Environmental
Science &
Engineering, Inc.
A CILCORP Company

TO: Alameda County Health Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

DATE: December 2, 1993

ATTN: Juliet Shin

JOB NUMBER: 6-92-5405

SUBJECT: USDA, Albany

WE ARE TRANSMITTING THE FOLLOWING:

Third Quarter 1993 Ground Water Monitoring Report.

On behalf of USDA, we request written site closure and permission to abandon the three ground water monitoring wells at the site.

CC: Larry Soto, Alameda County Health Agency
Regional Water Quality Control Board, San Francisco
Gary Flemming, USDA

DIST:
LB
FILE
ORIGINATOR

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

BY Sue W. Wickham

Susan S. Wickham
Senior Geologist

4090 Nelson Avenue, Suite J Concord, CA 94520 Phone (510) 685-4053 Fax (510) 685-5323

GROUND WATER MONITORING REPORT
THIRD QUARTER 1993
UNITED STATES DEPARTMENT OF AGRICULTURE
WESTERN REGIONAL RESEARCH CENTER
ALBANY, CALIFORNIA

(ESE PROJECT #6-92-5405.0006)

SUBMITTED TO:

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH CENTER
PACIFIC WEST AREA
800 BUCHANAN STREET
ALBANY, CALIFORNIA 94710

PREPARED BY:

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
4090 NELSON AVENUE, SUITE J
CONCORD, CALIFORNIA 94520
(510) 685-4053

OCTOBER 6, 1993

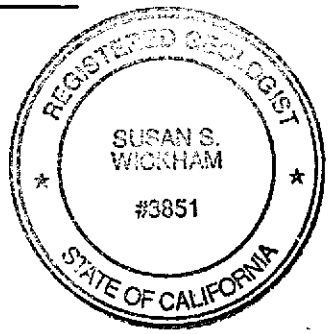
This report has been prepared by Environmental Science & Engineering, Inc. for the exclusive use of the United States Department of Agriculture as it pertains to their Western Regional Research Center located at 800 Buchanan Street in Albany, California. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists and engineers practicing in this field. No other warranty, express or implied, is made as to professional advice in this report.

REPORT PREPARED BY:

Susan S. Wickham

Susan S. Wickham, R.G. 3851
Senior Geologist

Dec 2, 1993
DATE

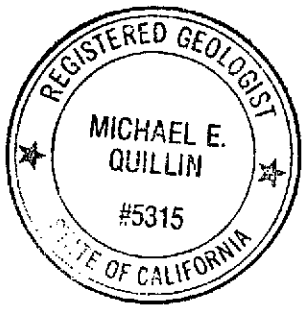


REVIEWED BY:

Michael E. Quillin

Michael E. Quillin, R.G. No. 5315
Senior Hydrogeologist

DECEMBER 2, 1993
DATE



ESE PROJECT NO. 6-92-5405

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1.0 INTRODUCTION

This report presents the findings of Third Quarter 1993 ground water monitoring conducted by Environmental Science & Engineering, Inc. (ESE) at the United States Department of Agriculture (USDA) Western Regional Research Center (site) located at 800 Buchanan Street in Albany, California (Figure 1 - Location Map). Ground water monitoring was conducted at the site in association with the environmental site closure process, as requested by the Alameda County Health Care Services Agency (ACHCSA), and is follow-up to the findings of a preliminary soil and ground water investigation conducted at the site by ESE (ESE, 1992).

This monitoring event represents the fourth of four quarters of ground water monitoring associated with this investigation. The purpose of this ground water monitoring event was to confirm previous ESE findings that no detectable concentrations of volatile organic compounds occur in ground water near former solvent extraction facilities and associated underground solvent storage tanks at the site. The following report presents the procedures and methods used during this monitoring event, and the results and conclusions drawn from the monitoring.

1.1 SCOPE OF WORK

To complete the objectives for this ground water monitoring event, ESE performed the following tasks:

- Collected ground water level measurements from each monitoring well (MW-1 through MW-3; Figure 2 - Site Map);
- Collected ground water samples from each monitoring well;
- Analyzed all ground water samples for Halogenated Volatile Organic Compounds (HVOCs); and
- Evaluated all field and analytical data associated with the ground water monitoring event and prepared this report of findings.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

The 16-acre site is located on Buchanan Street, immediately east of Interstate 80, in Albany, California (Figure 1) and occupies a low relief area adjacent to San Francisco Bay. Original development of the site was initiated during 1939 and additional construction occurred during the mid-1960's. Site structures include the Main Laboratory which is comprised of an administration wing, a chemical laboratory wing, and an industrial laboratory wing; the West Annex and woodshop building; the word processing building; the service building; a complex of five greenhouses, two solvent extraction facilities (SEFs), numerous small sheds and enclosures, and a main parking lot. Site layout near the SEFs, which are the primary focus of this investigation, is detailed in Figure 2 - Site Map. SEF #1 is no longer active and the building is currently used for bulk materials storage. SEF #2 is still active.

2.2 SITE HISTORY

Site investigation pertinent to the current work commenced during December 1990 when five underground storage tanks (USTs) were excavated and removed. Former UST locations are shown in Figure 2. The USTs are as follows: two 550-gallon solvent USTs immediately east of SEF #1 (USTs 1 and 2; Figure 2), one 1,000-gallon solvent UST immediately west of SEF #1 (UST 3; Figure 2), one 200-gallon solvent UST immediately west of SEF #2 (UST 4; Figure 2), and one 550-gallon gasoline UST near the west main entrance to the site from Buchanan Street (UST 5; Figure 2). A total of five soil samples (one sidewall sample from each excavation) and two ground water samples (one each from the 1,000-gallon and 200-gallon UST excavations) were collected and submitted for chemical analysis. Soil and ground water samples collected from the solvent UST excavations were analyzed for HVOCs using EPA Method 8010 and for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) using EPA Method 8020. The soil sample collected from the gasoline UST excavation was analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G) and for BTEX using EPA Method 8015/8020.

Analytical results for soil samples collected from the excavations for USTs 1 and 2 indicated detectable concentrations of chloroform at 1,200 and 1,400 micrograms per kilogram (µg/Kg) or parts per billion (ppb), respectively. The soil sample collected from the excavation for UST 3 reported no detectable concentrations of HVOCs or BTEX; however, the ground water sample collected from the excavation reported concentrations of Methylene Chloride and Chloroform at 11 and 12 micrograms per liter (µg/L), or ppb, respectively. The soil sample collected from the excavation for UST 4 reported detectable concentrations of Methylene Chloride and Chloroform at 12 and 6.6 µg/Kg, respectively, and the ground water sample collected from the excavation contained Methylene Chloride and Chloroform concentrations of 480 and 360 µg/L, respectively. The soil sample collected from the excavation for UST 5 reported no detectable concentrations of TPH-G or BTEX.

During September 1992, ESE sampled three soil borings to a depth of 20 feet below ground surface (bgs) adjacent to the excavations formerly occupied by the solvent USTs at the site (ESE, 1992). Two-inch diameter ground water monitoring wells were installed in the three soil borings and subsequently developed, purged, and sampled. All soil and ground water samples collected by ESE were found not to contain detectable concentrations of HVOCs.

Three quarters of ground water monitoring were completed at the site between September 1992 and July 1993. No detectable HVOC's were present in any ground water samples during these three previous monitoring events.

3.0 PROCEDURES

3.1 GROUND WATER LEVEL MONITORING

On September 13, 1993, ESE measured the depth to ground water in monitoring wells MW-1 through MW-3 with respect to the surveyed top of casing for each well. The water level measurements were collected using an electric tape. Depth to water measurements were converted to elevations relative to mean sea level for the purpose of estimating the direction and magnitude of ground water flow beneath the site.

3.2 GROUND WATER SAMPLING

On September 13, 1993, ESE collected ground water samples from wells MW-1 through MW-3. A minimum of three well casing volumes of ground water were purged from each well prior to collection of the ground water samples. During the well purging process the pH, conductivity, and temperature of the ground water were periodically monitored for stabilization to ensure the collection of samples representative of the aquifer surrounding each well. Ground water was purged from the wells using a variable flow-rate submersible pump. The submersible pump was cleaned following use in each well using an Alconox® soap and tap water cleaning solution followed by a tap water rinse. Ground water sampling data forms with recorded measurements of pH, conductivity and temperature of the purged water from each well are included as Appendix A - Ground Water Sampling Data Forms. All purged ground water and equipment rinse solutions were contained on site in Department of Transportation (DOT) approved 55-gallon drums pending receipt of analytical results and proper disposal or recycling.

Ground water samples were obtained from wells MW-1 through MW-3 with a dedicated disposable polyethylene bailer in each well. Ground water was then decanted from the bailers into laboratory supplied 40-milliliter glass vials containing hydrochloric acid (a preservative). Three vials were collected for each well. The sample vials were then sealed with a Teflon lined cap, labeled, placed under ice in a cooler and transported under

appropriate chain of custody to National Environmental Testing, Inc. (NET) of Santa Rosa, California, a State-certified analytical laboratory. A duplicate sample, collected from well MW-2, was also transported to NET with the other samples. The duplicate sample provides a Quality Assurance/Quality Control (QA/QC) check on ESE sample and laboratory handling procedures. A travel blank sample, consisting of deionized water in a 40-milliliter glass vial, was prepared by ESE and included to provide a QA/QC check on transport and laboratory handling procedures.

All samples were analyzed for HVOCs using EPA Method 601.

4.2 GROUND WATER SAMPLES

Laboratory analytical reports with chain of custody documentation are presented as Appendix B - Laboratory Analytical Report: Ground Water Samples. No HVOCs were detected in the ground water samples collected from monitoring wells MW-1, MW-2, and MW-3. The duplicate sample collected from well MW-2 did not contain detectable HVOCs. The laboratory-supplied trip blank did not to contain detectable concentrations of analytes.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- This ground water monitoring event is the fourth of four quarterly events requested by the ACHCSA for consideration to provide environmental closure of the site.

- On September 13, 1993, ground water was found at a depth of 7.69 to 10.81 feet bgs at the site. Based on ground water elevations, the direction of ground water flow beneath the site was found to be generally to the west-southwest. This reported ground water flow direction is generally consistent with past findings and with expected regional ground water flow.

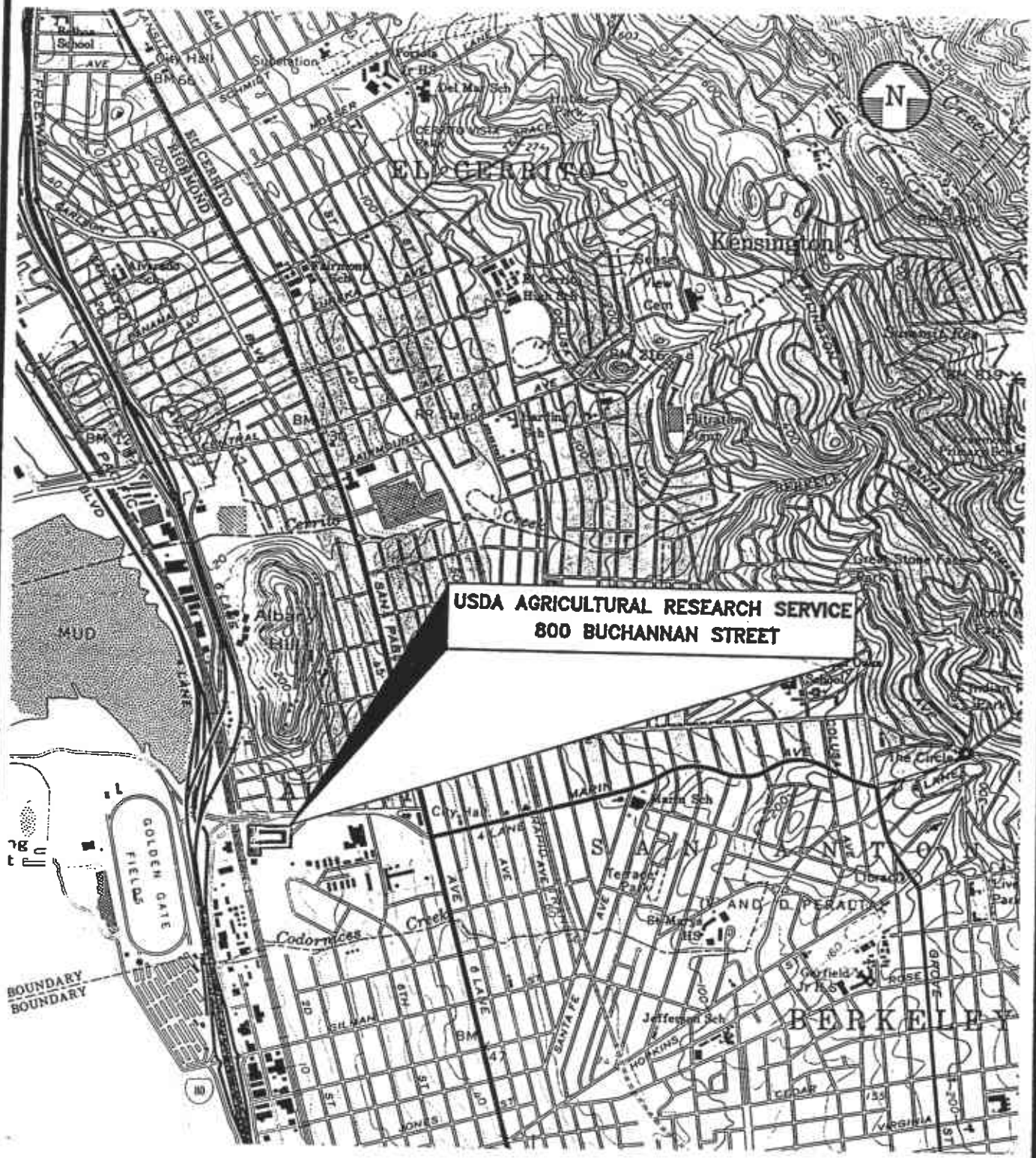
- No HVOCs were detected in ground water samples collected by ESE on September 13, 1993. These findings verify that no analytes of concern are present in the ground water within analytical detection limits.

- ESE recommends that ACHDSA provide written site closure to the USDA based on the findings of the last four quarters of ground water monitoring at the site revealing nondetectable concentrations of analytes, and on the preliminary site assessment results revealing nondetectable concentrations of HVOC's in the soil surrounding the former underground tank site.

- ESE also recommends that upon site closure, the ground water monitoring wells MW-1, MW-2, and MW-3 be abandoned in accordance with California Department of Water Resource and ACHDSA guidelines in order to prevent future liabilities.

6.0 REFERENCES

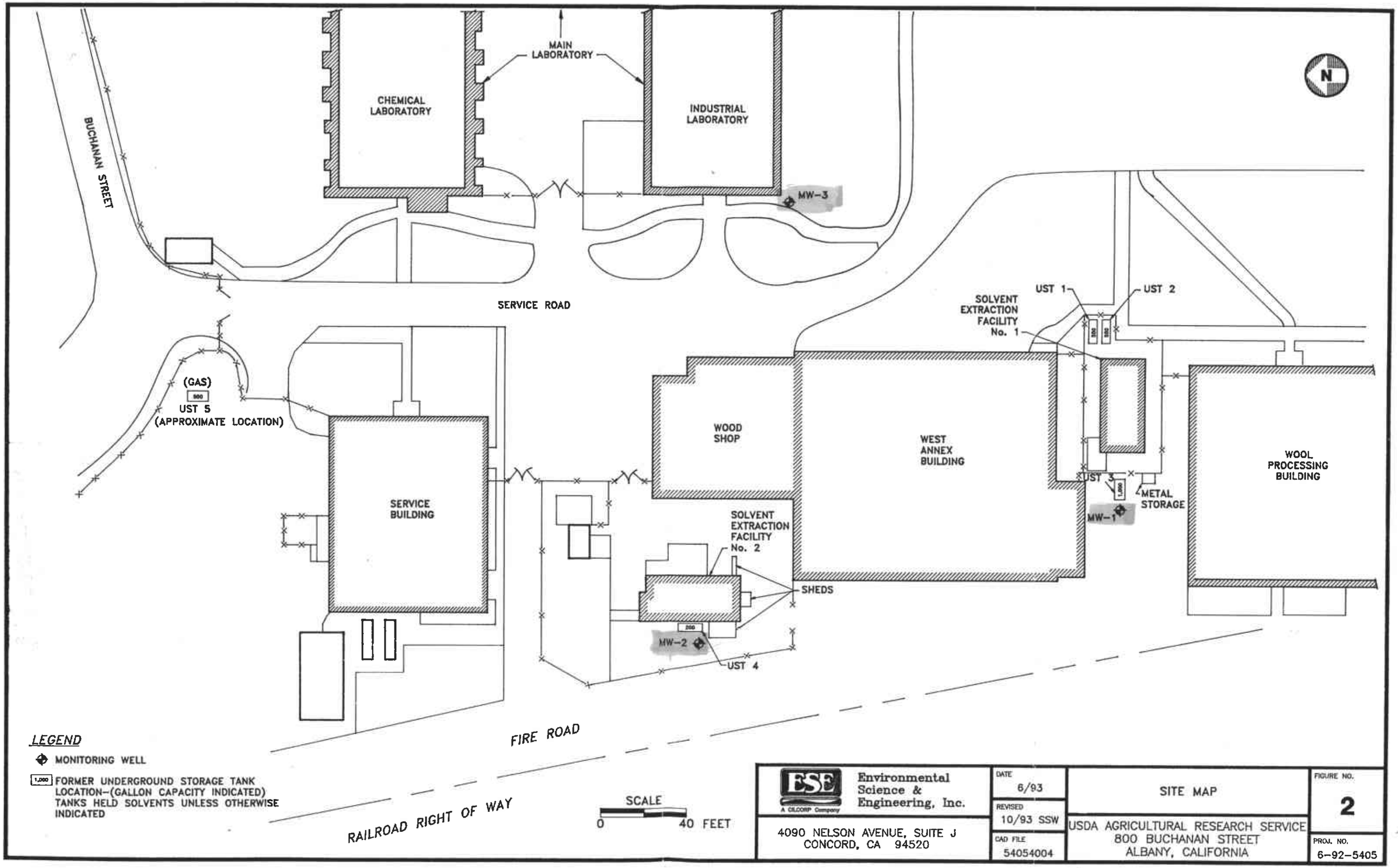
Environmental Science and Engineering, Inc., (1992). Report on Soil and Ground Water Investigation; December 3 1992.



SCALE 1:24000

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

ESE A CH2M HILL Company Environmental Science & Engineering, Inc.	DATE 8/92	PROJ. NO. 6-92-5405	USDA AGRICULTRURAL RESEARCH SERVICE 800 BUCHANAN STREET ALBANY, CALIFORNIA
	DRAWN BY DWR	CAD FILE 54051001	
4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	APPROVED BY	REVISED 6/93 CVS	FIGURE 1 LOCATION MAP

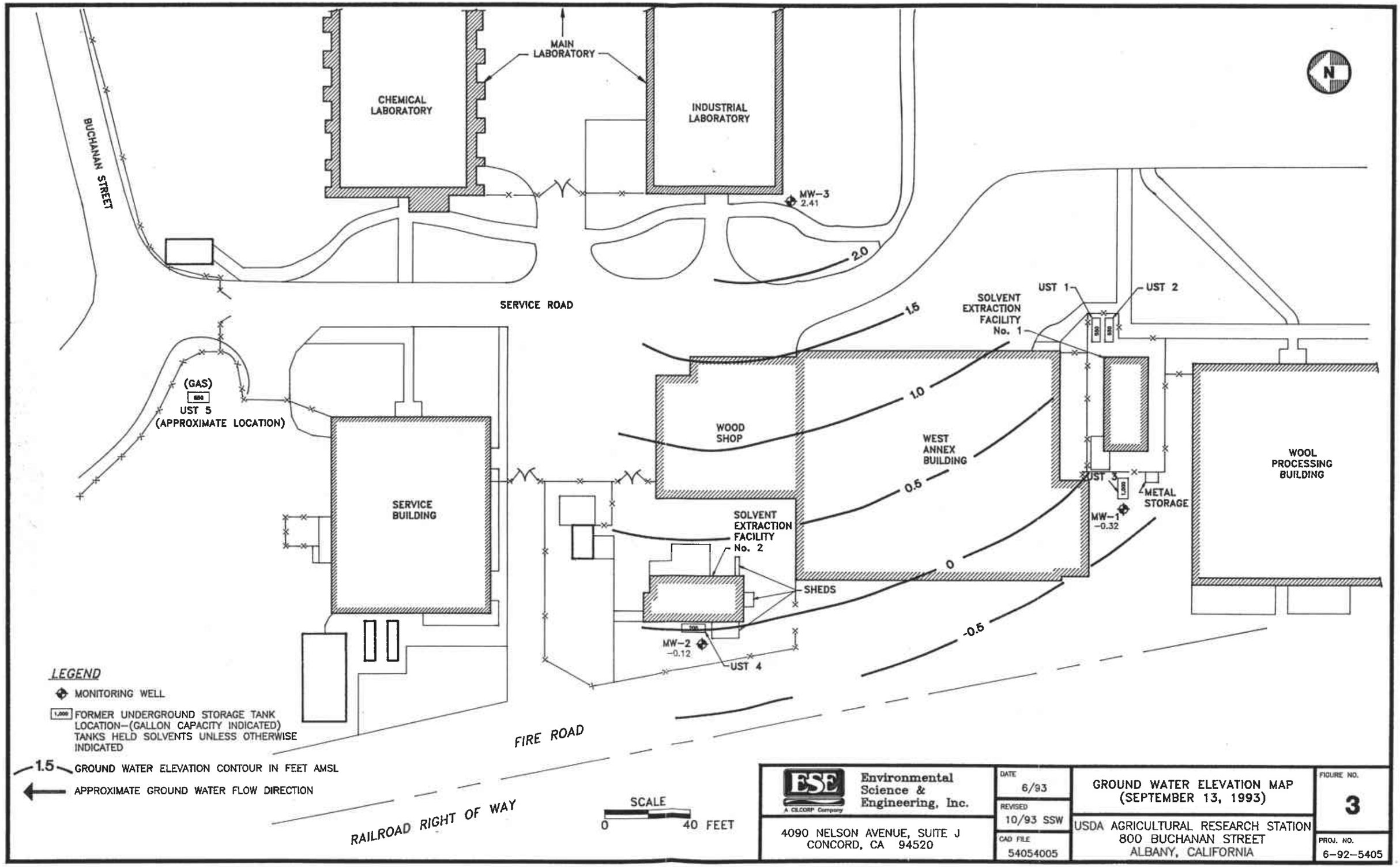


LEGEND

◆ MONITORING WELL

1,000 FORMER UNDERGROUND STORAGE TANK LOCATION–(GALLON CAPACITY INDICATED) TANKS HELD SOLVENTS UNLESS OTHERWISE INDICATED

ESE Environmental Science & Engineering, Inc. (A CILCORP Company) 4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	DATE 6/93 REVISED 10/93 SSW CAD FILE 54054004	SITE MAP USDA AGRICULTURAL RESEARCH SERVICE 800 BUCHANAN STREET ALBANY, CALIFORNIA	FIGURE NO. 2 PROJ. NO. 6-92-5405



ESE Environmental Science & Engineering, Inc.
A CILCORP Company
4090 NELSON AVENUE, SUITE J
CONCORD, CA 94520

DATE 6/93
REVISED 10/93 SSW
CAD FILE 54054005

GROUND WATER ELEVATION MAP
(SEPTEMBER 13, 1993)

USDA AGRICULTURAL RESEARCH STATION
800 BUCHANAN STREET
ALBANY, CALIFORNIA

FIGURE NO. 3

PROJ. NO. 6-92-5405

APPENDIX A

GROUND WATER SAMPLING DATA FORMS

Environmental Science & Engineering, Inc.
A CH2M HILL Company

SAMPLE COLLECTION LOG

PROJECT NAME: USDA - ALBANY
PROJECT NO.: 6-92-5405
DATE: SEPT. 13, 1993

SAMPLE LOCATION I.D.: MW-1
SAMPLER: CHRIS VALCHEFF
PROJECT MANAGER: BART MILLER

CASING DIAMETER

2" X
4"
Other

SAMPLE TYPE

Ground Water X
Surface Water
Treat. Influent
Treat. Effluent
Other

WELL VOLUMES PER UNIT

Well Casing I.D. (inches)	Gal/Ft.
2.0	0.1632
4.0	0.6528
6.0	1.4690

DEPTH TO PRODUCT: — (ft.)
DEPTH TO WATER: 7.74 (ft.)
DEPTH OF WELL: 19.04 (ft.)

PRODUCT THICKNESS: — (ft.)
WATER COLUMN: 11.30 (ft.)
WELL CASING VOLUME: 1.84 (gal)

MINIMUM PURGE VOLUME (3 or 4 WCV): 5.53 (gal)
ACTUAL VOLUME PURGED: 6.0 (gal)

TIME	Volume (GAL)	pH (Units)	E.C. (x1000 Micromhos)	Temperature (F°)	Turbid. (NTU)	Other
1230	0	6.16	0.18	68.7	—	CLEAR
1239	2.0	6.16	0.11	71.0	—	"
1245	4.0	6.08	0.11	72.5	—	"
1252	6.0	5.98	0.10	73.7	—	"

INSTRUMENT CALIBRATION

pH/COND./TEMP.: TYPE HYDAC UNIT# 9010 DATE: 9-13-93 TIME: 1000 BY: CHV
TURBIDITY: TYPE ____ UNIT# ____ DATE: ____ TIME: ____ BY: ____

PURGE METHOD

___Displacement Pump ___Other
___Bailer (Teflon/PVC/SS) X Submersible Pump

SAMPLE METHOD

___Bailer (Teflon/PVC/SS) ___Dedicated
X Bailer (Disposable) ___Other

SAMPLES COLLECTED

	ID	TIME	DATE	LAB	ANALYSES
SAMPLE	MW-1	1305	9-13-93	NET	8010
DUPLICATE					
SPLIT					
FIELD BLANK					

COMMENTS: ____

SAMPLER: Chris Valcheff PROJECT MANAGER S. Wahlen

Environmental Science & Engineering, Inc.

A CILCORP Company

SAMPLE COLLECTION LOG

PROJECT NAME: USDA - ALBANY
PROJECT NO.: 6-92-5405
DATE: SEPT. 13, 1993

SAMPLE LOCATION I.D.: MW-2
SAMPLER: CHRIS VALCHEFF
PROJECT MANAGER: BART MILLER

CASING DIAMETER

2" X
4"
Other

SAMPLE TYPE

Ground Water X
Surface Water
Treat. Influent
Treat. Effluent
Other

WELL VOLUMES PER UNIT

Well Casing I.D. (inches)	Gal/Ft.
2.0	0.1632
4.0	0.6528
6.0	1.4690

DEPTH TO PRODUCT: — (ft.)
DEPTH TO WATER: 7.69 (ft.)
DEPTH OF WELL: 19.67 (ft.)

PRODUCT THICKNESS: — (ft.)
WATER COLUMN: 11.98 (ft.)
WELL CASING VOLUME: 1.96 (gal)

MINIMUM PURGE VOLUME (3 or 4 WCV): 5.87 (gal)
ACTUAL VOLUME PURGED: 8.0 (gal)

TIME	Volume (GAL)	pH (Units)	E.C. x1000 (Micromhos)	Temperature (F°)	Turbid. (NTU)	Other
1128	0	6.57	0.17	64.4	—	CLEAR
1130	2.5	6.18	0.57	69.5	—	"
1136	5.0	5.99	0.62	73.4	—	"
1144	8.0	5.84	0.61	73.7	—	"

INSTRUMENT CALIBRATION

pH/COND./TEMP.: TYPE H40AC UNIT# 9010 DATE: 9-13-93 TIME: 1000 BY: CHV
TURBIDITY: TYPE ____ UNIT# ____ DATE: ____ TIME: ____ BY: ____

PURGE METHOD

___Displacement Pump
___Bailer (Teflon/PVC/SS)
___Other
X Submersible Pump

SAMPLE METHOD

___Bailer (Teflon/PVC/SS)
X Bailer (Disposable)
___Dedicated
___Other

SAMPLES COLLECTED

	ID	TIME	DATE	LAB	ANALYSES
SAMPLE	MW-2	1200	9-13-93	NET	8010
DUPLICATE	DUP	1200	9-13-93	NET	8010
SPLIT					
FIELD BLANK					

COMMENTS: ____

SAMPLER: Chr. Valch PROJECT MANAGER S. Mosher

Environmental Science & Engineering, Inc.
A CILCORP Company

SAMPLE COLLECTION LOG

PROJECT NAME: USDA - ALBANY
PROJECT NO.: 6-92-5405
DATE: SEPT. 13, 1993

SAMPLE LOCATION I.D.: MW-3
SAMPLER: CHRIS VALCHEFF
PROJECT MANAGER: BART MILLER

CASING DIAMETER

2" X
4" ____
Other ____

SAMPLE TYPE

Ground Water X
Surface Water ____
Treat. Influent ____
Treat. Effluent ____
Other ____

WELL VOLUMES PER UNIT

Well Casing I.D. (inches)	Gal/Ft.
2.0	0.1632
4.0	0.6528
6.0	1.4690

DEPTH TO PRODUCT: — (ft.)
DEPTH TO WATER: 10.81 (ft.)
DEPTH OF WELL: 22.17 (ft.)

PRODUCT THICKNESS: — (ft.)
WATER COLUMN: 11.36 (ft.)
WELL CASING VOLUME: 1.85 (gal)

MINIMUM PURGE VOLUME (3) or 4 WCV): 5.56 (gal)
ACTUAL VOLUME PURGED: 8.00 (gal)

TIME	Volume (GAL)	pH (Units)	E.C. X1000 (Micromhos)	Temperature (F°)	Turbid. (NTU)	Other
1028	0	7.05	0.68	68.6	—	BROWN/SILT
1033	2.5	7.22	0.49	68.3	—	CLEAR
1036	4.0	7.15	0.46	68.8	—	"
1041	6.0	6.93	0.46	67.8	—	"

INSTRUMENT CALIBRATION

pH/COND./TEMP.: TYPE HYDAC UNIT# 9010 DATE: 9-13-93 TIME: 1000 BY: CHV
TURBIDITY: TYPE ____ UNIT# ____ DATE: ____ TIME: ____ BY: ____

PURGE METHOD

___Displacement Pump ___Other
___Bailer (Teflon/PVC/SS) X Submersible Pump

SAMPLE METHOD

___Bailer (Teflon/PVC/SS) ___Dedicated
X Bailer (Disposable) ___Other

SAMPLES COLLECTED

	ID	TIME	DATE	LAB	ANALYSES
SAMPLE	MW-3	1100	9-13-93	NET	8010
DUPLICATE					
SPLIT					
FIELD BLANK					

COMMENTS: ____

SAMPLER: Chris Valcheff PROJECT MANAGER S. Wright

APPENDIX B

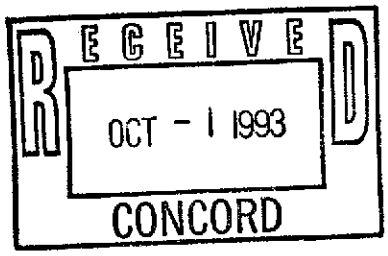
LABORATORY ANALYTICAL REPORT: GROUND WATER SAMPLES

NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Bart Miller
Env. Science & Engineering
4090 Nelson Ave., Suite J
Concord, CA 94520

Date: 09/30/1993
NET Client Acct. No: 69100
NET Pacific Job No: 93.04000
Received: 09/14/1993



Client Reference Information

USDA-Albany, Project: 6-92-5405

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: USDA-Albany, Project: 6-92-5405

SAMPLE DESCRIPTION: MW-3
Date Taken: 09/13/1993
Time Taken: 11:00
NET Sample No: 173451

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						09/16/1993
Bromodichloromethane	ND		0.4	ug/L	8010		09/16/1993
Bromoform	ND		0.4	ug/L	8010		09/16/1993
Bromomethane	ND		0.4	ug/L	8010		09/16/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		09/16/1993
Chlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Chloroethane	ND		0.4	ug/L	8010		09/16/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		09/16/1993
Chloroform	ND		0.4	ug/L	8010		09/16/1993
Chloromethane	ND		0.4	ug/L	8010		09/16/1993
Dibromochloromethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		09/16/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
Methylene chloride	ND		10	ug/L	8010		09/16/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		09/16/1993
Tetrachloroethene	ND		0.4	ug/L	8010		09/16/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		09/16/1993
Trichloroethene	ND		0.4	ug/L	8010		09/16/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		09/16/1993
Vinyl chloride	ND		0.4	ug/L	8010		09/16/1993
SURROGATE RESULTS	--						09/16/1993
Bromochloropropane (SURR)	101			% Rec.			09/16/1993

Ref: USDA-Albany, Project: 6-92-5405

SAMPLE DESCRIPTION: MW-2
Date Taken: 09/13/1993
Time Taken: 12:00
NET Sample No: 173452

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						09/16/1993
Bromodichloromethane	ND		0.4	ug/L	8010		09/16/1993
Bromoform	ND		0.4	ug/L	8010		09/16/1993
Bromomethane	ND		0.4	ug/L	8010		09/16/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		09/16/1993
Chlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Chloroethane	ND		0.4	ug/L	8010		09/16/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		09/16/1993
Chloroform	ND		0.4	ug/L	8010		09/16/1993
Chloromethane	ND		0.4	ug/L	8010		09/16/1993
Dibromochloromethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		09/16/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
Methylene chloride	ND		10	ug/L	8010		09/16/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		09/16/1993
Tetrachloroethene	ND		0.4	ug/L	8010		09/16/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		09/16/1993
Trichloroethene	ND		0.4	ug/L	8010		09/16/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		09/16/1993
Vinyl chloride	ND		0.4	ug/L	8010		09/16/1993
SURROGATE RESULTS	--						09/16/1993
Bromochloropropane (SURR)	112			% Rec.			09/16/1993

Ref: USDA-Albany, Project: 6-92-5405

SAMPLE DESCRIPTION: MW-1
Date Taken: 09/13/1993
Time Taken: 13:05
NET Sample No: 173453

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						09/16/1993
Bromodichloromethane	ND		0.4	ug/L	8010		09/16/1993
Bromoform	ND		0.4	ug/L	8010		09/16/1993
Bromomethane	ND		0.4	ug/L	8010		09/16/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		09/16/1993
Chlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Chloroethane	ND		0.4	ug/L	8010		09/16/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		09/16/1993
Chloroform	ND		0.4	ug/L	8010		09/16/1993
Chloromethane	ND		0.4	ug/L	8010		09/16/1993
Dibromochloromethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		09/16/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
Methylene chloride	ND		10	ug/L	8010		09/16/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		09/16/1993
Tetrachloroethene	ND		0.4	ug/L	8010		09/16/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		09/16/1993
Trichloroethene	ND		0.4	ug/L	8010		09/16/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		09/16/1993
Vinyl chloride	ND		0.4	ug/L	8010		09/16/1993
SURROGATE RESULTS	--						09/16/1993
Bromochloropropane (SURR)	106			% Rec.			09/16/1993

Ref: USDA-Albany, Project: 6-92-5405

SAMPLE DESCRIPTION: DUP
Date Taken: 09/13/1993
Time Taken: 12:00
NET Sample No: 173454

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						09/16/1993
Bromodichloromethane	ND		0.4	ug/L	8010		09/16/1993
Bromoform	ND		0.4	ug/L	8010		09/16/1993
Bromomethane	ND		0.4	ug/L	8010		09/16/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		09/16/1993
Chlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Chloroethane	ND		0.4	ug/L	8010		09/16/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		09/16/1993
Chloroform	ND		0.4	ug/L	8010		09/16/1993
Chloromethane	ND		0.4	ug/L	8010		09/16/1993
Dibromochloromethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		09/16/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
Methylene chloride	ND		10	ug/L	8010		09/16/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		09/16/1993
Tetrachloroethene	ND		0.4	ug/L	8010		09/16/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		09/16/1993
Trichloroethene	ND		0.4	ug/L	8010		09/16/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		09/16/1993
Vinyl chloride	ND		0.4	ug/L	8010		09/16/1993
SURROGATE RESULTS	--						09/16/1993
Bromochloropropane (SURR)	105			% Rec.			09/16/1993

Ref: USDA-Albany, Project: 6-92-5405

SAMPLE DESCRIPTION: Trip
Date Taken: 09/13/1993
Time Taken:
NET Sample No: 173455

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						09/16/1993
Bromodichloromethane	ND		0.4	ug/L	8010		09/16/1993
Bromoform	ND		0.4	ug/L	8010		09/16/1993
Bromomethane	ND		0.4	ug/L	8010		09/16/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		09/16/1993
Chlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Chloroethane	ND		0.4	ug/L	8010		09/16/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		09/16/1993
Chloroform	ND		0.4	ug/L	8010		09/16/1993
Chloromethane	ND		0.4	ug/L	8010		09/16/1993
Dibromochloromethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		09/16/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		09/16/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		09/16/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		09/16/1993
Methylene chloride	ND		10	ug/L	8010		09/16/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		09/16/1993
Tetrachloroethene	ND		0.4	ug/L	8010		09/16/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		09/16/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		09/16/1993
Trichloroethene	ND		0.4	ug/L	8010		09/16/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		09/16/1993
Vinyl chloride	ND		0.4	ug/L	8010		09/16/1993
SURROGATE RESULTS	--						09/16/1993
Bromochloropropane (SURR)	94			% Rec.			09/16/1993

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. Actual reporting limits and results have been multiplied by the listed dilution factor. **Do not** multiply the reporting limits or reported values by the dilution factor.
dw	:	Result expressed as dry weight.
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than the applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, Rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, Rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986., Rev. 1, December 1987.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Revised September, 1993
abb.93

5016

CHAIN OF CUSTODY RECORD

DATE 9-13-93 PAGE 1 OF 1

PROJECT NAME USDA - ALBANY

ADDRESS ALBANY, CA

PROJECT NO. 6-92-5405

SAMPLED BY CHRIS VALCHEFF

LAB NAME NET

Environmental Science & Engineering, Inc.
A GILCORP Company
4090 Nelson Avenue
Suite J
Concord, CA 94520
Phone (510) 685-4053
Fax (510) 685-5323

SAMPLE #	DATE	TIME	LOCATION	ANALYSES TO BE PERFORMED: HVOC's (EPA 8010)	MATRIX	NUMBER OF CONTAINERS	REMARKS (CONTAINER, SIZE, ETC.)
MW-3	9-13-93	1100	ALBANY	X	H_2O	3	VOAs - No Preserv.
MW-2	↓	1200	↓	X	↓	3	↓
MW-1		1305		X		3	
DUP		1200		X		3	
TRIP				X		2	

CUSTODY SEALED 9-13-93 16:00 @ P.K. Lumbre Seal intact

RELINQUISHED BY: (signature)	RECEIVED BY: (signature)	date	time
1.		9-13-93	14:40
2.	P.K. Lumbre	9-13-93	1450
3. P.K. Lumbre	(with NES)	9/13/93	16:00
4.		9/14/93	0800
5.			

14 TOTAL NUMBER OF CONTAINERS

REPORT RESULTS TO: BART MILLER ESE

SPECIAL SHIPMENT REQUIREMENTS: COLD TRANSPORT

INSTRUCTIONS TO LABORATORY (handling, analyses, storage, etc.):
NO PRESERVATIVE. NORMAL TAT.

SAMPLE RECEIPT

CHAIN OF CUSTODY SEALS	
REC'D GOOD CONDTN/COLD	
CONFORMS TO RECORD	

NATIONAL ENVIRONMENTAL TESTING, INC.

Portland Division
17400 SW Upper Boones Ferry Rd.
Suite #260
Portland, OR 97224
Tel: (503) 624-5449
Fax: (503) 639-6889

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

Date: 09/20/1993
NET Account No.: 18500
NET Job Number: 93.00984

Project: 93.04000/69100
Location:

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
18288	93.04000-173451	GROUND WATER	09/13/1993	09/15/1993
18289	93.04000-173452	GROUND WATER	09/13/1993	09/15/1993
18290	93.04000-173453	GROUND WATER	09/13/1993	09/15/1993
18291	93.04000-173454	GROUND WATER	09/13/1993	09/15/1993
18292	93.04000-173455	GROUND WATER	09/13/1993	09/15/1993

Approved by:

Marty French
NET, INC. Division Manager

ANALYTICAL REPORT

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

09/20/1993
Job No.: 93.00984

Project Name: 93.04000/69100
Date Received: 09/15/1993

E

Sample Number	Sample Description
18288	93.04000-173451

PARAMETERS	METHODS	RESULTS		DATE ANALYZED
8010 HALOGENATED VOC (W)				
Dilution Factor		1		09/16/1993
Chloromethane	8010	<0.5	ug/L	09/16/1993
Bromomethane	8010	<0.5	ug/L	09/16/1993
Vinyl chloride	8010	<2.0	ug/L	09/16/1993
Chloroethane	8010	<0.5	ug/L	09/16/1993
Methylene chloride	8010	<10	ug/L	09/16/1993
Trichlorofluoromethane	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethene	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethane	8010	<0.5	ug/L	09/16/1993
trans-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
cis-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
Chloroform	8010	<0.5	ug/L	09/16/1993
1,2-Dichloroethane	8010	<0.5	ug/L	09/16/1993
1,1,1-Trichloroethane	8010	<0.5	ug/L	09/16/1993
Carbon Tetrachloride	8010	<0.5	ug/L	09/16/1993
Bromodichloromethane	8010	<0.5	ug/L	09/16/1993
1,2-Dichloropropane	8010	<0.5	ug/L	09/16/1993
trans-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
Trichloroethene	8010	<0.5	ug/L	09/16/1993
Dibromochloromethane	8010	<0.5	ug/L	09/16/1993
1,1,2-Trichloroethane	8010	<0.5	ug/L	09/16/1993
cis-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
2-Chloroethylvinyl ether	8010	<1.0	ug/L	09/16/1993
Bromoform	8010	<0.5	ug/L	09/16/1993
1,1,2,2-Tetrachloroethane	8010	<0.5	ug/L	09/16/1993
Tetrachloroethene	8010	<0.5	ug/L	09/16/1993
Chlorobenzene	8010	<0.5	ug/L	09/16/1993
1,3-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,2-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,4-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993

ANALYTICAL REPORT

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

09/20/1993
Job No.: 93.00984

Project Name: 93.04000/69100
Date Received: 09/15/1993

Sample Number	Sample Description
18289	93.04000-173452

PARAMETERS	METHODS	RESULTS		DATE ANALYZED
8010 HALOGENATED VOC (W)				
Dilution Factor		1		09/16/1993
Chloromethane	8010	<0.5	ug/L	09/16/1993
Bromomethane	8010	<0.5	ug/L	09/16/1993
Vinyl chloride	8010	<2.0	ug/L	09/16/1993
Chloroethane	8010	<0.5	ug/L	09/16/1993
Methylene chloride	8010	<10	ug/L	09/16/1993
Trichlorofluoromethane	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethene	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethane	8010	<0.5	ug/L	09/16/1993
trans-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
cis-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
Chloroform	8010	<0.5	ug/L	09/16/1993
1,2-Dichloroethane	8010	<0.5	ug/L	09/16/1993
1,1,1-Trichloroethane	8010	<0.5	ug/L	09/16/1993
Carbon Tetrachloride	8010	<0.5	ug/L	09/16/1993
Bromodichloromethane	8010	<0.5	ug/L	09/16/1993
1,2-Dichloropropane	8010	<0.5	ug/L	09/16/1993
trans-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
Trichloroethene	8010	<0.5	ug/L	09/16/1993
Dibromochloromethane	8010	<0.5	ug/L	09/16/1993
1,1,2-Trichloroethane	8010	<0.5	ug/L	09/16/1993
cis-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
2-Chloroethylvinyl ether	8010	<1.0	ug/L	09/16/1993
Bromoform	8010	<0.5	ug/L	09/16/1993
1,1,2,2-Tetrachloroethane	8010	<0.5	ug/L	09/16/1993
Tetrachloroethene	8010	<0.5	ug/L	09/16/1993
Chlorobenzene	8010	<0.5	ug/L	09/16/1993
1,3-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,2-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,4-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993

ANALYTICAL REPORT

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

09/20/1993
Job No.: 93.00984

Project Name: 93.04000/69100
Date Received: 09/15/1993

Sample Number	Sample Description
18290	93.04000-173453

PARAMETERS	METHODS	RESULTS		DATE ANALYZED
8010 HALOGENATED VOC (W)				
Dilution Factor		1		09/16/1993
Chloromethane	8010	<0.5	ug/L	09/16/1993
Bromomethane	8010	<0.5	ug/L	09/16/1993
Vinyl chloride	8010	<2.0	ug/L	09/16/1993
Chloroethane	8010	<0.5	ug/L	09/16/1993
Methylene chloride	8010	<10	ug/L	09/16/1993
Trichlorofluoromethane	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethene	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethane	8010	<0.5	ug/L	09/16/1993
trans-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
cis-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
Chloroform	8010	<0.5	ug/L	09/16/1993
1,2-Dichloroethane	8010	<0.5	ug/L	09/16/1993
1,1,1-Trichloroethane	8010	<0.5	ug/L	09/16/1993
Carbon Tetrachloride	8010	<0.5	ug/L	09/16/1993
Bromodichloromethane	8010	<0.5	ug/L	09/16/1993
1,2-Dichloropropane	8010	<0.5	ug/L	09/16/1993
trans-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
Trichloroethene	8010	<0.5	ug/L	09/16/1993
Dibromochloromethane	8010	<0.5	ug/L	09/16/1993
1,1,2-Trichloroethane	8010	<0.5	ug/L	09/16/1993
cis-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
2-Chloroethylvinyl ether	8010	<1.0	ug/L	09/16/1993
Bromoform	8010	<0.5	ug/L	09/16/1993
1,1,2,2-Tetrachloroethane	8010	<0.5	ug/L	09/16/1993
Tetrachloroethene	8010	<0.5	ug/L	09/16/1993
Chlorobenzene	8010	<0.5	ug/L	09/16/1993
1,3-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,2-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,4-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993

ANALYTICAL REPORT

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

09/20/1993
Job No.: 93.00984

Project Name: 93.04000/69100
Date Received: 09/15/1993

Sample Number	Sample Description
18291	93.04000-173454

PARAMETERS	METHODS	RESULTS		DATE ANALYZED
8010 HALOGENATED VOC (W)				
Dilution Factor		1		09/16/1993
Chloromethane	8010	<0.5	ug/L	09/16/1993
Bromomethane	8010	<0.5	ug/L	09/16/1993
Vinyl chloride	8010	<2.0	ug/L	09/16/1993
Chloroethane	8010	<0.5	ug/L	09/16/1993
Methylene chloride	8010	<10	ug/L	09/16/1993
Trichlorofluoromethane	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethene	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethane	8010	<0.5	ug/L	09/16/1993
trans-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
cis-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
Chloroform	8010	<0.5	ug/L	09/16/1993
1,2-Dichloroethane	8010	<0.5	ug/L	09/16/1993
1,1,1-Trichloroethane	8010	<0.5	ug/L	09/16/1993
Carbon Tetrachloride	8010	<0.5	ug/L	09/16/1993
Bromodichloromethane	8010	<0.5	ug/L	09/16/1993
1,2-Dichloropropane	8010	<0.5	ug/L	09/16/1993
trans-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
Trichloroethene	8010	<0.5	ug/L	09/16/1993
Dibromochloromethane	8010	<0.5	ug/L	09/16/1993
1,1,2-Trichloroethane	8010	<0.5	ug/L	09/16/1993
cis-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
2-Chloroethylvinyl ether	8010	<1.0	ug/L	09/16/1993
Bromoform	8010	<0.5	ug/L	09/16/1993
1,1,2,2-Tetrachloroethane	8010	<0.5	ug/L	09/16/1993
Tetrachloroethene	8010	<0.5	ug/L	09/16/1993
Chlorobenzene	8010	<0.5	ug/L	09/16/1993
1,3-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,2-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,4-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993

ANALYTICAL REPORT

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

09/20/1993
Job No.: 93.00984

6

Project Name: 93.04000/69100
Date Received: 09/15/1993

Sample Number	Sample Description
18292	93.04000-173455

PARAMETERS	METHODS	RESULTS		DATE ANALYZED
8010 HALOGENATED VOC (W)				
Dilution Factor		1		09/16/1993
Chloromethane	8010	<0.5	ug/L	09/16/1993
Bromomethane	8010	<0.5	ug/L	09/16/1993
Vinyl chloride	8010	<2.0	ug/L	09/16/1993
Chloroethane	8010	<0.5	ug/L	09/16/1993
Methylene chloride	8010	<10	ug/L	09/16/1993
Trichlorofluoromethane	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethene	8010	<0.5	ug/L	09/16/1993
1,1-Dichloroethane	8010	<0.5	ug/L	09/16/1993
trans-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
cis-1,2-Dichloroethene	8010	<0.5	ug/L	09/16/1993
Chloroform	8010	<0.5	ug/L	09/16/1993
1,2-Dichloroethane	8010	<0.5	ug/L	09/16/1993
1,1,1-Trichloroethane	8010	<0.5	ug/L	09/16/1993
Carbon Tetrachloride	8010	<0.5	ug/L	09/16/1993
Bromodichloromethane	8010	<0.5	ug/L	09/16/1993
1,2-Dichloropropane	8010	<0.5	ug/L	09/16/1993
trans-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
Trichloroethene	8010	<0.5	ug/L	09/16/1993
Dibromochloromethane	8010	<0.5	ug/L	09/16/1993
1,1,2-Trichloroethane	8010	<0.5	ug/L	09/16/1993
cis-1,3-Dichloropropene	8010	<0.5	ug/L	09/16/1993
2-Chloroethylvinyl ether	8010	<1.0	ug/L	09/16/1993
Bromoform	8010	<0.5	ug/L	09/16/1993
1,1,2,2-Tetrachloroethane	8010	<0.5	ug/L	09/16/1993
Tetrachloroethene	8010	<0.5	ug/L	09/16/1993
Chlorobenzene	8010	<0.5	ug/L	09/16/1993
1,3-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,2-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993
1,4-Dichlorobenzene	8010	<0.5	ug/L	09/16/1993

SURROGATE REPORT

Kelly Temple
NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

09/20/1993
Job No.: 93.00984

Project Name: 93.04000/69100
Date Received: 09/15/1993

SURROGATES	METHODS	RESULTS	DATE ANALYZED
Sample Number 18288	Sample Description 93.04000-173451		
Br,Cl-Propane (Surr.)	8010	101 %	09/16/1993
Sample Number 18289	Sample Description 93.04000-173452		
Br,Cl-Propane (Surr.)	8010	112 %	09/16/1993
Sample Number 18290	Sample Description 93.04000-173453		
Br,Cl-Propane (Surr.)	8010	106 %	09/16/1993
Sample Number 18291	Sample Description 93.04000-173454		
Br,Cl-Propane (Surr.)	8010	105 %	09/16/1993
Sample Number 18292	Sample Description 93.04000-173455		
Br,Cl-Propane (Surr.)	8010	94 %	09/16/1993

QUALITY CONTROL REPORT
LABORATORY CONTROL STANDARD

NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

Date: 09/20/1993

NET Job Number: 93.00984

Contact: Kelly Temple
Project: 93.04000/69100

Analyte	LCS True Concentration	Concentration Found	LCS % Recovery	Date Analyzed

LCS - Laboratory Control Standard

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

Date: 09/20/1993

NET Job Number: 93.00984

Contact: Kelly Temple
Project: 93.04000/69100

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
8010 HALOGENATED VOC (W)				
Chlorobenzene	20	17.3	86.5	09/16/1993
1,2-Dichloroethane	20	19.9	99.5	09/16/1993
1,1-Dichloroethene	20	21.96	109.8	09/16/1993
Trichloroethene	20	20.4	102.0	09/16/1993

CCV - Continuing Calibration Verification

QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

Date: 09/20/1993

Job Number: 93.00984

Contact: Kelly Temple
Project: 93.04000/69100

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD
8010 HALOGENATED VOC (W)										
1,1-Dichloroethene	23.7	<0.5	20	ug/L	118.5	21.4	20	ug/L	107.0	10.2
1,2-Dichloroethane	22.1	<0.5	20	ug/L	110.5	18.4	20	ug/L	92.0	18.2
Trichloroethene	20.5	<0.5	20	ug/L	102.5	20.2	20	ug/L	101.0	1.5
Chlorobenzene	19.2	<0.5	20	ug/L	96.0	17.2	20	ug/L	86.0	11.0
8010 HALOGENATED VOC (W)										
Chlorobenzene	20	<0.5	20	ug/L	100.0	20	20	ug/L	100.0	0.0
1,2-Dichloroethane	20	<0.5	20	ug/L	100.0	20	20	ug/L	100.0	0.0
1,1-Dichloroethene	20	<0.5	20	ug/L	100.0	20	20	ug/L	100.0	0.0
Trichloroethene	20	<0.5	20	ug/L	100.0	20	20	ug/L	100.0	0.0

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

QUALITY CONTROL REPORT
BLANKS

NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

Date: 09/20/1993

NET Job Number: 93.00984

Contact: Kelly Temple
Project: 93.04000/69100
Location:

Analyte	Blank Analysis	Units	Date Analyzed
8010 HALOGENATED VOC (W)			
Bromodichloromethane	<0.5	ug/L	09/16/1993
Bromoform	<0.5	ug/L	09/16/1993
Bromomethane	<0.5	ug/L	09/16/1993
Carbon Tetrachloride	<0.5	ug/L	09/16/1993
Chlorobenzene	<0.5	ug/L	09/16/1993
Chloroethane	<0.5	ug/L	09/16/1993
2-Chloroethylvinyl ether	<5	ug/L	09/16/1993
Chloroform	<0.5	ug/L	09/16/1993
Chloromethane	<0.5	ug/L	09/16/1993
Dibromochloromethane	<0.5	ug/L	09/16/1993
1,2-Dichlorobenzene	<0.5	ug/L	09/16/1993
1,3-Dichlorobenzene	<0.5	ug/L	09/16/1993
1,4-Dichlorobenzene	<0.5	ug/L	09/16/1993
1,1-Dichloroethane	0.6	ug/L	09/16/1993
1,2-Dichloroethane	<0.5	ug/L	09/16/1993
1,1-Dichloroethene	<0.5	ug/L	09/16/1993
trans-1,2-Dichloroethene	<0.5	ug/L	09/16/1993
cis-1,2-Dichloroethene	<0.5	ug/L	09/16/1993
1,2-Dichloropropane	<0.5	ug/L	09/16/1993
cis-1,3-Dichloropropene	<0.5	ug/L	09/16/1993
trans-1,3-Dichloropropene	<0.5	ug/L	09/16/1993
Methylene chloride	<10	ug/L	09/16/1993
1,1,2,2-Tetrachloroethane	<0.5	ug/L	09/16/1993
Tetrachloroethene	<0.5	ug/L	09/16/1993
1,1,1-Trichloroethane	<0.5	ug/L	09/16/1993
1,1,2-Trichloroethane	<5	ug/L	09/16/1993

Advisory Control Limits for Blanks:
Metals/Wet Chemistry/ Conventionals/GC - all compounds should be less than the Reporting Limit.
GC/MS - Semi-Volatiles - all compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the reporting limit.

QUALITY CONTROL REPORT
BLANKS

NET - Santa Rosa
435 Tesconi Circle
Santa Rosa, CA 95401

Date: 09/20/1993

NET Job Number: 93.00984

Contact: Kelly Temple
Project: 93.04000/69100
Location:

Analyte	Blank Analysis	Units	Date Analyzed
Trichloroethene	<0.5	ug/L	09/16/1993
Trichlorofluoromethane	<0.5	ug/L	09/16/1993
Vinyl chloride	<2	ug/L	09/16/1993
Br,Cl-Propane (Surr.)	114	%	09/16/1993

Advisory Control Limits for Blanks:
Metals/Wet Chemistry/ Conventionals/GC - all compounds should be less than the Reporting Limit.
GC/MS - Semi-Volatiles - all compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the reporting limit.