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Alameda County  
Environmental Health

October 29, 2012

Ms. Donna Drogos  
Alameda County Environmental Health  
1131 Harbor Parkway, Suite 250  
Oakland, CA 94502-6577

Subject: First Quarter 2006 Monitoring Report  
Stop N Save Inc.  
20570 Stanton Avenue, Castro Valley, Alameda County, California  
RO #0000179  
ECG # SNS.18281

Dear Ms. Drogos:

Enclosed please find a copy of the April 7, 2006, First Quarter 2006 Monitoring Report for the above referenced site prepared by our consultant Enviro Soil Tech Consultants.

I declare, under penalty and perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Respectfully,



Sean Kapoor

**FIRST QUARTER OF 2006 GROUNDWATER  
MONITORING AND SAMPLING  
AT THE PROPERTY  
LOCATED AT 20570 STANTON AVENUE  
CASTRO VALLEY, CALIFORNIA  
APRIL 7, 2006**

**PREPARED FOR:  
MR. SEAN KAPOOR  
25064 VIKING STREET  
HAYWARD, CALIFORNIA 94545**

**BY:  
ENVIRO SOIL TECH CONSULTANTS  
131 TULLY ROAD  
SAN JOSE, CALIFORNIA 95111**

**ENVIRO SOIL TECH CONSULTANTS**

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**APPENDIX "E"**

Entech Analytical Labs Report and Chain-of-Custody Record

April 7, 2006

File No. 2-00-706-ST

**Mr. Sean Kapoor**  
Stop 'N Save, Inc.  
25064 Viking Street  
Hayward, California 94545

**SUBJECT: FIRST QUARTER OF 2006 GROUNDWATER  
MONITORING & SAMPLING AT THE PROPERTY**  
Located at 20570 Stanton Avenue, in  
Castro Valley, California

Dear Mr. Kapoor:

This report presents the first quarter of 2006 groundwater monitoring and sampling results that were conducted by Enviro Soil Tech Consultants (ESTC), on March 16, 2006, at the subject site (Figure 1).

Three monitoring wells (STMW-1, STMW-2 and STMW-3) are located on-site. The locations of the wells are shown on Figure 2. This quarterly monitoring and sampling was conducted in accordance with ESTC's recommendations made in "Preliminary Soil and Groundwater Assessment at the Property...", dated October 13, 2000.

File No. 2-00-706-ST

It is the responsibility of the owner and/or his/her representative agent to make sure a copy of this report is sent to Alameda County Health Care Services Agency (ACHCSA) and California Regional Water Quality Control Board-San Francisco Bay Region (CRWQCB-SFBR) for their comments and recommendations.

If you have any questions or require additional information, please feel free to contact our office at (408) 297-1500.

Sincerely,

**ENVIRO SOIL TECH CONSULTANTS**

  
FRANK HAMEDI-FARD  
GENERAL MANAGER

  
LAWRENCE KOO  
C. E. #34928



**ENVIRO SOIL TECH CONSULTANTS** 2



**PURPOSE:**

The purpose of this investigation was to determine the direction of groundwater flow and the extent of subsurface hydrocarbon contamination at the subject site.

The groundwater monitoring and sampling was conducted in accordance with ESTC's Standard Operation Procedure (SOP) and Alameda County Health Care Services Agency (ACHCSA) guidelines.

**SITE DESCRIPTION:**

The site is located at the southeast corner of San Carlos Avenue and Stanton Avenue, in Castro Valley, California (Figure 1). The site is currently used as a quick stop mini mart. The site is relatively flat, and the surrounding properties are primarily residential and light commercial businesses.

**BACKGROUND:**

On February 24, 2000, two 10,000gallon underground storage gasoline tanks were removed by Johnson Tank Testing and Maintenance.

During tanks removal activities, ESTC was retained by Mr. Randy Johnson of Johnson Tank Testing and Maintenance to conduct soil sampling from the tanks excavations. In addition, at the request of Mr. Robert Weston of ACHCSA-EHS, soil sampling was also conducted on the stockpiled soil and between the two removed underground storage tank areas. All soil sampling activities were conducted under the supervision of Mr. Robert Weston of ACHCSA-EHS.

The soil samples from the tanks and from between the tanks area were collected at approximately 2 feet below the excavation areas.

The four soil samples from the two 10,000 gallon UST excavations areas detected TPHg upto 11 milligram per kilogram (mg/Kg), and the maximum levels detected BTEX were (0.07 mg/Kg; 0.26 mg/Kg; 0.15 mg/Kg and 1.1 mg/Kg), respectively. MTBE in this area ranged between 0.11 mg/Kg to a maximum of 3.8 mg/Kg.

The soil samples between the two USTs area detected TPHg at 71 mg/Kg; BTEX at (0.22 mg/Kg; 0.47 mg/Kg; 0.49 mg/Kg and 3.7 mg/Kg, respectively) and MTBE at 1.2 mg/Kg.

The stockpiled soil samples detected TPHg upto 1,100 mg/Kg; BTEX at (4.2 mg/Kg; 22 mg/Kg; 12 mg/Kg and 110 mg/Kg); MTBE at 12 mg/Kg and Total lead at 11 mg/Kg.

The details of soil sampling are described in ESTC's report entitled "Soil Sampling Beneath Removed USTs at the Property...", dated March 8, 2000.

Since concentrations of TPHg, BTEX and MTBE were detected in the soil samples collected during USTs removal, further investigation was verbally requested by the Alameda County Health Care Services Agency (ACHCSA).

EST was retained by Mr. Sean Kapoor to conduct further investigation as requested by ACHCSA. A detailed proposed work plan, which was prepared by ESTC for the further investigation of the property, is described in a report entitled "Proposed Work Plan for Preliminary Site Assessment for the Property...", dated May 18, 2000.

On July 25 and 26, 2000, ESTC over-excavated the contaminated soil in the vicinity of former gasoline tanks areas to a practical extent. Approximately 150 cubic yards of contaminated soil was over-excavated.

Excavated soil from the removed USTs and over-excavation activities were stored on-site, sampled prior to treatment and treated by bio-remediation on a weekly basis. The details of the bio-remediation activities of the stockpiled soil is described in ESTC's report entitled "Interim Corrective Action for the Property...", dated August 17, 2000.

ESTC sampled the stockpiled soil to confirm if bio-treatment of the stockpiled soil was successful in reducing the contamination levels in the stockpiled soil. Upon approval of acceptance from Republic Services Vasco Road Landfill (former BFI Landfill), approximately 500 yards of soil were disposed at Republic Services Landfill in the City of Livermore. The details of sampling and disposal activities is described in ESTC's report entitled "Soil Sampling, Treatment and Disposal of Contaminated Stockpiled Soil from the Property...", dated August 21, 2000.

After ESTC's work plan (dated May 18, 2000) was approved by the Alameda County Health Cares Services Agency (ACHCSA), ESTC performed a preliminary soil and groundwater assessment of the subject property in September 2000.

The details of the preliminary soil and groundwater assessment are described in ESTC's report entitled "Preliminary Soil and Groundwater Assessment at the Property...", dated October 13, 2000. The report recommended quarterly monitoring and sampling of the on-site wells for at least one year.

Up-to-date, ESTC has conducted one quarterly groundwater monitoring and sampling of the on-site wells. The details of groundwater monitoring and sampling are described in ESTC's report entitled "Quarterly Groundwater Monitoring and Sampling at the Property...", dated January 19, 2001.

During concrete paving of the subject property parking lot done by Kapoor Enterprises' contract, two of the wells were damaged. ESTC halted the quarterly groundwater monitoring and sampling events until the wells were fixed.

Up to date ESTC has conducted has continued to conduct quarterly groundwater monitoring and sampling of the monitoring wells. The details of these quarterly groundwater monitoring and sampling are described in the reports dated April 23, 2004; July 20, 2004; January 28, 2005; April 22, 2005; August 31, 2005 and October 28, 2005.

#### **SCOPE OF PRESENT WORK:**

- Measured depth-to-water table in the three on-site wells STMW-1, STMW-2 and STMW-3 and monitored for presence of any floating product and/or odor.
- Purged each monitoring well prior to sampling.
- Sampled monitoring wells STMW-1, STMW-2 and STMW-3 for laboratory analyses.
- Submitted water samples to a State-Certified laboratory for analyses of Total Petroleum Hydrocarbons as gasoline (TPHg), BTEX, MTBE and other hydrocarbon fuel oxygenated constituents per EPA Method 8260B.
- Reviewed results and prepared a report of the investigation.

**FIELD ACTIVITIES:**

The three monitoring wells (STMW-1 through STMW-3) were monitored for the presence of floating product(s) and/or any distinctive odor. Groundwater samples were collected and submitted to a state-certified laboratory for analyses.

*GROUNDWATER MONITORING:*

On March 16, 2006, ESTC's staff monitored three on-site wells to measure water depth and check for the presence of sheen and/or odor.

The recent water measurement revealed that the wells screens are submerged at least 7.5 to 10 feet.

During monitoring of the wells, rainbow sheen and sewerage odor were noted in groundwater sample from monitoring well STMW-1. Rainbow sheen was noted in groundwater sample from monitoring well STMW-2, but no sheen or odor was noted in groundwater sample from well STMW-3.

*GROUNDWATER SAMPLING:*

Water samples from the three monitoring wells (STMW-1, STMW-2 and STMW-3) were collected and analyzed for TPHg, BTEX, MTBE and other hydrocarbon fuel oxygenate constituents per EPA Method 8260B. Approximately four to five well volumes of water was purged from each well using a bailer before the sample was collected in order to assure that the sample was representative of surrounding groundwater. A stainless steel bailer was used for sample collection. Water sampling

equipment was decontaminated before and after each well sampling using Tri-sodium Phosphate (TSP) and water wash, followed by double rinsing. Groundwater samples were contained in 40-milliliter glass vials with Teflon-lined septa. After labeling, they were immediately stored in a cold ice chest. Strict chain-of-custody procedures were maintained during sample acquisition, storage and transport. The sampling was conducted in accordance with ESTC's Standard Operation Procedures (Appendix "C").

### **ANALYTICAL RESULTS:**

The water samples from the monitoring wells were submitted to Entech Analytical Labs, in Santa Clara, California to be analyzed for TPHg, BTEX, MTBE and other hydrocarbon fuel oxygenated constituents (per EPA Method 8260B).

Groundwater samples from monitoring wells detected TPHg and BTEX below laboratory detection limit in monitoring wells STMW-2 and STMW-3. Groundwater sample from monitoring well STMW-1 detected Benzene at 0.9 microgram per liter ( $\mu\text{g/L}$ ), Toluene at 3.3  $\mu\text{g/L}$ , MTBE at 21  $\mu\text{g/L}$ , Acetone at 37  $\mu\text{g/L}$  and p-Isopropyltoluene at 16  $\mu\text{g/L}$ , respectively, while Ethylbenzene and Total Xylenes were below laboratory detection limit in the water sample. Water sample from monitoring well STMW-2 detected MTBE at 34  $\mu\text{g/L}$  and tert-Butanol (TBA) at 150  $\mu\text{g/L}$ . A summary of groundwater monitoring data and analytical results are presented in Table 1 (Appendix "A"). The laboratory analytical report is included in Appendix "E".

### **GROUNDWATER FLOW DIRECTION:**

In order to estimate groundwater gradient and flow direction, a level and depth survey was conducted. Depths to groundwater were measured relative to an arbitrarily

established datum assumed to be 100 feet above sea level. Well casing and ground surface elevations are summarized in Table 1. The results of this investigation indicated westerly direction of groundwater flow as of March 16, 2006.

### **SUMMARY:**

Rainbow sheen and sewerage odor were noted in monitoring well STMW-1, and rainbow sheen was noted in well STMW-2 but no sheen or odor was noted in well STMW-3.

One out of three wells detected Benzene, Toluene, TBA and other fuel hydrocarbon oxygenated compounds in the water samples. Two out of three wells detected MTBE.

### **RECOMMENDATIONS:**

Since two out of three monitoring wells detect MTBE, and one out of three monitoring wells detected Benzene and Toluene in the groundwater, ESTC recommends continuation of quarterly groundwater monitoring and sampling of on-site monitoring wells. Furthermore, since the screens of all the wells are submerged, water samples may not be representative of the surrounding groundwater; therefore, we recommend further investigation and/or replacement of the existing wells.

### **LIMITATIONS:**

This report and the associated work have been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. The contents of this report reflect the conditions of the site at this particular time. The findings of this report are based on:

- 1) The observations of field personnel.
- 2) The results of laboratory analyses performed by a state-certified laboratory.

It is possible that variations in the soil and groundwater could exist beyond the points explored in this investigation. Also, changes in groundwater conditions of a property can occur with the passage of time due to variations in rainfall, temperature, regional water usage and other natural processes or the works of man on this property or adjacent properties.

This report is issued with the understanding that it is the responsibility of the owner or his/her representative to ensure that the information and recommendations contained herein are called to the attention of the Local Environmental Agency.

Services performed by ESTC have been in accordance with generally accepted environmental professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. This report is not meant to represent a legal opinion. No other warranty, express or implied is made.



**A P P E N D I X "A"**

**TABLES**

**TABLE 1  
GROUNDWATER MONITORING DATA (feet)  
AND ANALYTICAL RESULTS (µg/L)**

Date	Well No./ Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	B	T	E	X	MTBE	PCE	TBA	TCE	Other VOCs by EPA 8260B
10/04/00	STMW-1 (97.93)	23	14	8.34*	89.59	No sheen Light petroleum odor	60000	ND <2500	ND <2500	ND <2500	ND <2500	69000	ND <2500	ND <10000	ND <2500	None Detected<2500
1/04/01				7.86*	90.07	No sheen Light sewerage odor	71000	ND <5000	ND <5000	ND <5000	ND <5000	89000	ND <5000	ND <20000	ND <5000	None Detected<5000
3/16/04				5.70*	92.23	No sheen Sewerage odor	260	52	64	7.9	27	39	ND <0.5	ND <10	ND <0.5	1,2,4-Trimethylbenzene 5.2 2-Butanone (MEK) 21 Acetone 22 Carbon Disulfide 0.75 Styrene 1.5
7/05/04				4.82*	93.11	No sheen Sewerage odor	2100	17	240	2.6	12	520	ND <2.5	ND <50	ND <2.5	Acetone 820
12/28/04				6.82*	91.11	No sheen Sewerage odor	310	89	90	11	43	32	ND<1	ND <20	ND <1	None Detected<1
3/24/05				5.63*	92.30	Rainbow sheen Sewerage odor	630	43	140	16	110	20	ND<1	ND <20	ND <1	1,2,4-Trimethylbenzene 13 Acetone 46
7/20/05				5.75*	92.18	No sheen Sewerage odor	330b	12	22	ND <2.5	9.3	310	ND <2.5	ND <50	ND <2.5	Chloroform 23 Methylene Chloride 40
9/15/05				7.44*	90.49	Rainbow sheen Sewerage odor	15000	ND <100	ND <100	ND <100	ND <100	13000	ND <100	2500	ND <100	None Detected<100
12/12/05				5.32*	92.61	Rainbow sheen Sewerage odor	130	4.4	7.5	ND<1	3.4	170	ND <1	100	ND <1	Acetone 61 Carbon Disulfide 4.1
3/16/06				3.90*	94.03	Rainbow sheen Sewerage odor	ND <50	0.9	3.3	ND <0.5	ND <0.5	21	ND <0.5	ND <10	ND <0.5	Acetone 37 p-Isopropyltoluene 16
10/04/00	STMW-2 (99.04)	22	13	8.22*	90.82	No ashen or odor	69	ND <5	ND <5	ND <5	ND <5	66	ND <5	ND <20	ND <5	None Detected<5
1/04/01				6.70*	92.96	No sheen or odor	110	ND <5	ND <5	ND <5	ND <5	120	ND <5	ND <20	ND <5	None Detected<5
3/16/04				6.08*	92.96	No sheen Sewerage odor	1100a	ND <10	ND <10	ND <10	ND <20	1700	ND <10	ND <200	ND <10	None Detected<10
7/05/04				6.86*	92.18	No sheen or odor	1800b	ND <10	ND <10	ND <10	ND <20	1800	ND <10	ND <200	ND <10	None Detected<10
12/28/04				6.22*	92.82	No sheen or odor	1000b	ND <13	ND <13	ND <13	ND <13	1400	ND <13	ND <250	ND <13	None Detected<13
3/24/05				5.12*	93.92	No sheen Sewerage odor	760	ND <5	ND <5	ND <5	ND <5	930	ND <5	180	ND <5	None Detected<5

**TABLE 1 CONT'D  
GROUNDWATER MONITORING DATA (feet)  
AND ANALYTICAL RESULTS (µg/L)**

Date	Well No./ Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	B	T	E	X	MTBE	PCE	TBA	TCE	Other VOCs by EPA 8260B
7/20/05	STMW-2 (99.04)	22	13	5.66*	93.38	No sheen Sewerage odor	64	ND <1	ND <1	ND <1	ND <1	43	ND <1	920	ND <1	None Detected<1
9/15/05				6.14*	92.90	No sheen or odor	53	ND <1	ND <1	ND <1	ND <1	88	ND <1	130	ND <1	None Detected<1
12/12/05				6.68*	92.36	No sheen Sewerage odor	ND <50	2.2	ND <0.5	0.6	ND <0.5	23	ND <0.5	22	ND <0.5	None Detected<0.5
3/16/06				5.54*	93.50	Rainbow sheen No odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	34	ND <0.5	150	ND <0.5	None Detected<0.5
10/04/00	STMW-3 (99.60)	22	13	8/.42*	91.18	No sheen or odor	ND <50	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <20	ND <5	None Detected<5
1/04/01				6.16*	93.44	No sheen or odor	ND <50	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <20	ND <5	None Detected<5
3/16/04				7.18*	92.42	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <1	2.8	ND <0.5	ND <10	ND <0.5	None Detected<0.5
7/05/04				6.27*	93.33	No sheen or odor	ND <25	ND <0.5	ND <0.5	ND <0.5	ND <1	2.5	ND <0.5	ND <10	ND <0.5	None Detected<0.5
12/28/04				5.64*	93.96	No sheen or odor	ND <25	ND <0.5	ND <0.5	ND <0.5	ND <0.5	2	ND <0.5	ND <10	ND <0.5	None Detected<0.5
3/24/05				5.12*	94.48	No sheen or odor	ND <25	ND <0.5	ND <0.5	ND <0.5	ND <0.5	1.4	ND <0.5	ND <10	ND <0.5	None Detected<0.5
7/20/05				5.50*	94.10	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	1.5	ND <0.5	ND <10	ND <0.5	None Detected<0.5
9/15/05				5.56*	94.04	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	1.2	ND <0.5	ND <10	ND <0.5	None Detected<0.5
12/12/05				6.26*	93.34	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND	ND <0.5	ND <0.5	ND <0.5	None Detected<0.5
3/16/06				5.14*	94.46	No sheen or odor	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <1	ND <0.5	ND <10	ND <0.5	None Detected<0.5

**TABLE 1 CONT'D**  
**GROUNDWATER MONITORING DATA (feet)**  
**AND ANALYTICAL RESULTS ( $\mu\text{g/L}$ )**

**TPHg** – Total Petroleum Hydrocarbons as gasoline

**MTBE** – Methyl Tertiary Butyl Ether

**TBA** – Tertiary Butanol

**VOCs** – Other Fuel Hydrocarbon Oxygenated Compounds

**Perf.** – Perforation

**ND** – Not Detected (Below Laboratory Reporting Limit)

**b** – TPH as gasoline reported value due to high concentration of MTBE present in the TPH as gasoline quantitation range

**BTEX** – Benzene, Toluene, Ethylbenzene, Total Xylenes

**PCE** – Tetrachloroethene

**TCE** – Trichloroethene

**GW Elev.** – Groundwater Elevation

\* Well screens are submerged

**a** – No other indication of gasoline besides MTBE

**TABLE 2  
SUMMARY OF MONITORING WELLS DATA  
IN FEET**

<b>Well No.</b>	<b>Well Diameter (inch)</b>	<b>Depth of Well</b>	<b>Depth of Perforation</b>	<b>Depth of Blank</b>	<b>Depth of Cement</b>	<b>Depth of Bentonite</b>	<b>Depth of Sand</b>
STMW-1	2	23	14	9	7½	½	15
STMW-2	2	22	13	9	7½	½	14
STMW-3	2	22	13	9	7½	½	14

**A P P E N D I X "B"**

**FIGURES**

Enviro Soil Tech  
Consultants

131 Tully Road  
San Jose, CA 95112

PROJECT

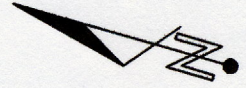
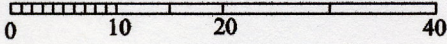
20570 Stanton Avenue  
Castro Valley, California

PROJECT # 2-00-706-ST  
DATE: 4/7/2006

Figure 5

Isocontours of MTBE  
in Groundwater 3/16/06

Scale: Feet



Residence

San Carlos Avenue

Mini Mart  
Building

ND<1

10

STMW-1

21

30

34

STMW-2

STMW-3

<1

Sidewalk

Legend

◆ = Monitor Well

Isocontours are variable in ug/L

Stanton Avenue

Enviro Soil Tech  
Consultants

131 Tully Road  
San Jose, CA 95112

PROJECT

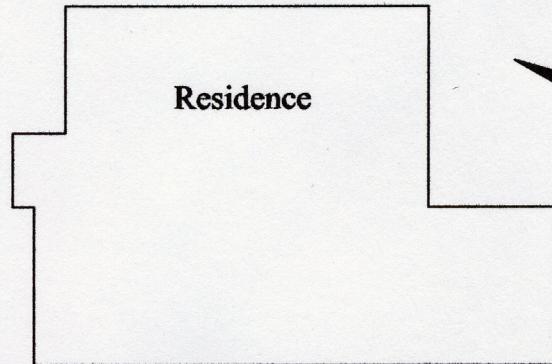
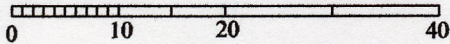
20570 Stanton Avenue  
Castro Valley, California

PROJECT # 2-00-706-ST  
DATE: 4/7/2006

Figure 3

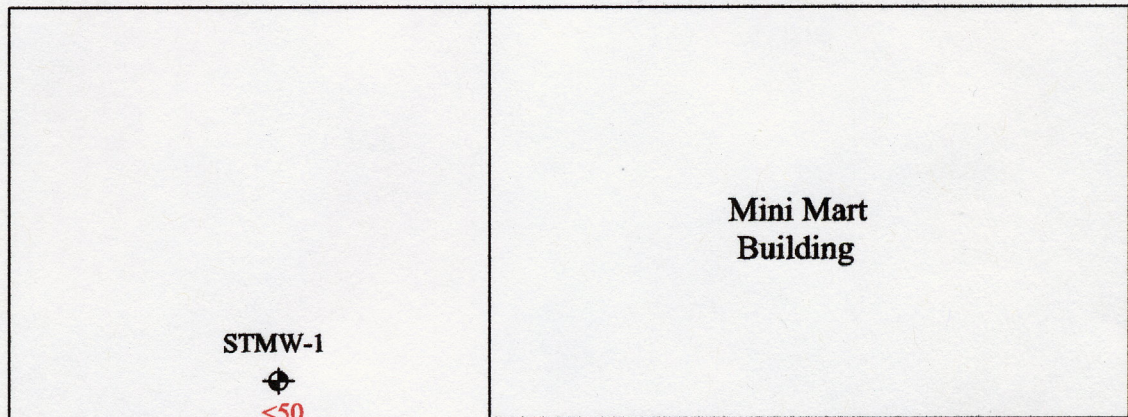
Isocontours of TPH-g  
in Groundwater 3/16/06

Scale: Feet



Residence

San Carlos Avenue



Mini Mart  
Building

STMW-1



<50

<50



STMW-2

STMW-3



<50

Sidewalk

Legend

⊕ = Monitor Well

Isocontours in ug/L

Stanton Avenue



Enviro Soil Tech  
Consultants

131 Tully Road  
San Jose, CA 95112

PROJECT

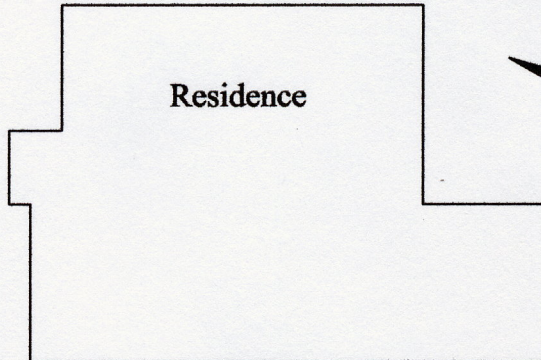
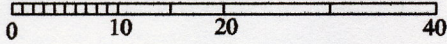
20570 Stanton Avenue  
Castro Valley, California

PROJECT # 2-00-706-ST  
DATE: 4/7/2006

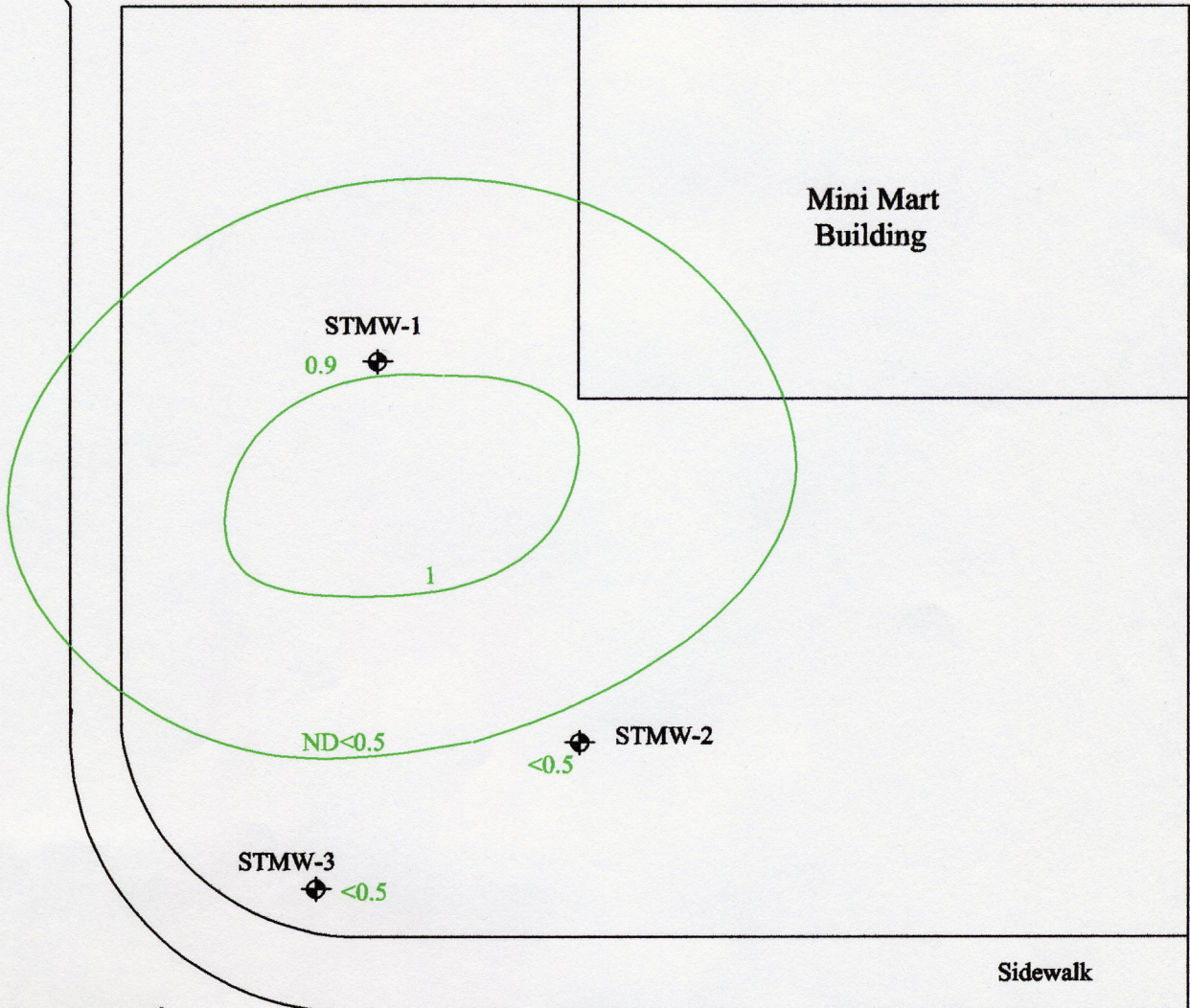
Figure 4

Isocontours of Benzene  
in Groundwater 3/16/06

Scale: Feet



San Carlos Avenue



Legend

◆ = Monitor Well

Isocontours equal 1 ug/L

Stanton Avenue

Enviro Soil Tech  
Consultants

131 Tully Road  
San Jose, CA 95112

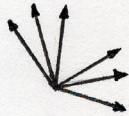
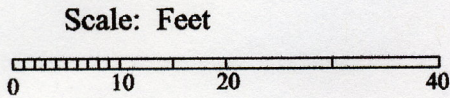
PROJECT

20570 Stanton Avenue  
Castro Valley, California

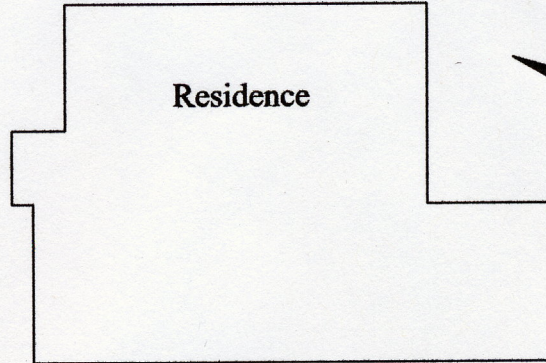
PROJECT # 2-00-706-ST  
DATE: 4/7/2006

Figure 2

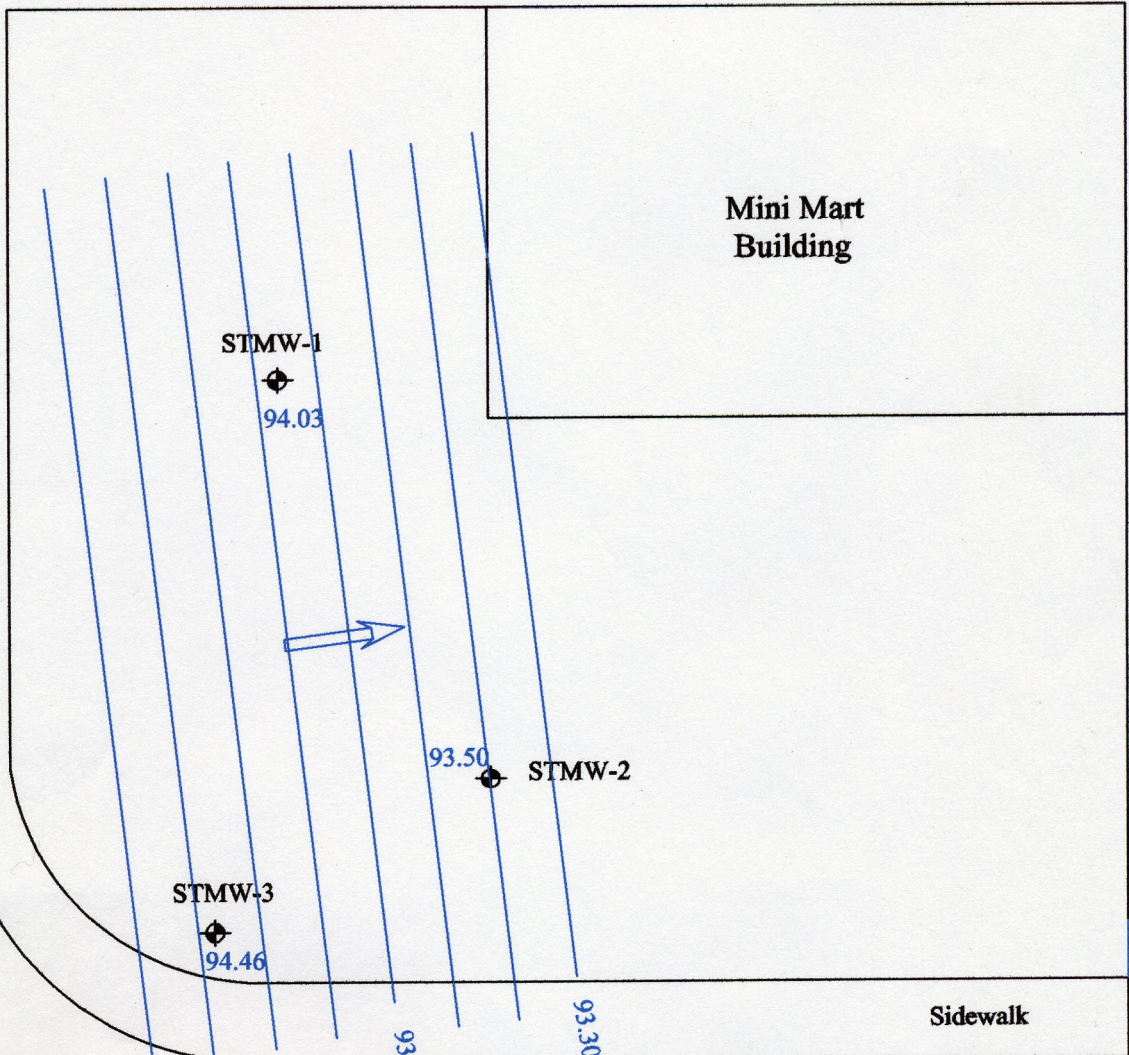
Groundwater Elevation  
March 16, 2006



Historical Direction of  
Groundwater Rose Diagrams



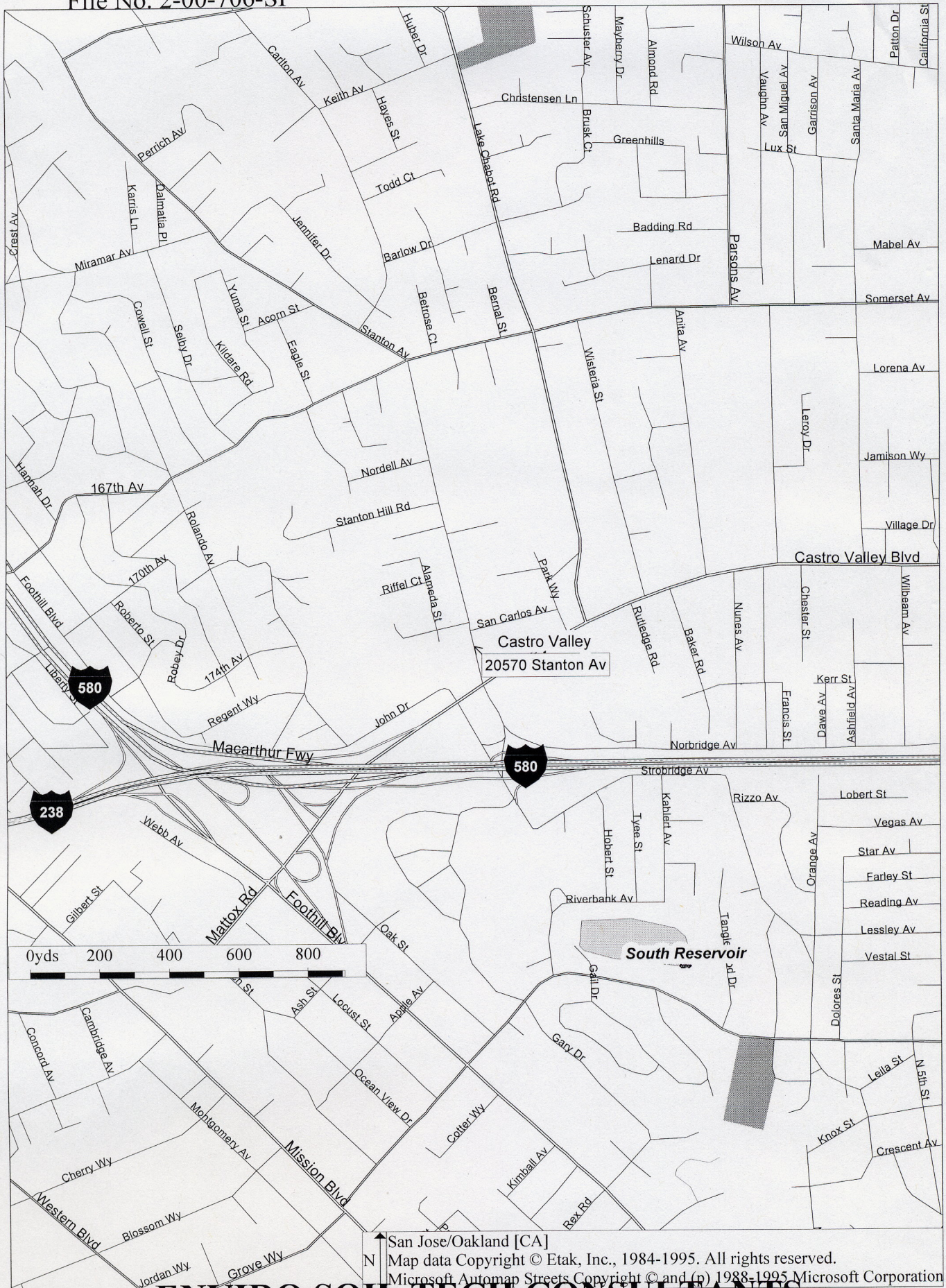
San Carlos Avenue



Legend

⊕ = Monitor Well

Contour intervals = 0.20 feet



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Figure 1

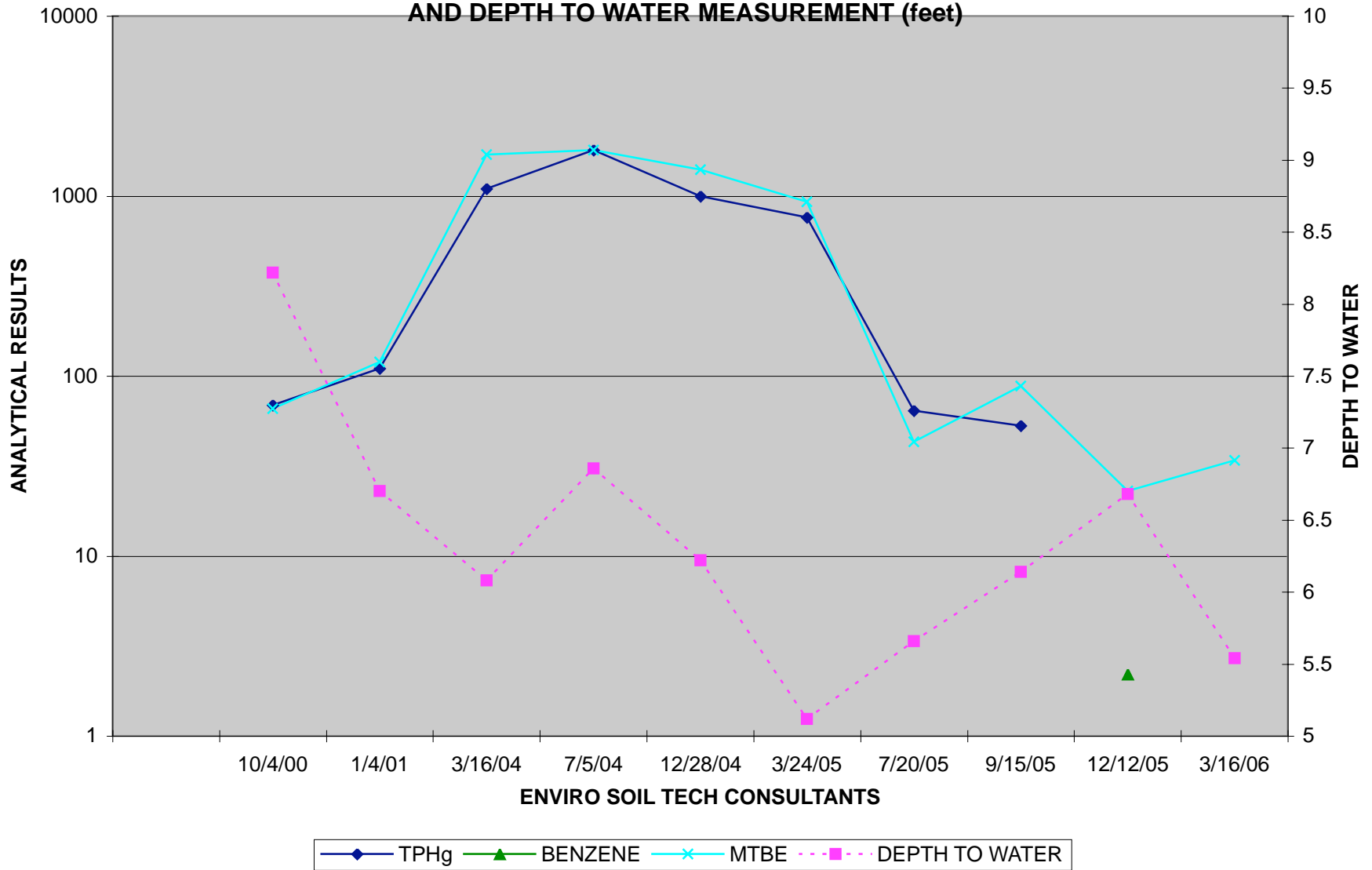
File No. 2-00-706-ST

**A P P E N D I X "C"**

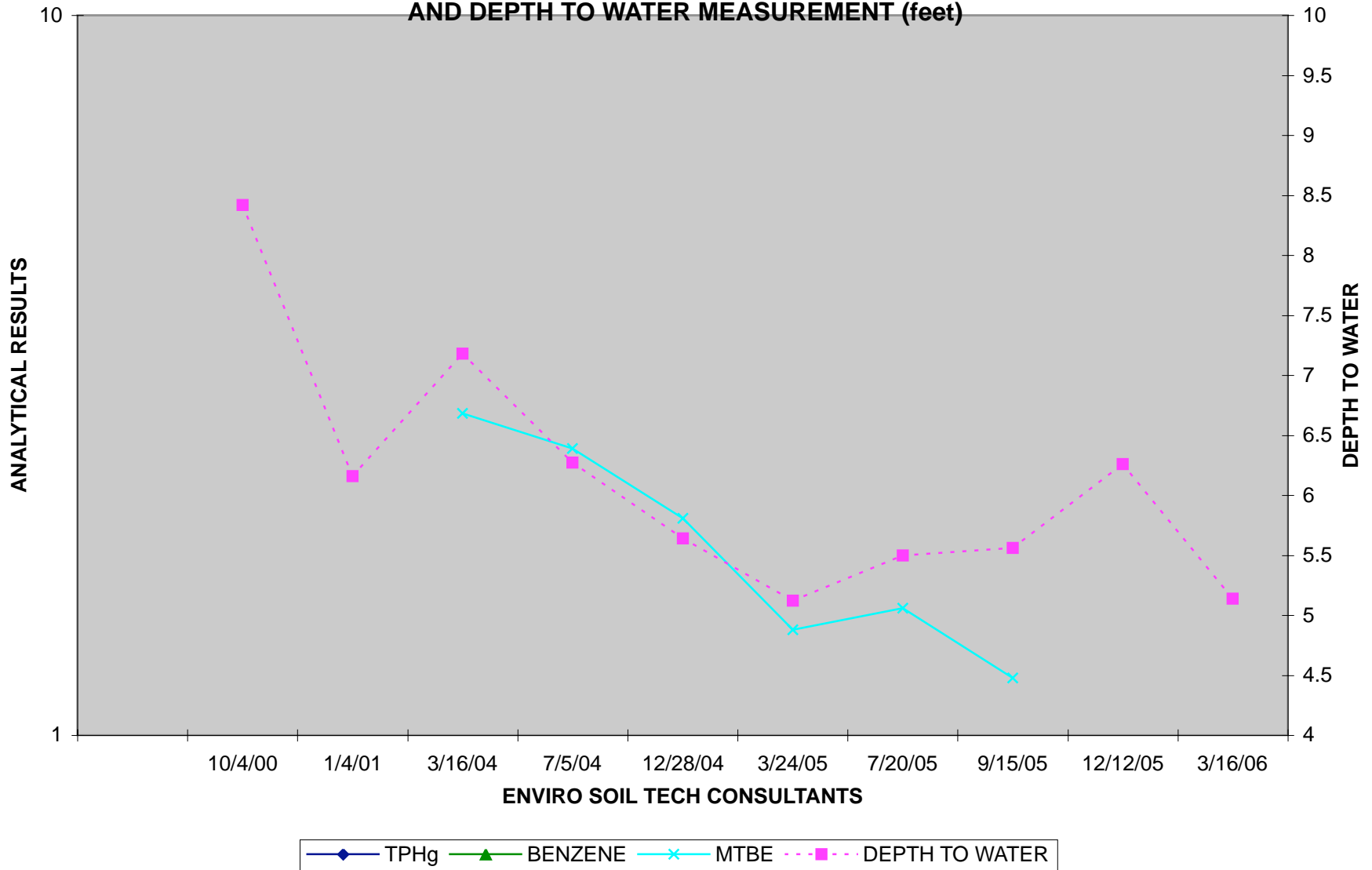
**HYDROGRAPHS**

**ENVIRO SOIL TECH CONSULTANTS**

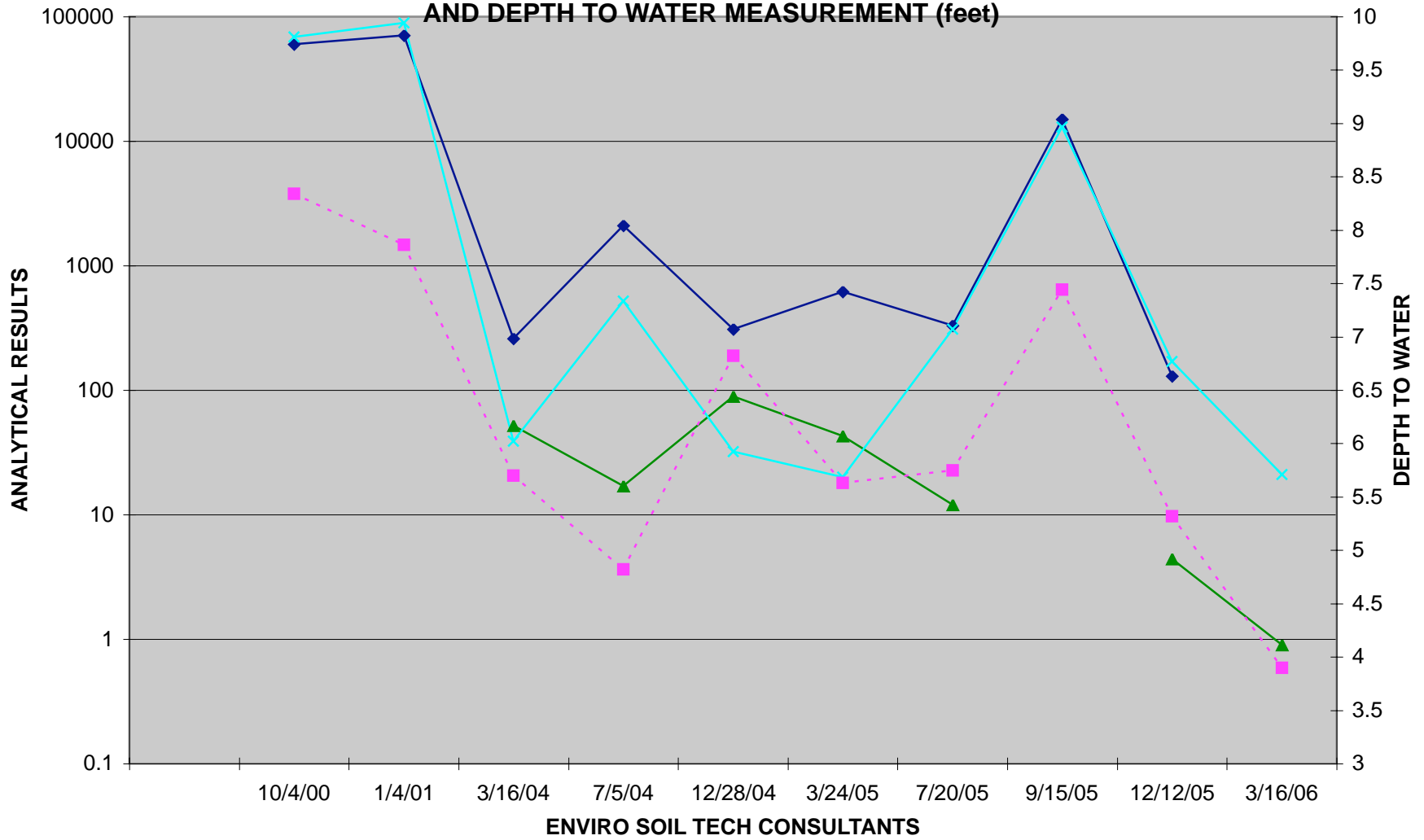
**File No.: 2-00-706-ST**  
**TPHg, BENZENE & MTBE RESULTS FOR STMW-2 ( $\mu\text{g/L}$ )**  
**AND DEPTH TO WATER MEASUREMENT (feet)**



File No.: 2-00-706-ST  
TPHg, BENZENE & MTBE RESULTS FOR STMW-3 (µg/L)  
AND DEPTH TO WATER MEASUREMENT (feet)



**File No.: 2-00-706-ST**  
**TPHg, BENZENE & MTBE RESULTS FOR STMW-1 (µg/L)**  
**AND DEPTH TO WATER MEASUREMENT (feet)**



◆ TPHg   
 ▲ BENZENE   
 × MTBE   
 ■ DEPTH TO WATER

File No. 2-00-706-ST

**A P P E N D I X "D"**

**STANDARD OPERATION PROCEDURE**

**ENVIRO SOIL TECH CONSULTANTS**



## **GROUNDWATER SAMPLING**

Prior to collection of groundwater samples, all of the sampling equipment (i.e. bailer, cables, bladder pump, discharge lines and etc.) was cleaned by pumping TSP water solution followed by distilled water.

Prior to purging, the well "Water Sampling Field Survey Forms" were filled out (depth to water and total depth of water column were measured and recorded). The well was then bailed or pumped to remove four to ten well volumes or until the discharged water temperature, conductivity and pH stabilized. "Stabilized" is defined as three consecutive readings within 15% of one another.

The groundwater sample was collected when the water level in the well recovered to 80% of its static level.

Forty milliliter (ml.), glass volatile organic analysis (VOA) vials with Teflon septa were used as sample containers. The groundwater sample was decanted into each VOA vial in such a manner that there was a meniscus at the top. The cap was quickly placed over the top of the vials and securely tightened. The VOA vials were then inverted and tapped to see if air bubbles were present. If none were present, the sample was labeled and refrigerated for delivery under chain-of-custody to the laboratory. The label information would include a sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

File No. 2-00-706-ST

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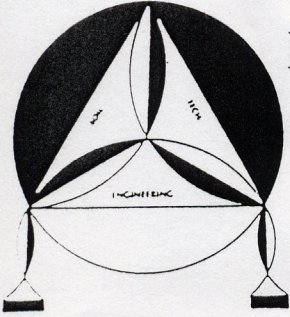
SOP1

File No. 2-00-706-ST

**A P P E N D I X "F"**

**FIELD NOTES**

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# ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 2-00-206-ST

WELL NO.: STMA-2

DATE: 3-16-06

SAMPLER: Richard Mendez

DEPTH TO WELL: \_\_\_\_\_

1 WELL VOLUME: 2.7

DEPTH TO WATER: 5' .54

5 WELL VOLUME: 13.5

HEIGHT OF WATER COLUMN: \_\_\_\_\_

ACTUAL PURGED VOLUME: 9

CASING DIAMETER:  2"

4"

### CALCULATIONS:

2" x 0.1632 16.46

4" x 0.653 \_\_\_\_\_

PURGE METHOD:  BAILER  DISPLACEMENT PUMP  OTHER

SAMPLE METHOD:  BAILER  OTHER

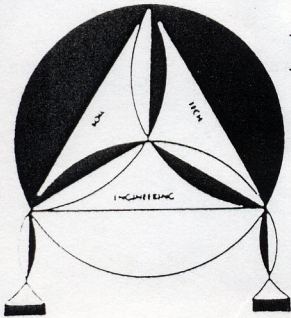
SHEEN:  NO  YES, DESCRIBE: Rain Bow

ODOR:  NO  YES, DESCRIBE: \_\_\_\_\_

### FIELD MEASUREMENTS

TIME	VOLUME	Ph	TEMP.	E.C.
	<u>3 gals</u>	<u>7.93</u>	<u>18.0</u>	<u>1280</u>
	<u>6 gals</u>	<u>7.84</u>	<u>18.5</u>	<u>1247</u>
	<u>9 gals</u>	<u>7.71</u>	<u>19.0</u>	<u>1328</u>

6' .84



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Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 2-00-706-ST

WELL NO.: SPMU-1

DATE: 3-16-06

SAMPLER: Double Manly

DEPTH TO WELL: \_\_\_\_\_

1 WELL VOLUME: 3.1

DEPTH TO WATER: 3<sup>ft</sup> .90

5 WELL VOLUME: 15.5

HEIGHT OF WATER COLUMN: \_\_\_\_\_

ACTUAL PURGED VOLUME: 9

CASING DIAMETER:  2"

4"

### CALCULATIONS:

2" x 0.1632 19.1

4" x 0.653 \_\_\_\_\_

PURGE METHOD:  BAILER  DISPLACEMENT PUMP  OTHER

SAMPLE METHOD:  BAILER  OTHER

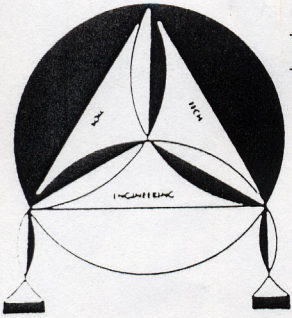
SHEEN:  NO  YES, DESCRIBE: RAIN BOW

ODOR:  NO  YES, DESCRIBE: SEWAGE

### FIELD MEASUREMENTS

<u>TIME</u>	<u>VOLUME</u>	<u>Ph</u>	<u>TEMP.</u>	<u>E.C.</u>
	<u>3 GAC</u>	<u>8.46</u>	<u>16.6</u>	<u>228</u>
	<u>6 SAC</u>	<u>7.95</u>	<u>16.7</u>	<u>171</u>
	<u>9 GAC</u>	<u>7.71</u>	<u>17.6</u>	<u>166</u>

4<sup>th</sup> .80



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131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

FILE NO.: 2000-206-SJ

WELL NO.: STMW-3

DATE: 3-16-06

SAMPLER: Rotary Mander

DEPTH TO WELL: \_\_\_\_\_

1 WELL VOLUME: 2.8

DEPTH TO WATER: 5<sup>ft</sup> .14

5 WELL VOLUME: 14

HEIGHT OF WATER COLUMN: \_\_\_\_\_

ACTUAL PURGED VOLUME: 9

CASING DIAMETER: ✓ 2"

\_\_\_\_\_ 4"

## CALCULATIONS:

2" x 0.1632 16.86

4" x 0.653 \_\_\_\_\_

PURGE METHOD: \_\_\_\_\_ BAILER ✓ DISPLACEMENT PUMP \_\_\_\_\_ OTHER

SAMPLE METHOD: ✓ BAILER \_\_\_\_\_ OTHER

SHEEN: ✓ NO \_\_\_\_\_ YES, DESCRIBE: \_\_\_\_\_

ODOR: ✓ NO \_\_\_\_\_ YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

TIME	VOLUME	Ph	TEMP.	E.C.
	3 gpc	7.82	16.8	1663
	6 gpc	7.84	17.8	1692
	9 gpc	7.81	18.3	1946

6<sup>ft</sup> .08