To BARNEY CHAN - ENVIRON PROTECTION DIV.

FAX # 510-337-9335

SUBJECT: 4341 Howard ST.
OAKLAND, CA.

FROM Jim MINOR
Phone/FAX 510-833-8874

DATE: April 26, '95
1:30 PM.

PAGES (6)

April 26, 1995

Dear Barney,

Please find attached Quarterly Groundwater Motoring report for 4341 Seward St. Oakland.

Please note page 3, Table 1 and Chromalab, Inc. submission # 9503406 in which Artesian for the first time sampled and analyzed for Chlorinated Solvents at MW-1. Chromalab recorded 12 ug/l in Trans 1,2; 36 in CIS 1-2; and 220 in Trichloroethene. I believe the Trans 1-2 is quite a bit lower than reported by Blymyer. I have asked for Blymyer/B of A's most recent test analysis (taken since our March 27th meeting) but have not received it.

With these readings and Blymyers readings don't you feel we have a stable condition here and the boring of two more tempory wells is not necessary!? We have two wells and four bore holes on our property.

Thank you for your help - please advise

Sincerely

Jim Mino

April 26, 1995

Dear Barney,

Please find attached Quarterly Groundwater Monitoring report for 4341 Seward St. Oakland.

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Thank you for your help - please advise

Sincerely Jim Nilmon

ARTESIAN ENVIRONMENTAL CONSULTANTS

April 21, 1995

Mr. Jim Minor
P.O. Box 726
Diablo, CA 94528

Project No. 1610

RE: Quarterly Groundwater Monitoring at 4341 Howard Street, Oakland, CA.
Sampling Date: March 27, 1995

Dear Mr. Minor,

Artesian Environmental Consultants (Artesian), a general engineering and drilling contractor with hazardous waste removal certificate (#624461), is pleased to submit this letter report regarding the results of quarterly groundwater monitoring performed at 4341 Howard Street, Oakland, California- formerly El Monte RV Center (see Figure 1).

BACKGROUND

On November 15, 1991 a 1,000 gallon gasoline underground storage tank (UST) was removed from the 4341 Howard Street site by Zaccor Corp. of Menlo Park, California. Soil samples taken at the time of the tank removal indicated up to 8,200 milligrams per kilogram (mg/kg) equivalent to parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-g), 33000 micrograms per liter (µg/kg) equivalent to parts per billion (ppb) benzene (B), 93000 µg/kg toluene (T), 75 µg/kg ethylbenzene (E), and 330 µg/kg total xylenes (X).

After removal of the tank the excavation was backfilled with clean imported fill material. The dispenser was removed. Stockpiled soil was left on-site.

On June 7, 1993 Artesian was contracted to overexcavate the contaminated soil, remove the additional excavated and previously stockpiled soil, and install a groundwater monitoring well.

On June 24, 1994 Artesian personnel overexcavated the gasoline impacted soil removing 110 yards of impacted soil forming an excavation pit approximately 15' X 20' X 10' deep. Approximately 110 yards of hydrocarbon impacted soil was excavated and stockpiled on-site.

Soil samples were taken from each of the four sidewalls of the excavation at 8 feet below ground surface. The analytical results of this sampling event indicated up to 410 mg/kg TPH-g and up to 7200 µg/kg benzene, and 18000 µg/kg toluene.

On August 19, 1993 the excavation was backfilled with clean imported backfill material purchased from Rock Transport of Oakland, California.

On August 31, 1993 Artesian personnel supervised the removal of the stockpiled soil. The stockpiled soil was transported to Gibson Environmental of Bakersfield, California, by Caballero Trucking of San Jose, California for recycling.

On June 25, 1993 Artesian personnel supervised Guess Drilling of San Rafael, California in the installation of a groundwater monitoring well (MW-1).

Groundwater monitoring well MW-1 was placed approximately 10 feet from the edge of the excavation in the presumed groundwater downgradient direction. The estimated westerly groundwater flow direction was based on wells at the adjacent neighboring Bank of America site at 500 High Street, Oakland.

Groundwater monitoring well MW-1 was constructed with two inch diameter Schedule 40 factory threaded and slotted polyvinyl chloride (PVC) casing. A slot size of 0.020 inches was selected based on the knowledge that the predominant soil type at this site is a sandy silt. Groundwater was encountered at 10 feet below ground surface. The slotted interval of MW-1 extends from 5 feet above first groundwater to 10 feet below first groundwater, to a total depth of 20 feet. The annular space around the 0.020 inch slotted sections of casing was packed with lonestar #3 sand (LS#3 = 1.5 mm) as filter material, from the bottom of the borehole to approximately 3 feet below ground surface.

Two soil samples were taken at the time of drilling at five and ten feet below ground surface. Neither TPH-g nor BTEX were detected at or above the detection limit (ND) in either sample. A groundwater grab sample taken at the time of drilling also indicated ND levels for TPH-g and BTEX.

FIELDWORK

Monitoring Well Purging

On March 23, 1995, prior to purging, depth to groundwater measurements were taken in the well; groundwater was measured at 2.85 feet below top of casing. Monitoring well MW-1 was ~~purged using a down~~hole pump fitted with disposable PVC tubing. A minimum of three borehole volumes were extracted from the well to ensure that a representative sample of groundwater would be obtained. All equipment was cleaned before and after sampling with non-phosphate laboratory grade detergent and rinsed with deionized water.

Following the recharge of the well to at least 80% of the well's original volume, temperature, electrical conductivity, and pH were measured. Additional measurements of these three parameters were made to confirm well stabilization (stabilization is defined as two or more subsequent measurements whose values are within 10% of each other).

The discharge effluent was drummed in a DOT 17-H drum, and labeled for disposal in a manner consistent with the Regional Water Quality Control Board and other regulatory agency regulations and guidelines.

Monitoring Well Sampling

Groundwater sampling was performed on immediately following the purging of the well. Groundwater samples were obtained following the standard operating procedures for groundwater sampling included in the Appendix of this report.

A groundwater sample was collected with a new disposable bailer using new nylon line. After the well was sampled the bailer and line was disposed of. The sample was collected

in labeled 40 ml VOAs with no headspace. The samples were placed on crushed ice and transported under chain of custody documentation to Chromalab, Inc. of Pleasanton, California, a California certified hazardous materials laboratory which specializes in the analysis of hydrocarbon-contaminated samples.

The groundwater samples were analyzed for TPH-g by EPA Method 5030 and modified Method 8015, and BTEX by EPA Method 602/8020. These analyses indicate that the groundwater sample contained 0.08 milligrams per liter (mg/L), equivalent to parts per million (ppm) TPH-g, and 1.6 micrograms per liter (µg/L), equivalent to ppb benzene. Other target analytes were not detected in the groundwater sample (reporting limit 0.5 ppb).

The groundwater sample was also analyzed for purgeable halocarbons by EPA Method 8010 at the request of the client. Results of this analysis indicate 12 ppb trans-1,2-dichloroethene (trans-1,2 DCE), 36 ppb cis-1,2-dichloroethene (cis-1,2-DCE), and 220 ppb trichloroethene (TCE). All other target analytes were reported to be below the laboratory detection limits for this analysis. This is the first time that Artesian has analyzed a groundwater sample for purgeable halocarbons. Blymyer Engineering , Inc. of Alameda, California had been sampling MW-1 for the last three quarters and analytical results from these events indicate detectable concentrations of chlorinated solvents. Blymyer has received permission to sample this well by Mr. Minor to investigate a chlorinated solvent plume from there adjacent site up gradient from MW-1. Table 1 shows a summary of reported groundwater sample results (see attached water sample laboratory reports).

DISTRIBUTION

A copy of this report, along with a cover letter, should be sent to these regulatory agencies at addresses listed below:

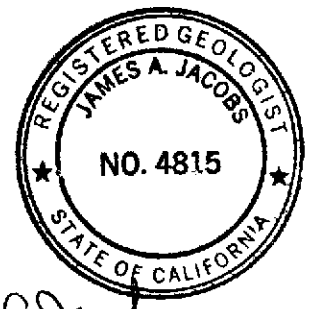
Attn: Mr. Barney Chan
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 350
Oakland, California 94621

Attn: Mr. Richard Hiett
Regional Water Quality Control Board
2101 Webster Street
Suite 500
Oakland, California 94612

LIMITATIONS

Artesian Environmental Consultants (Artesian) and the authors offer no assurance and assume no responsibility for site conditions or activities which were beyond the scope of work authorized by the Client. This report was prepared in accordance with generally accepted standards of environmental practice in Northern California at the time this work was performed. This monitoring was conducted solely to assess the relative impact to shallow groundwater with respect to gasoline contamination in the immediate vicinity of the former underground fuel storage tank at this site. Evaluation of the groundwater conditions at the site for the purpose of this sampling is made from one observation point. There may be variations in subsurface conditions away from the well sampled. This report was prepared for the sole and exclusive benefit of the Client specified herein and is intended only for the use of the Client. Other parties should not rely on the information contained in this report without first consulting Artesian.

Sincerely,
ARTESIAN ENVIRONMENTAL CONSULTANTS



Thomas Fortner
Project Geologist

James A Jacobs, R.G. #4815
Principal Geologist

Table 1 **Groundwater Analytical Results**

4341 Howard Street, Oakland, California

Sample ID	Date	TPH-g (1)	Benzene (2)	Toluene (2)	Ethyl benzene (2)	Total Xylenes (2)	trans 1.2 DCE (2)	cis 1,2 DCE (2)	TCE (2)
MW-1 (grab)	6/25/93	**<0.05***	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-1	7/27/93	**0.25**	**1.7**	<0.5	<0.5	<0.5	NA	NA	NA
MW-1	4/27/94	**0.34**	**2.1**	<0.5	<0.5	<0.5	NA	NA	NA
MW-1	7/29/94	**0.41**	**1.8**	<0.5	<0.5	<0.5	NA	NA	NA
MW-1	10/25/94	<0.05	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-1	3/23/95	**0.08**	**1.6**	<0.5	<0.5	<0.5	**12**	**36**	**220**

NOTES

(1) mg/L = milligrams per Liter; equivalent to parts per million (ppm)

(2) µg/L = micrograms per Liter; equivalent to parts per billion (ppb)

MW-1(grab) = Water Grab Sample Collected During Well Installation

MW-1 = Groundwater Monitoring Well Water Sample

* Two unknown peaks in early gasoline range,
concentration would be 0.37 mg/L if quantified as gasoline

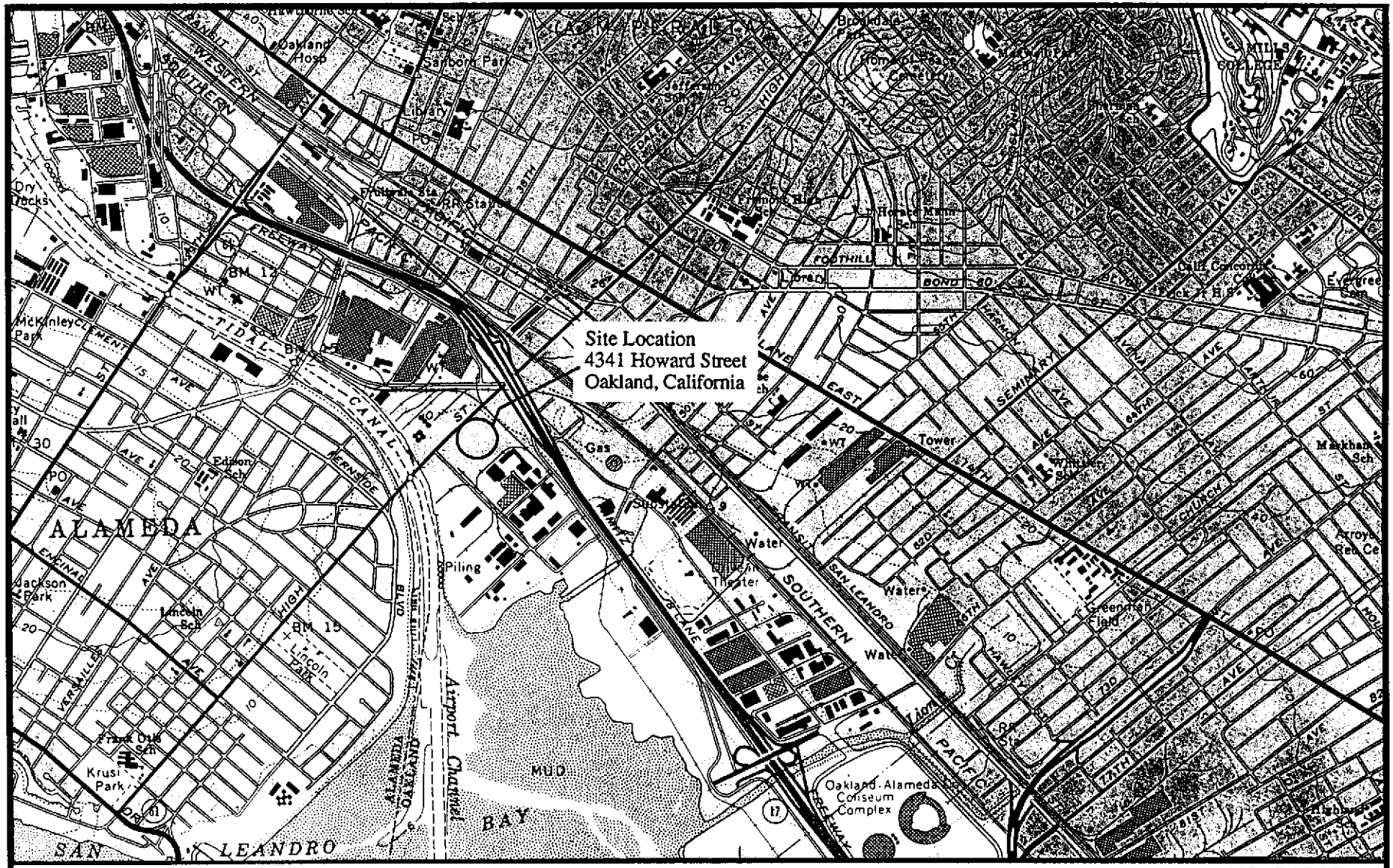
TPH-g = Total Petroleum Hydrocarbons as Gasoline

trans-1,2 DCE = trans 1,2 Dichloroethene

cis-1,2 DCE = cis 1,2 Dichloroethene

TCE = Trichloroethene

NA = Not Analyzed



Site Map

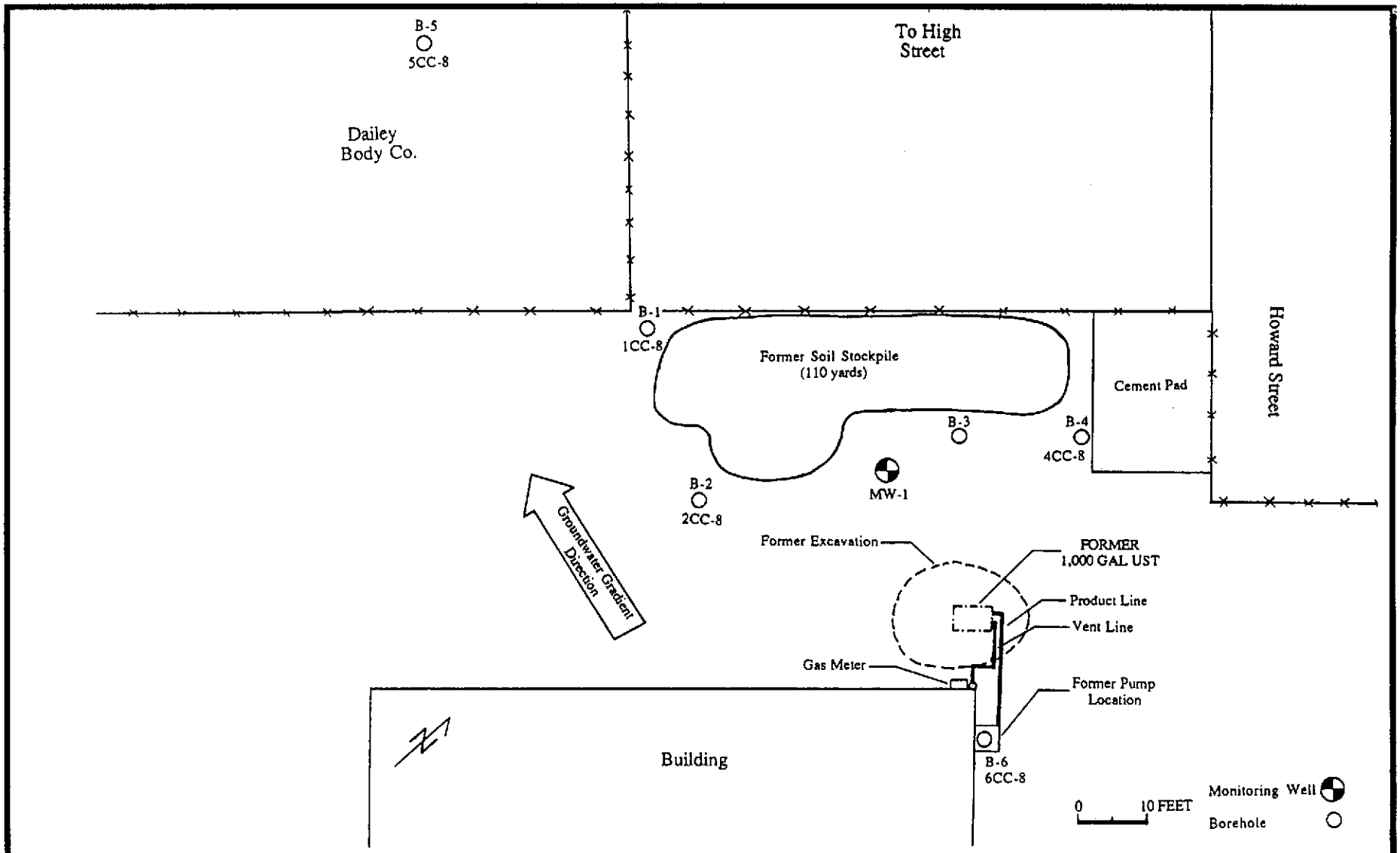
Jim Minor Site
4341 Howard Street
Oakland, California

OAKLAND EAST, CALIF.
SW/4 CONCORD 15' QUADRANGLE
N3745—W12207.5/7.5

1959
PHOTOREVISED 1980
DMA 1559 I SW-SERIES V895

Project No. 1610	Date: 9/8/93	Drawn by: DT	Figure 1

Artesian Environmental Consultants, 3100 Kerner Blvd., Suite C, San Rafael, California 94901



Site Map

4341 Howard Street
Oakland, California

Project No. 1610	Date: 9/2/93	Drawn by: DT	Figure 2

Artesian Environmental Consultants

Standard Operating Procedures

MONITORING WELL SAMPLING

Prior to groundwater sampling, initial water level and floating liquid hydrocarbon measurements are recorded for each well. Each well is sounded for depth to ascertain if silting has occurred and to verify the actual depth below ground surface. These measurements are used to calculate the volume for each well. At this time, all non-dedicated pumping and sampling supplies are washed with an Alconox solution, rinsed with clean water, and final rinsed with either distilled or deionized water to prevent any cross contamination from other sampling events.

Each well is purged by evacuating a minimum of three well-casing volumes of groundwater from the well. The well water may be evacuated either by bailing, or pumping. Any of the following may be used for bailing: a dedicated pvc bailer, sterile disposable polyethylene bailer, or a stainless steel bailer. For pumping the groundwater out of the well, a downhole impeller type pump (dedicated or removable with PVC tubing), a downhole dedicated bladder pump, or a surface peristaltic pump is used.

After three to four well volumes are pumped, each well is permitted to recharge to at least 80% of original capacity or for two hours; whichever occurs first. The water is then measured to verify whether the well has stabilized. Stabilization is determined by measuring the parameters of pH; temperature; and electrical conductivity. Stabilized measurements indicate that formation water has entered the well. When two subsequent measurements of these three parameters are within 10% of each other, the well is considered stabilized and is ready to be sampled.

The samples are collected using a new polyethylene bailer with a bottom siphon and nylon cord. The bailers are disposable, and therefore, never reused. The groundwater sample is visually inspected for the presence of free product in the sampling bailer. Agitation is minimized during sample retrieval to prevent aeration during the transfer from the well to the laboratory prepared sample containers. Duplicate water samples are collected from the well and siphoned into three, 40 ml, VOA, septum top vials, with additional 950 ml samples collected in an amber glass bottles or polyethylene bottles depending on the analyses to be performed. The VOA vials are filled completely, leaving no headspace, and are sealed with Teflon-lined lids. All samples are labeled, chilled to 4° C in an ice chest, and sent to a California State Certified hazardous materials testing laboratory under chain-of-custody documentation .

All groundwater samples are collected in accordance with California Regional Water Quality Control Board (RWQCB) procedures described in the *Leaking Underground Fuel Tank (LUFT) Field Manual*, the *Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites*, and local regulatory guidelines.

Standard Environmental Protection Agency (EPA), San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), and Department of Health Services (DHS) methodologies for sampling and analyses are routinely utilized.

Chain of Custody documentation accompanies all samples to the laboratory. A copy of the Chain of Custody documentation is attached to the Certificate of Analysis.

Monitor well purge water is properly stored and labeled on site in DOT 17-H containers pending off site disposal.

CHROMALAB, INC.

Environmental Services (SDB)

March 30, 1995 *Submission #:* 9503362

ARTESIAN ENV. CONSULTANTS

Atten: Tom Fortner

Project: MINOR *Project#:* 1610
Received: March 23, 1995

re: 1 sample for Gasoline and BTEX analysis.

Matrix: WATER
Sampled: March 23, 1995 *Run#:* 5971 *Analyzed:* March 30, 1995
Method: EPA 5030/8015M/602/8020

Spl # CLIENT SMPL ID	Gasoline (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
82386 MW1	0.08	1.6	N.D.	N.D.	N.D.
Reporting Limits	0.05	0.5	0.5	0.5	0.5
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	114	92	98	98	105

Jack Kelly
Chemist

Ali Kharrazi
Organic Manager

QC JACK 13.19.11

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096

3648220

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9503362
CLIENT: ARTESIAN
DUE: 03/30/95
REF #:21152

21152

Chain of Custody

DATE 3/23/95 PAGE 1 of 1

PROJ. MGR Tom Fortner
COMPANY ARTESIAN ENV CONS.
ADDRESS 3100 Kerner Blvd
San Rafael CA

SAMPLERS (SIGNATURE) F.A.S.

(PHONE NO.) 415 257 4801
(FAX NO.) 257 4805

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			H010	NUMBER OF CONTAINERS
MW1	1107	3/23	H_2O	HCL		X																		2

PROJECT INFORMATION

PROJECT NAME: Minor
PROJECT NUMBER: 1610
P.O. #: 1060

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
Please Hold Sample after performing above analysis

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY
F.A.S. 1503 (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
Fred Smith 3/23/95 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
ARTESIAN (COMPANY)	(COMPANY)	(COMPANY)

RECEIVED BY 1.	RECEIVED BY 2.	RECEIVED BY (LABORATORY)
(SIGNATURE) 1607 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
R Morrow 3-23-95 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
Chromalab (COMPANY)	(COMPANY)	(LAB)

CHROMALAB, INC.

Environmental Services (SDB)

April 5, 1995 *Submission #:* 9503406

ARTESIAN ENV. CONSULTANTS

Atten: Tom Fortner

Project: MINOR *Project#:* 1610
Received: March 23, 1995

re: One sample for Volatile Halogenated Organics analysis.

Sample ID: **MW1**
Spl#: 82784 *Matrix:* WATER
Sampled: March 23, 1995 *Run#:* 6058 *Analyzed:* April 4, 1995
Method: EPA 8010

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE RESULT (%)
CHLOROMETHANE	N.D.	0.5	N.D.	--
VINYL CHLORIDE	N.D.	0.5	N.D.	--
BROMOMETHANE	N.D.	0.5	N.D.	--
CHLOROETHANE	N.D.	0.5	N.D.	--
TRICHLOROFLUOROMETHANE	N.D.	0.5	N.D.	--
1,1-DICHLOROETHENE	N.D.	0.5	N.D.	114
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--
TRANS-1,2-DICHLOROETHENE	12	0.5	N.D.	--
CIS-1,2-DICHLOROETHENE	36	2.5	N.D.	--
1,1-DICHLOROETHANE	N.D.	0.5	N.D.	--
CHLOROFORM	N.D.	0.5	N.D.	--
1,1,1-TRICHLOROETHANE	N.D.	0.5	N.D.	--
CARBON TETRACHLORIDE	N.D.	0.5	N.D.	--
1,2-DICHLOROETHANE	N.D.	0.5	N.D.	--
TRICHLOROETHENE	220	25	N.D.	81
1,2-DICHLOROPROPANE	N.D.	0.5	N.D.	--
BROMODICHLOROMETHANE	N.D.	0.5	N.D.	--
2-CHLOROETHYLVINYL ETHER	N.D.	0.5	N.D.	--
TRANS-1,3-DICHLOROPROPENE	N.D.	0.5	N.D.	--
CIS-1,3-DICHLOROPROPENE	N.D.	0.5	N.D.	--
1,1,2-TRICHLOROETHANE	N.D.	0.5	N.D.	--
TETRACHLOROETHENE	N.D.	0.5	N.D.	--
DIBROMOCHLOROMETHANE	N.D.	0.5	N.D.	--
CHLOROBENZENE	N.D.	0.5	N.D.	86
BROMOFORM	N.D.	0.5	N.D.	--
1,1,2,2-TETRACHLOROETHANE	N.D.	0.5	N.D.	--
1,3-DICHLOROBENZENE	N.D.	0.5	N.D.	--
1,4-DICHLOROBENZENE	N.D.	0.5	N.D.	--
1,2-DICHLOROBENZENE	N.D.	0.5	N.D.	--
TRICHLOROTRIFLUOROETHANE	N.D.	0.5	N.D.	--

Aaron McMichael
Chemist

Ali Kharrazi
Organic Manager

DCTEST AARON 09:12:16

CHROMALAB, INC.

ADD-ON CHANGE ORDER

Order No.: 21208

Original Submission Info

Client Name: ARTESIAN

Project Mgr.: TOM FORTNER

Project Name: MINOR

Project No.: 1610

Date Received: 3/23/95

Submission No.: 9503362

Name of Caller: TOM FORTNER

Call date: 3/28/95 Time:

ADD ON DUE DATE: 4/4/95 Date Sampled: 3/23/95

Comments: PLEASE HOLD SAMPLE AFTER PERFORMING ANALYSIS by MC

☐ FAX TO FOLLOW

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	ANALYSIS REPORT: TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/625, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			NUMBER OF CONTAINERS
MW1									X															2