198	>1000	27.2	cloudy, less turbid
1414	67.7	7.1	1241	>1000	30.6	less turbid
1421	67.6	7.0	1122	>1000	34.0	cloudy, tan, No odor
				Final TDS = 550ppm		
Did Well Dewater? Yes	If yes, note above.			Gallons Actually Evacuated:	34.0	

* ⇒ well drawdown & slowed pump - less silt & hard Bottom
about ~300 ml of small grained silt removed from well

WELL DEVELOPMENT DATA SHEET

Project #: 050607-M01	Client: Frank Goldman (235 Santa Clara Ave, Alameda)
Developer: MW	Date Developed: 6/8/05
Well I.D. BJ	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth:	Depth to Water:
Before 14.44 After 14.59	Before 9.62 After 13.87
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15min prior to purging	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	(2")	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

0.8	X	10	=	8
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☑ Suction Pump
- ☐ Electric Submersible
- ☐ Positive Air Displacement

Type of Installed Pump ___
Other equipment used 2" Surge Block, 20ft PE Tubing

TIME	TEMP (F)	pH	Cond. (mS or uS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0753	62.7	6.1	95.6 mS	>1000	0.8	cloudy, Fine silt, Brown, odor
0754	62.7	5.9	88.2	>1000	1.6	moved pump around on bottom, stirred purge
0758	62.3	6.0	80.1	>1000	2.4	Brown, turbid, odor, Hard bottom
	well dewatered @		→		2.4	DTW=14.12
0825	62.0	6.5	83.5	>1000	3.2	cloudy, less turbid, odor
0827	62.2	6.6	83.4	>1000	4.0	cloudy, odor, turbid
	well	dewatered @	→		4	DTW=14.28
0846	62.1	6.5	84.3	428	4.8	cloudy, less turbid, odor
0848	61.9	6.4	84.5	314	5.6	" " "
		well	dewatered @		5.6	DTW=14.21
0904	62.2	6.4	85.1	151	6.4	clear, odor very strong
0907	62.2	6.5	85.8	129	7.0	clear, odor very strong
	well dewatered @		→		7.0	DTW=14.25

Did Well Dewater? Yes If yes, note above. Gallons Actually Evacuated: 8.0

WELL DEVELOPMENT DATA SHEET

Well I.D. BJ	PAGE 2 OF 2
Project #: 050607-MD1	Client: 2305 Santa Clara Ave, Alameda

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0925	62.5	6.4	86	85	8	cloudy, odor is strong
				Post TDS = 55.5 ppm		

WELL DEVELOPMENT DATA SHEET

Project #: 050607--MW1	Client: Frank Coleman (2305 Santa Clara Ave. Alameda)
Developer: MW	Date Developed: 6/8/05
Well I.D. BK	Well Diameter: (circle one) (2) 3 4 6
Total Well Depth:	Depth to Water:
Before 14.12 After 14.13	Before 10.31 After 13.65
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 min prior to pumping	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	(2")	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

0.6	X	10	=	6
1 Case Volume		Specified Volumes		gallons

Purging Device:
- ☐ Bailer
- ☑ Suction Pump
- ☐ Electric Submersible
- ☐ Positive Air Displacement

Type of Installed Pump _____

Other equipment used 2" Surge Block, 20' Polytubing

TIME	TEMP (F)	pH	Cond. (mS or (uS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0815	62.5	6.3	145	>1000	0.6	cloudy, odor, sheen, silt
0817	62.5	6.3	141	>1000	1.2	odor, moved around bottom, sheen
		well dewatered @	→		1.5	DTW = 14.00
0833	62.1	6.6	107	>1000	1.8	cloudy, odor, silt, Brown, hard bottom
0836	61.8	6.6	105	>1000	2.4	cloudy, odor, No silt
		well dewatered @	→		2.4	DTW = 14.02
0855	62.3	6.5	~~96~~ 96	>1000	3.0	cloudy, tan, odor
0858	62.0	6.5	98	>1000	3.6	" " "
		well dewatered @			3.6	DTW = 14.00
0913	62.1	6.6	94	>1000	~~3.2~~ 4.2	cloudy, tan, strong odor
0917	62.5	6.6	91	>1000	4.8	cloudy tan, strong odor
		well dewatered @			4.8	DTW = 14.01
		See Pg 2				

Did Well Dewater? Yes | If yes, note above: | Gallons Actually Evacuated: 6.0

WELL DEVELOPMENT DATA SHEET

Well I.D. BK	PAGE 2 OF 2
Project #: 050607-MM	Client: 2305 Santa Clara Ave., Alameda

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0939	62.6	6.6	90	>1000	5.4	cloudy, odor, tan
0945	62.2	6.5	91	>1000	6.0	cloudy, odor, tan
				Post TDS = 59.1 ppm		

WELL DEVELOPMENT DATA SHEET

Project #: 050607-MW01	Client: Frank Coleman (7705 Santa Clara Ave, Alameda)
Developer: MW	Date Developed: 6/7/05
Well I.D. BG	Well Diameter: (circle one) (2) 3 4 6 __
Total Well Depth: Before 20.14 After 20.21	Depth to Water: Before 8.79 After 17.12
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged for 15 min prior to purging	

Volume Conversion Factor (VCF): {12 x (d^2/4) x π} /231
where
12 = in / foot
d = diameter (in.)
π = 3.1416
231 = in 3/gal

Well dia.		VCF
(2")	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	6.87

1 Case Volume	X	Specified Volumes	=	gallons
1.8		10		18

Purging Device:
- ☐ Bailer
- ☑ Suction Pump
- ☐ Electric Submersible
- ☐ Positive Air Displacement

Type of Installed Pump
Other equipment used 2" Surge Block, 25' PE tubing

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1347	65.6	7.1	701	71000	1.8	Pump on Bottom, silty, Fine particles
1353	65.1	7.0	1165	>1000	3.6	Moved pump around, turbid, No silt
	well dewatered @				3.8	DTW = 19.41 Left site
6/8/05	return to well re-surged for 10 min Before purging					
1018	63.6	6.6	1209	>1000	5.4	Hard Bottom, turbid, Brown, odor
1023	64.6	6.8	1259	>1000	7.2	turbid, Brown
	well dewatered @				8.0	DTW = 19.87
1046	64.2	6.8	1234	262	9.0	cloudy, less turbid, slowed pump
1056	64.5	6.8	1292	85	10.8	clear, ↓ water level 16.45
1104	64.8	6.7	1296	35	12.6	clear
1117	64.7	6.8	1314	42	14.4	"
1125	65.0	6.8	1310	53	16.2	"
1136	65.2	6.8	1324	96	18.0	clear, odor
Did Well Dewater? Yes		If yes, note above.		Gallons Actually Evacuated:		18.0

post TDS = 910 ppm

SPH or Purge Water Drum Log

Client: Frank Goldman

Site Address: 2305 Santa Clara Ave, Alameda

STATUS OF DRUM(S) UPON ARRIVAL						
Date	6/7/05					
Number of drum(s) empty:	~~2~~					
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:	16					
Total drum(s) on site:	16					
Are the drum(s) properly labeled?	Y					
Drum ID & Contents:	H2O, Soil					
If any drum(s) are partially or totally filled, what is the first use date:	?					

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.

-If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.

-All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE						
Date	6/8/05					
Number of drums empty:						
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:	1					
Number of drum(s) 3/4 full:						
Number of drum(s) full:	18					
Total drum(s) on site:	19					
Are the drum(s) properly labeled?	Y					
Drum ID & Contents:	H2O, Soil					

LOCATION OF DRUM(S)	
Describe location of drum(s):	By kiosk

FINAL STATUS						
Number of new drum(s) left on site this event	3					
Date of inspection:	6/8/05					
Drum(s) labelled properly:	Y					
Logged by BTS Field Tech:	MW					
Office reviewed by:	MW					

Appendix B
Sampling Event Logs

Sampling Event Logs - Chun - August 20 -22, 2005

BM	DTW 10.30'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		3.0	63.5	667	6.6	6:05 am	
		3.0	62.9	656	6.6	6:35	
		3.0	64.9	687	6.8	7:10 am	

BH	DTW 13.78'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		2.5	70.5	998	7.1	7:20 am	
		2.5	69.8	1023	7.0	7:50	
		2.5	69.1	1001	7.1	8:20 am	

BF	DTW 9.22'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		1.5	65.9	733	6.8	8:40 am	
		1.5	65.9	745	6.9	8:55	
		1.5	65.1	755	7.0	9:30 am	

MW-11	DTW 9.80'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		1.5	70.1	983	7.0	9:55 am	
		1.5	69.4	981	7.0	10:20	
		2.0	69.8	978	7.0	10:45 am	

EW-16	DTW 9.10'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		5.5	70.0	978	7.0	11:10 am	
		4.5	69.9	988	7.0	11:35	
		4.0	71.5	981	7.1	11:55 am	

MW-3	DTW 8.67'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		1.5	70.9	1026	7.0	12:20 am	
		1.5	71.8	1065	7.0	12:40	
		2.0	71.3	1069	7.0	1:00 pm	

MW-4	DTW 8.47'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		1.5	70.1	976	7.0	1:25 pm	
		1.5	69.6	977	7.0	1:45	
		2.0	69.9	971	7.0	2:05 pm	

MW-5	DTW 8.20'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		2.0	70.4	1001	7.1	2:20 pm	
		1.5	71.9	1005	7.0	2:40 pm	
		1.5	69.9	1009	7.1	2:55 pm	

MW-6	DTW 8.24'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		1.5	70.9	988	7.2	3:20 pm	
		1.5	71.9	1005	7.0	3:40	
		2.0	71.9	1008	7.1	4:00 pm	

MW-1	DTW 8.47'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		2.0	71.0	970	6.9	4:15 pm	
		1.5	71.5	978	7.0	4:35	
		1.5	71.9	988	7.0	4:50 pm	

MW-2	DTW 8.43'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-20-05
		1.5	71.0	988	6.9	5:20 pm	
		1.5	71.9	1001	7.0	5:45	
		2.0	71.6	1008	7.0	6:10 pm	

EW-13	DTW 8.71'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		5.5	70.5	1181	7.0	6:20 am	
		4.5	70.9	1175	7.2	6:50	
		5.0	71.3	1179	7.1	7:15 am	

EW-15	DTW 8.73'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		5.5	70.6	998	7.0	8:05 am	
		4.5	71.9	976	7.0	8:25	
		3.5	69.9	979	7.0	8:45 am	

EW-14	DTW 9.26'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		4.5	70.3	1155	7.0	9:10 am	
		3.5	69.4	1162	7.0	9:40	
		5.5	69.2	1159	7.0	10:10 am	

BL	DTW 9.66'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		2.5	70.0	1155	7.0	10:30 am	
		2.5	71.1	1165	7.0	10:45	
		2.5	71.2	1169	7.0	11:00 am	

BG	DTW 10.90'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		1.5	69.6	988	7.0	11:20 am	
		1.5	69.9	979	7.0	11:40	
		2.5	69.9	969	7.0	11:50 am	

BK	DTW 7.14'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		1.5	70.0	979	7.0	12:10 am	
		2.0	70.8	987	7.0	12:20	
		1.5	69.7	1002	7.0	12:30 pm	

BJ	DTW 6.34'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		1.5	69.0	956	7.0	12:40 pm	
		1.5	68.9	961	7.0	12:50	
		1.5	68.9	952	7.1	1:10 pm	

MW-8	DTW 8.16'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		2.0	71.0	1101	7.1	1:25 pm	
		1.5	71.9	1121	7.1	1:45	
		1.5	71.9	1119	7.0	2:00 pm	

MW-10	DTW 5.94'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		2.5	71.0	1111	7.1	2:30 pm	
		2.0	71.9	1141	7.0	2:40	
		2.0	69.8	1132	7.1	2:50 pm	

MW-9	DTW 6.98'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		2.5	70.6	1101	7.1	3:10 pm	
		2.0	68.9	1105	7.0	3:25	
		1.5	69.9	1119	6.9	3:40 pm	

EW-17	DTW 8.96'	Gallons purged	TEMP C/F (Circle One)	EC (us/cm)	PH	TIME	08-22-05
		5.0	68.0	989	7.1	4:10 pm	
		5.5	68.9	1101	7.1	4:35	
		3.5	69.9	1105	6.9	5:20 pm	

Appendix C
Laboratory Data Sheets

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Chun
Project No.: N/A
Project Name: Chun
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A57211
Date Received: 08/26/05
Date Reported: 09/12/05
Units: ug/L

Date Sampled:	**08/20/05**	**08/20/05**	**08/20/05**	**08/20/05**	
Date Analyzed:	**08/30/05**	**08/30/05**	**08/30/05**	**08/30/05**	
AA ID No.:	**191974**	**191975**	**191976**	**191977**	
Client ID No.:	**BM**	**BH**	**BF**	**MW-11**	
Dilution Factor:	**1.0**	**1.0**	**1.0**	**10.0**	**MRL**
Compounds:					
Benzene	<0.5	<0.5	**89**	**5100**	0.5
Di-isopropyl Ether	<2	<2	<2	<20	2
1,2-Dibromoethane (EDB)	<0.5	<0.5	<0.5	<5	0.5
1,2-Dichloroethane (EDC)	<0.5	<0.5	**19**	<5	0.5
Ethyl tert-Butyl Ether	<2	<2	<2	<20	2
Ethylbenzene	<0.5	<0.5	**150**	**3400**	0.5
Gasoline Range Organics	<100	<100	**3800**	**31000**	100
Methyl tert-Butyl Ether	**7.0**	**31**	**42**	<20	2
Tert-Amyl Methyl Ether	<2	<2	<2	<20	2
Tert-Butanol	<10	<10	**80**	<100	10
Toluene	<0.5	<0.5	**4.7**	**1500**	0.5
m,p-Xylenes	<1	<1	<1	**16000**	1
o-Xylene	<0.5	<0.5	**3.4**	**1800**	0.5

Viorel Vasile
Project Manager

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Chun
Project No.: N/A
Project Name: Chun
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A57211
Date Received: 08/26/05
Date Reported: 09/12/05
Units: ug/L

Date Sampled:	**08/20/05**	**08/20/05**	**08/20/05**	**08/20/05**	
Date Analyzed:	**08/30/05**	**08/30/05**	**08/30/05**	**08/30/05**	
AA ID No.:	**191978**	**191979**	**191980**	**191981**	
Client ID No.:	**EW-16**	**MW-3**	**MW-4**	**MW-5**	
Dilution Factor:	**5.0**	**10.0**	**1.0**	**10.0**	**MRL**
Compounds:					
Benzene	**410**	**3000**	**1.5**	**130**	0.5
Di-isopropyl Ether	<10	<20	<2	<20	2
1,2-Dibromoethane (EDB)	<2.5	<5	<0.5	<5	0.5
1,2-Dichloroethane (EDC)	<2.5	<5	<0.5	<5	0.5
Ethyl tert-Butyl Ether	<10	<20	<2	<20	2
Ethylbenzene	<2.5	**140**	<0.5	**1000**	0.5
Gasoline Range Organics	**1600**	**5500**	**1100**	**19000**	100
Methyl tert-Butyl Ether	<10	<20	<2	<20	2
Tert-Amyl Methyl Ether	<10	<20	<2	<20	2
Tert-Butanol	<50	<100	<10	<100	10
Toluene	<2.5	**27**	<0.5	**750**	0.5
m,p-Xylenes	<5	**350**	**63**	**3300**	1
o-Xylene	<2.5	**390**	<0.5	**1100**	0.5

Viorel Vasile
Project Manager

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57211
Project No.:	N/A	**Date Received:**	08/26/05
Project Name:	Chun	**Date Reported:**	09/12/05
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**08/20/05**	**08/20/05**	**08/20/05**	**08/22/05**	
Date Analyzed:	**08/30/05**	**08/30/05**	**08/30/05**	**08/30/05**	
AA ID No.:	**191982**	**191983**	**191984**	**191985**	
Client ID No.:	**MW-6**	**MW-1**	**MW-2**	**EW-13**	
Dilution Factor:	**1.0**	**50.0**	**20.0**	**500.0**	**MRL**
Compounds:					
Benzene	<0.5	**14000**	**10000**	**27000**	0.5
Di-isopropyl Ether	<2	<100	<40	<1000	2
1,2-Dibromoethane (EDB)	<0.5	<25	<10	<250	0.5
1,2-Dichloroethane (EDC)	<0.5	<25	<10	<250	0.5
Ethyl tert-Butyl Ether	<2	<100	<40	<1000	2
Ethylbenzene	<0.5	**1600**	**1400**	**4200**	0.5
Gasoline Range Organics	**810**	**35000**	**31000**	**130000**	100
Methyl tert-Butyl Ether	<2	<100	<40	<1000	2
Tert-Amyl Methyl Ether	<2	<100	<40	<1000	2
Tert-Butanol	<10	<500	<200	<5000	10
Toluene	<0.5	**6500**	**5100**	**5500**	0.5
m,p-Xylenes	**180**	**3800**	**5700**	**15000**	1
o-Xylene	<0.5	**1200**	**1400**	**6700**	0.5

Viorel Vasile
Project Manager

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Chun
Project No.: N/A
Project Name: Chun
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A57211
Date Received: 08/26/05
Date Reported: 09/12/05
Units: ug/L

Date Sampled:	**08/22/05**	**08/22/05**	**08/22/05**	**08/22/05**	
Date Analyzed:	**08/30/05**	**08/30/05**	**08/31/05**	**08/31/05**	
AA ID No.:	**191986**	**191987**	**191988**	**191989**	
Client ID No.:	**EW-15**	**EW-14**	**BL**	**BG**	
Dilution Factor:	**100.0**	**20.0**	**1.0**	**1.0**	**MRL**
Compounds:					
Benzene	**11000**	**7100**	**17**	**5.9**	0.5
Di-isopropyl Ether	<200	<40	<2	<2	2
1,2-Dibromoethane (EDB)	<50	<10	<0.5	<0.5	0.5
1,2-Dichloroethane (EDC)	<50	<10	<0.5	**13**	0.5
Ethyl tert-Butyl Ether	<200	<40	<2	<2	2
Ethylbenzene	**2900**	**1200**	<0.5	<0.5	0.5
Gasoline Range Organics	**670000**	**26000**	<100	**100**	100
Methyl tert-Butyl Ether	<200	<40	<2	**39**	2
Tert-Amyl Methyl Ether	<200	<40	<2	<2	2
Tert-Butanol	<1000	<200	<10	<10	10
Toluene	**14000**	**7500**	<0.5	<0.5	0.5
m,p-Xylenes	**11000**	**3700**	<1	<1	1
o-Xylene	**4100**	**1700**	<0.5	<0.5	0.5

Viorel Vasile
Project Manager

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Chun
Project No.: N/A
Project Name: Chun
Sample Matrix: Water
Method: EPA 8260B

AA Project No.: A57211
Date Received: 08/26/05
Date Reported: 09/12/05
Units: ug/L

Date Sampled:	**08/22/05**	**08/22/05**	**08/22/05**	**08/22/05**	
Date Analyzed:	**08/31/05**	**08/31/05**	**08/31/05**	**08/31/05**	
AA ID No.:	**191990**	**191991**	**191992**	**191993**	
Client ID No.:	**BK**	**BJ**	**MW-8**	**MW-10**	
Dilution Factor:	**10.0**	**1.0**	**1.0**	**1.0**	**MRL**
Compounds:					
Benzene	**22**	**14**	<0.5	<0.5	0.5
Di-isopropyl Ether	<20	<2	<2	<2	2
1,2-Dibromoethane (EDB)	<5	<0.5	<0.5	<0.5	0.5
1,2-Dichloroethane (EDC)	<5	<0.5	<0.5	<0.5	0.5
Ethyl tert-Butyl Ether	<20	<2	<2	<2	2
Ethylbenzene	**64**	**38**	<0.5	<0.5	0.5
Gasoline Range Organics	**3600**	**1500**	<100	<100	100
Methyl tert-Butyl Ether	<20	<2	<2	<2	2
Tert-Amyl Methyl Ether	<20	<2	<2	<2	2
Tert-Butanol	<100	<10	<10	<10	10
Toluene	**61**	**100**	<0.5	<0.5	0.5
m,p-Xylenes	**330**	**170**	<1	<1	1
o-Xylene	<5	**54**	<0.5	<0.5	0.5

Viorel Vasile
Project Manager

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client:	Chun	**AA Project No.:**	A57211
Project No.:	N/A	**Date Received:**	08/26/05
Project Name:	Chun	**Date Reported:**	09/12/05
Sample Matrix:	Water	**Units:**	ug/L
Method:	EPA 8260B		

Date Sampled:	**08/22/05**	**08/22/05**	
Date Analyzed:	**08/30/05**	**08/30/05**	
AA ID No.:	**191994**	**191995**	
Client ID No.:	**MW-9**	**EW-17**	
Dilution Factor:	**1.0**	**100.0**	**MRL**
Compounds:			
Benzene	<0.5	**13000**	0.5
Di-isopropyl Ether	<2	<200	2
1,2-Dibromoethane (EDB)	<0.5	<50	0.5
1,2-Dichloroethane (EDC)	<0.5	<50	0.5
Ethyl tert-Butyl Ether	<2	<200	2
Ethylbenzene	<0.5	**1700**	0.5
Gasoline Range Organics	<100	**42000**	100
Methyl tert-Butyl Ether	<2	<200	2
Tert-Amyl Methyl Ether	<2	<200	2
Tert-Butanol	<10	<1000	10
Toluene	<0.5	**9300**	0.5
m,p-Xylenes	<1	**5600**	1
o-Xylene	<0.5	**2500**	0.5

MRL: Method Reporting Limit J: Estimated Value

Viorel Vasile
Project Manager

LABORATORY QA/QC REPORT

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

Project No.: N/A
AA Project No.: A57211
Date Analyzed: 08/30/05
Date Reported: 09/12/05

Compounds	Result 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
Gasoline Range Organics	<100	100
Methyl tert-Butyl Ether	<2	2
Tert-Amyl Methyl Ether	<2	2
Tert-Butanol	<10	10
Toluene	<0.5	0.5
m,p-Xylenes	<1	1
o-Xylene	<0.5	0.5

MRL: Method Reporting Limit

Viorel Vasile
Project Manager

LABORATORY QA/QC REPORT

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

Project No.: N/A
AA Project No.: A57211
Date Analyzed: 08/31/05
Date Reported: 09/12/05

Compounds	Result 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
Gasoline Range Organics	<100	100
Methyl tert-Butyl Ether	<2	2
Tert-Amyl Methyl Ether	<2	2
Tert-Butanol	<10	10
Toluene	<0.5	0.5
m,p-Xylenes	<1	1
o-Xylene	<0.5	0.5

MRL: Method Reporting Limit

Viorel Vasile
Project Manager

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. A57211
Date Analyzed: 08/30/05
Date Reported: 09/12/05

Compounds	Recovered Amount (ug/L)	Recovery (%)	Acceptable Range (%)
Benzene	24.9	125	75 - 125
Ethylbenzene	20.9	105	75 - 125
Gasoline Range Organics	21.5	108	75 - 125
Methyl tert-Butyl Ether	22.5	113	75 - 125
Toluene	21.1	106	75 - 125
o-Xylene	19.6	98	75 - 125

Viorel Vasile
Project Manager

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. A57211
Date Analyzed: 08/31/05
Date Reported: 09/12/05

Compounds	Recovered Amount (ug/L)	Recovery (%)	Acceptable Range (%)
Benzene	24.4	122	75 - 125
Ethylbenzene	20.7	104	75 - 125
Gasoline Range Organics	23.2	116	75 - 125
Methyl tert-Butyl Ether	24.5	123	75 - 125
Toluene	21.0	105	75 - 125
o-Xylene	19.8	99	75 - 125

Viorel Vasile
Project Manager

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: 191974
Project No.: N/A
AA Project No. A57211
Date Analyzed: 08/30/05
Date Reported: 09/12/05

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept. Rec. Range (%)
Benzene	25.7	129	26.7	134	4	50 - 150
Ethylbenzene	18.7	94	21.9	110	16	50 - 150
Methyl tert-Butyl Ether	12.4	62	11.5	58	7	50 - 150
Toluene	20.1	101	22.3	112	10	50 - 150
o-Xylene	19.1	96	21.0	105	9	50 - 150

Viorel Vasile
Project Manager

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: 191988
Project No.: N/A
AA Project No. A57211
Date Analyzed: 08/31/05
Date Reported: 09/12/05

Compounds	Result (ug/L)	Spike Recovery (%)	Dup. Result (ug/L)	Spike/Dup. Recovery (%)	RPD (%)	Accept. Rec. Range (%)
Benzene	22.7	114	25.7	129	12	50 - 150
Ethylbenzene	20.8	104	20.6	103	1	50 - 150
Methyl tert-Butyl Ether	26.2	131	30.4	152	15	50 - 150
Toluene	20.7	104	20.9	105	1	50 - 150
o-Xylene	20.1	101	19.6	98	3	50 - 150

Viorel Vasile
Project Manager

Franklin J. Goldman
PO BOX 59, Sonoma, CA 95476
Phone: (707) 235-9979
franklingoldman1@yahoo.com

CHAIN OF CUSTODY RECORD

Laboratory Analysis P.O. No. A57211

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

Date: 08-25-05 Sheet 1 Of 3

Project Name: Chun
Project Number:
Address: 2301 Santa Clara Ave, Alameda, CA
Sampler's Name: Frank Goldman
Sampler's Signature:

Sample Number	Location	Date	Time
BM	191974	8/20/05	7[10] AM
BH	191975		8[20] AM
BF	191976		9[30] AM
MW-11	191977		10[45] AM
EW-16	191978		11[55] AM
MW-3	191979		1[00] PM
MW-4	191980		2[05] PM
MW-5	191981		2[55] PM
MW-6	191982		4[00] PM
MW-1	191983		4[50] PM

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	and TPHg & BTEX	Bulk density, moisture, porosity fraction of organic carbon	SOIL SAMPLE	WATER SAMPLE
										X				X

Laboratory Delivery Location
American Analytics, Inc.
9765 Eton Ave
Chatsworth, CA
Phone: (818) 998-5547

Phone

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

Repeat to: Frank

Comments
3 VOAs
Prepare for Geotracker

'05 AUG 26 AM 10:5

Relinquished By	Date	Time
Franklin J. Goldman	8/25/05	2[55] PM
FedEx		
Dispatched By	Date	Time

Received By	Date	Time
F. Goldman for FedX	8/25/05	3[05] PM
Michelle Clark	8/26/5	10:52 AM
Received in Lab By	Date	Time

Total Number of Containers this Sheet:
Method of Shipment:
Special Shipment/Handling or Storage Requirements:

Keep on Ice

Allen Amirian 8/29/05 AA

Franklin J. Goldman
PO BOX 59, Sonoma, CA 95476
Phone: (707) 235-9979
franklingoldman1@yahoo.com

CHAIN OF CUSTODY RECORD

Laboratory Analysis P.O. No._____

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

Date: 08/25/05 Sheet 2 Of 3

Project Name: Chun
Project Number:
Address: 2301 Santa Clara Ave, Alameda, CA
Sampler's Name: Frank Goldman
Sampler's Signature:

Sample Number	Location	Date	Time
MW-2	191984	8/29/05	6:10 PM
EW-13	191985	8/29/05	7:15 AM
EW-15	191986		8:45 AM
EW-14	191987		10:10 AM
BL	191988		11:00 AM
BG	191989		11:50 AM
BK	191990		12:30 PM
BJ	191991		1:10 PM
MW-8	191992		2:00 PM
MW-10	191993	↓	2:50 PM

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 and TPHg & BTEX	Bulk density, moisture, porosity fraction of organic carbon	SOIL SAMPLE	WATER SAMPLE
										X			X

Laboratory Delivery Location
American Analytics, Inc.
9765 Eton Ave
Chatsworth, CA
Phone: (818) 998-5547

Phone

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

Repeat to: Frank

Comments
3 VOAS
Prepare for Geotracker

'05 AUG 26 AM10:52

Relinquished By	Date	Time
Frank Goldman	8/25/05	2:55 PM
Fed Ex		
Dispatched By	Date	Time

Received By	Date	Time
F. Goldman for Fed X	8/25/05	3:05 PM
Lucia G. Glen	8/26/5	10:52 AM
Received in Lab By	Date	Time

Total Number of Containers this Sheet:

Method of Shipment:

Special Shipment/Handling or Storage Requirements:

Keep on Ice

Also Analyze 8/29/05 AA

Franklin J. Goldman
PO BOX 59, Sonoma, CA 95476
Phone: (707) 235-9979
franklingoldman1@yahoo.com

CHAIN OF CUSTODY RECORD

Laboratory Analysis P.O. No._____

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

Date: 08-25-05 Sheet 3 of 3

Project Name Chun

Project Number

Address 2301 Santa Clara Ave
Alameda, CA

Sampler's Name:
Frank Goldman

Sampler's Signature:

Sample Number	Location	Date	Time	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 & TPHg & BTEX	Bulk density, moisture, porosity fraction of organic carbon	SOIL SAMPLE	WATER SAMPLE	Comments
MW-9	191994	8/22/05	340 PM											X			X	3 VOAs
EW-17	191995	8/22/05	520 PM											↓			X	Prepare for Geotracker

Laboratory Delivery Location
American Analytics, Inc.
9765 Eton Ave
Chatsworth, CA
Phone: (818) 998-5547

Phone

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

Repeat to: Frank

Relinquished By	Date	Time	Received By	Date	Time
Frank Goldman	8/25/05	255 pm	F Goldman for FedX	8/25/05	345 pm
FED EX			Lucia Glaz	8/26/5	10:52 AM
Dispatched By	Date	Time	Received in Lab By	Date	Time

Total Number of Containers this Sheet:

'05 AUG 26 AM10:52

Method of Shipment:

Special Shipment/Handling or Storage Requirements:

Keep on Ice

Alla Amirian 8/29/05 AA