



Professional
Construction
Management

TEL (510) 837-1050
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January 31, 1994

Eva Chew
ALAMEDA COUNTY HEALTH AGENCY
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Groundwater Monitoring Wells
Fire Station No. 1
7494 Donohue Drive
Dublin, CA 94568
Groundwater Monitoring Report - Quarterly Report
Period Covered November 1993 to January 1994

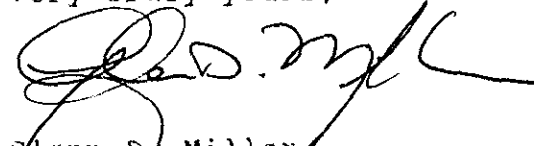
ALCO
HAZMAT
94 FEB - 1 PM 12:53

Ms. Chew,

In accordance with the accepted Remediation Plan (8/27/92) and Final Report (11/30/92) as prepared by BSK for the subject project, the 3 new monitoring wells have been installed. Attached are two copies of the first quarterly monitoring analysis of these wells recently completed by BSK. At first glance it would appear that all wells are reading non-detect. The quarterly monitoring of these wells will continue for a period of at least one-year in accordance with the ACDEH's requirements. We will continue to forward these reports covering the sampling and analysis as they are received.

We appreciate your continued efforts and positive response in this matter and Aztec will continue to serve as your contact regarding this matter as DRFA's representative. Please feel free to call with any questions or comments on this subject.

Very truly yours,



Glenn D. Miller
Construction Manager

cc: Karl Diekman/DRFA w/copy
Tim Berger/BSK

ALCO
HAZMAT
94 FEB -1 PM 12:53

RECEIVED
JAN 31 1994
AZTEC CONSULTANTS

BSK & ASSOCIATES
GEOTECHNICAL CONSULTANTS, INC.

BSK JOB NO. P93156.3

JANUARY 1994

REPORT
FIRST QUARTERLY
GROUNDWATER MONITORING
D.R.F.A. FIRE STATION NO. 1
7494 DONOHUE DRIVE
DUBLIN, CALIFORNIA



& Associates

1181 Quarry Lane
Building 300
Pleasanton, CA 94566
(510) 462-4000
(510) 462-6283 FAX

January 27, 1994

BSK Job No.P93156.3

Dougherty Regional Fire Authority
c/o Aztec Consultants
Construction Managers
2110 Omega Road, Suite B
San Ramon, CA 94587

Attention: Mr. Glenn D. Miller, P.E.
Construction Manager

Subject: Report
First Quarterly Groundwater Monitoring
Dougherty Regional Fire Authority - Station No. 1
7494 Donohue Drive
Dublin, California

As requested and authorized, BSK & Associates has prepared this report describing the first quarterly sampling and analysis of three shallow groundwater monitoring wells, MW-1 through MW-3, at the Dougherty Regional Fire Authority (DRFA) Fire Station No. 1, at 7494 Donohue Drive in Dublin, California (Site). The wells were installed in general accordance with the BSK Proposal/Work Plan of May 10, 1993 (Proposal No. P93129.3), which was accepted by the Alameda County Department of Environmental Health (ACDEH).

BSK appreciates this opportunity to continue to be of service to the Dougherty Regional Fire Authority. If there are questions or comments regarding this report, please contact us.

Respectfully submitted,
BSK & Associates

Tim W. Berger, C.E.G. 1828
Project Geologist

Alex Y. Eskandari, C.E. 38101
Project Manager

AYETWB:ndp
(ENVVP93156.MPI)

Distribution: Aztec/DRFA (1 original + 3 copies)

TABLE OF CONTENTS

TEXT	<u>PAGE</u>
INTRODUCTION	1
Background	1
PURPOSE AND SCOPE	
Purpose	1
Scope	2
Task 1 - Water Sampling	2
Water Samples	2
Task 2 - Analytical Testing	2
Tasks 3 & 4 - Analysis And Reporting	4
Regional Hydrology	4
Site Hydrology	5
CONCLUSIONS	
Conclusions	5
REPORT DISTRIBUTION	5
LIMITATIONS	6

TABLES

Table 1A	Water Results	Benzene, Toluene, Ethylbenzene and Xylenes .	3
Table 1B	Water Results	Total Petroleum Hydrocarbons (TPH) as	4
		Gasoline and Diesel, and Total Lead	

FIGURES

Figure 1	Vicinity Map
Figure 2	Site Plan
Figures 3 through 5	Well Field Logs
Figure 6	Groundwater Flow Direction and Gradient

APPENDICES

Appendix A

Figures A-1 through A-6	Chemical Test Data Sheets
Figures A-7	Chain-of-Custody Record

**REPORT
FIRST QUARTERLY
GROUNDWATER MONITORING
D.R.F.A. FIRE STATION NO. 1
7494 DONOHUE DRIVE
DUBLIN, CALIFORNIA**

INTRODUCTION

This report has been prepared to document the first quarterly monitoring of three shallow groundwater monitoring wells installed at the Site in September 1992. The Site Location is shown on Figure 1, Vicinity Map. A Site layout, together with locations of groundwater monitoring wells, is shown on Figure 2, Site Plan.

Background

Three underground storage tanks (UST) containing gasoline and diesel were in use at the Site in the 1960's. The tank group was located behind the former truck garage, in the northwestern portion of the Site. The largest tank was 4000 gallons in capacity and was used to store gasoline. The two smaller tanks were each 550 gallons in capacity; one tank stored Diesel and the other stored Gasoline.

At the time of tank removal in 1989, soil in close proximity to the tanks was observed to be contaminated with petroleum products. The contaminated soil was removed, aerated on-site under a permit from the Bay Area Air Quality Management District, and returned to the excavation with the approval of the Alameda County Department of Environmental Health (ACDEH).

As part of the Site preparation for the construction of the new D.R.F.A. Station No. 1, hydrocarbon contaminated soil was removed from the subsurface to the depth of first encountered groundwater. The contaminated soil resulted from leakage of the underground fuel storage tanks at the station.

Specification 5.4 of the Soil Remediation and Groundwater Monitoring Plan prepared by Remediation Services for the contaminated soil removal recommends, as a confirmation of the remedial effort, the installation of three shallow groundwater monitoring wells, and monitoring of those wells to assess the impact of the soil remediation activities at the Site. ACDEH has requested the monitoring wells be monitored quarterly for a period of one year.

PURPOSE AND SCOPE

Purpose

Groundwater monitoring facilities were installed at the Site in order to assess the impact to shallow groundwater of release of UST contents to subsurface, if any. Quarterly monitoring of the wells of one year is to be performed to meet the assessment objective.

Scope

In order to meet the objective, the following tasks were performed:

1. Purging and Sampling of groundwater from the monitoring wells for the contaminants of concern;
2. Analytical testing of the collected water samples by a California-certified analytical laboratory;
3. Assessment of the information obtained;
4. Preparation of a formal report presenting the observations, services performed, conclusions and recommendations based on our assessment of the data obtained.

Each task is described in detail in the following text.

Task 1 - WATER SAMPLING

Water Samples

Fire Station monitoring wells were sampled by BSK personnel on January 5, 1994. Water samples from Site wells were obtained after purging each well of three to four casing volumes, and allowing eighty percent recovery. Observation of water level, and for immiscible product was performed using an electric sounder and clear point-source bailer prior to purging. The water level was recorded to the nearest 1/100th of a foot. During the purge, the physical parameters: pH, temperature and conductivity were monitored and recorded at regular intervals on a Well Field Log to assess the influx of fresh formation water; the Well Field Logs are presented in Figures 3 through 5. Water samples for analytical testing were obtained via electric submersible pump, and transferred to the appropriate sample container, field-filtered and with preservative added as needed. The samples were labeled and refrigerated on-site using water-ice or blue ice, to 4°C.

Task 2 - ANALYTICAL TESTING

Analytical testing of soil and water samples obtained from the Site was performed by the BSK State-certified analytical laboratory.

The analyses performed for each contaminant type are those specified by the Tri-Regional Water Board Staff Recommendations of August 10, 1992, and as proposed and accepted by our Proposal PR93129.3 of May 10, 1993. The analyses performed were:

MW-1, MW-2, MW-3:	TPHg by GCFID-5030
	TPHd by GCFID 3550
	BTEX by Methods 602
	Total Lead Concentration

The Chemical Test Data Sheets and the Project Chain-of-Custody documents are shown in Appendix A, Figures A-1 through A-7.

The results of the chemical analyses of groundwater samples for the well installation sampling and this quarter are summarized in the following two Tables; (ug/l).

TABLE 1

BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
Action Levels and analytical results are presented in Parts Per Billion (ppb)

C O N S T I T U E N T S				
Sample Location (Action Level)	Benzene (1) ₁	Toluene (100) ₂	Ethylbenzene (680) ₁	Xylenes (1750) ₁
October 6, 1993				
MW-1	ND	ND	ND	ND
MW-2	ND	ND	ND	ND
MW-3	ND	ND	ND	ND
January 5, 1994				
MW-1	ND	ND	ND	ND
MW-2	ND	ND	ND	ND
MW-3	ND	ND	ND	ND

ND - None Detected

1 - California Department Of Health Services Drinking Water Standard, Revised 10/23/91

2 - California DOHS Action Level, 7/1/92

TABLE 2

**TOTAL PETROLEUM HYDROCARBONS (TPH) AS GASOLINE AND DIESEL,
AND TOTAL LEAD**

Action Levels and analytical results are presented in Parts Per Billion (ppb)

CONSTITUENTS			
Sample Location (Action Level)	TPH Gasoline (NA)	TPH Diesel (NA)	Total Lead (50)
October 6, 1993			
MW-1	ND	ND	ND
MW-2	ND	61*	ND
MW-3	ND	58*	ND
January 5, 1994			
MW-1	ND	ND	ND
MW-2	ND	ND	ND
MW-3	ND	ND	ND

ND - None Detected

-- - Not Tested

1 - California Department of Health Services Drinking Water Standards, Revised 10/23/91.

2 - EPA Drinking Water Standard, Revised 7/1/92

* - Sample contains higher molecular weight hydrocarbons than normally associated with Diesel (see Chemical Test Data Sheet, Monitoring Facilities Installation Report, October 31, 1993, Figures A-18 and A-21).

Tasks 3 & 4 - ANALYSIS AND REPORTING

Regional Hydrology

According to DWR Bulletin No. 118-2, "Evaluation of Groundwater Resources: Livermore and Sunol Valleys," the project site is located within the Dublin sub-basin of the Livermore Valley Groundwater Basin. There are two primary aquifers within the basin: the uppermost aquifer is semi- to unconfined, and occurs at a depth of 12 to 15 feet; the lower aquifer is confined, and is encountered at depths greater than 50 to 80 feet. The groundwater gradient in the upper aquifer is 0.5 percent (as determined in Spring 1992, ACFC Zone 7). The flow direction of the upper aquifer is generally southeast, as measured in the Spring of 1992 and the Fall of 1990 (ACFC Zone 7); the flow direction

on of the lower aquifer is reportedly similar to that of the upper. Mean annual precipitation in the Site vicinity, as measured from 1888 to 1977, was approximately 24 inches.

Site Hydrology

The Site is paved in concrete. Perimeter areas are planted with shrubbery. The front of the Station contains planters of shrubbery and small lawn areas. Irrigation is automated drip and local spray. A regional concrete-lined drainage canal is located along the north property boundary, and is connected to stormdrain runoff from the western portion of the Site; the eastern portion drains to Donohue Drive, which also likely drains to the aforementioned drainage canal.

Groundwater at the Site was encountered in the well installation borings at an approximate depth of 12 feet in silty-clay. Water levels in the installed wells rose to approximately 8½-feet from surface. Flow direction was found by three-point solution to be to the east-northeast on October 6, 1993, with a gradient of 0.8%. Groundwater flow direction and gradient on January 5, 1994 was found to be nearly due east at a gradient of 0.7%, as depicted in Figure 6, "Groundwater Flow Direction and Gradient - 01/05/94." Groundwater elevations were also observed to have fallen by up to 0.73 feet; pH was slightly more acidic, and conductivity increased slightly this quarter.

Contamination of groundwater by petroleum hydrocarbons was not observed olfactorally or visually in Wells MW-1, MW-2 and MW-3 during purging and sampling.

CONCLUSIONS

Conclusions

Concentrations of TPHd or TPHg range hydrocarbons, and Total Lead were not detected in water samples collected from Site wells on January 5, 1994.

REPORT DISTRIBUTION

A copy of this report should be forwarded to the Alameda County Department of Environmental Health (ACDEH) for their review. An extra copy of the report has been provided for this purpose. The ACDEH may in turn forward a copy of the report to the Regional Water Quality Control Board.

Alameda County Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Attention: Eva Chew

LIMITATIONS

This groundwater monitoring well installation report has been prepared for the exclusive use of Dougherty Regional Fire Authority (DRFA). Unauthorized use of or reliance on the information contained in this report by others, unless given express written consent by BSK & Associates, is strictly prohibited.

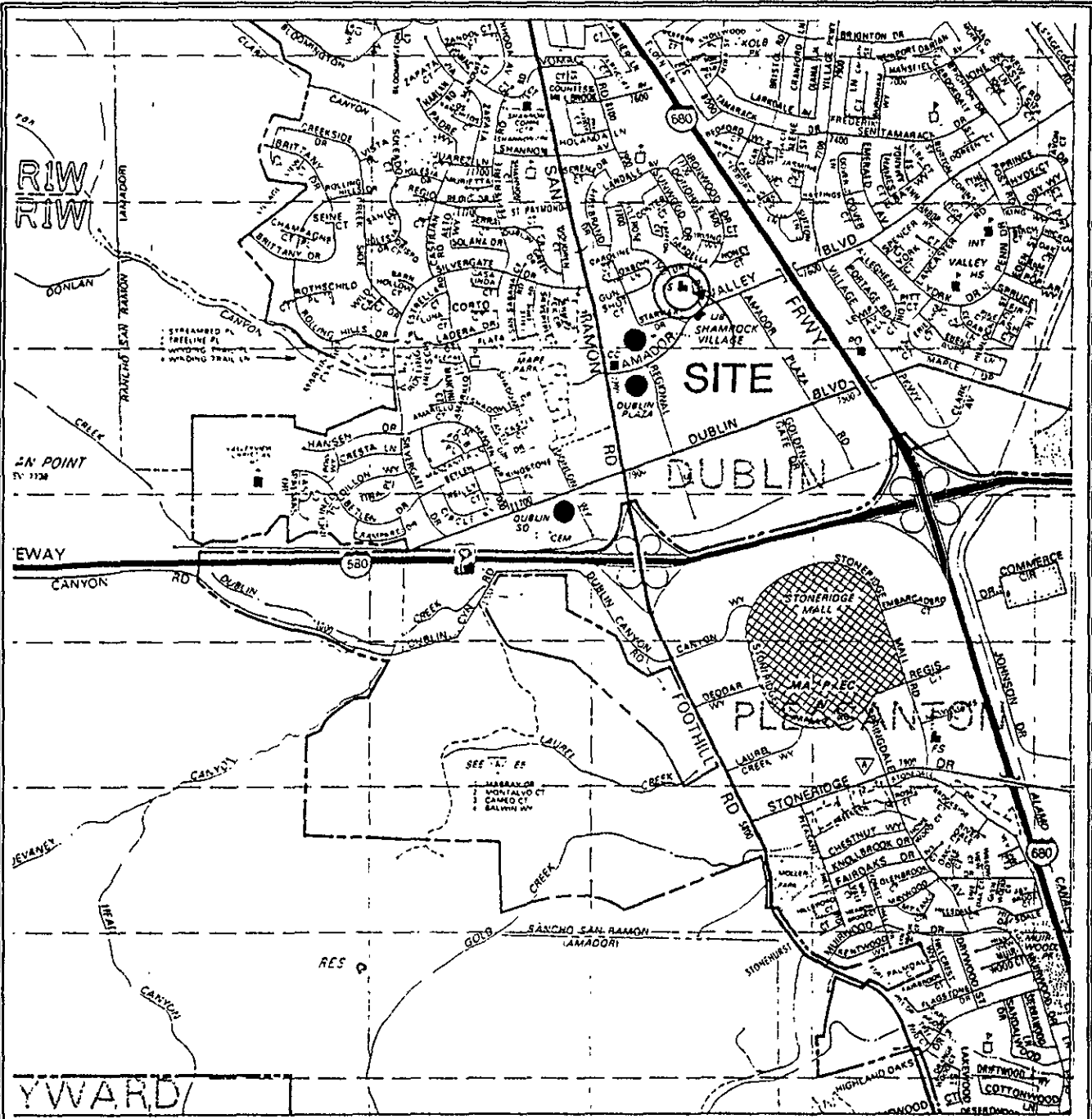
The findings and conclusions presented in this report are based on field observations, and on data obtained from the sources listed in this report. This report has been prepared in accordance with generally accepted methodologies and standards of practice for the area. No other warranty, either expressed or implied, is made as to the findings or conclusions included in this report.

The findings of this report are valid as of the present. The passage of time, natural processes or human intervention on the property or adjacent properties, and changes in the regulations can cause changed conditions which can invalidate the findings and conclusions in this report.

This report is neither certification nor guarantee that the property is free of, or contains hazardous substance contamination, other than that mentioned in the report.

Respectfully submitted,

BSK & Associates



Source: Thomas Guide, 1992, Alameda and Contra Costa Counties

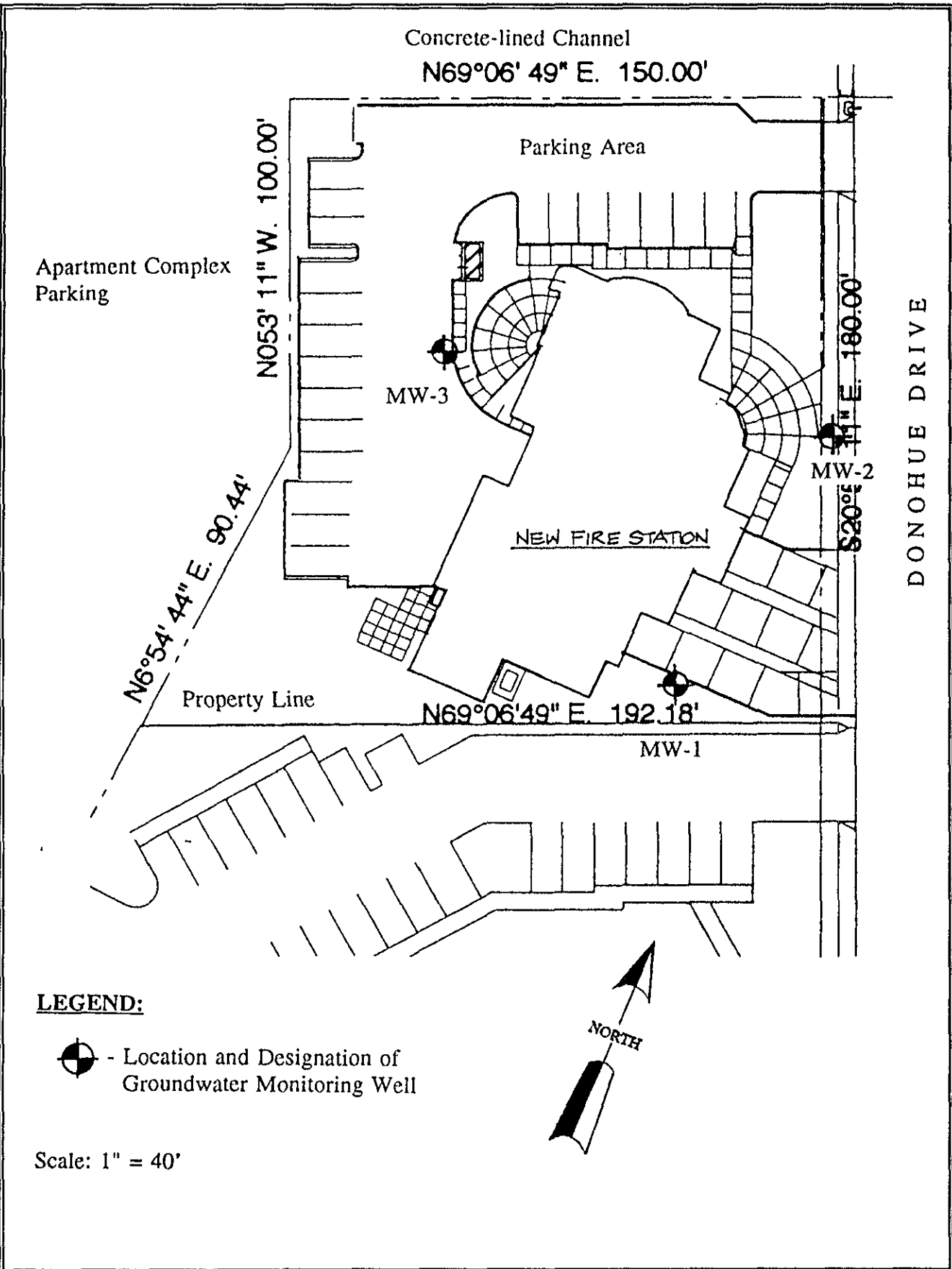
Scale: 1" = 2200'




GROUNDWATER MONITORING
 FIRE STATION NO. 1
 7494 DONOHUE DRIVE
 DUBLIN, CALIFORNIA

VICINITY MAP
 Job No. P93156.3
 January 1994
 FIGURE: 1

BSK
 & ASSOCIATES



LEGEND:

 - Location and Designation of Groundwater Monitoring Well

Scale: 1" = 40'

GROUNDWATER MONITORING
STATION NO. 1
7494 DONOHUE DRIVE
DUBLIN, CALIFORNIA

SITE PLAN
Job No. P93156.3
January 1994
FIGURE: 2

BSK
& ASSOCIATES

WELL FIELD LOG

Well Observation: x Date: 01/05/94
 Sample Collection: x Date: 01/05/94

Project Name: DRFA MFI
 Location: 7494 Donohue Drive, Dublin, CA
 Personnel: TWB
 Weather: Clear, ±65° F.

WELL INFORMATION:

Well Number	MW-1	Date Purged	01/05/94
Depth to Water - feet(TOC)	9.17	Purge Method	Electric submersible pump
Well Depth (feet)	25		
Water Volume (gallons)	2.53	Purge Begin	12:46
Reference Elevation - feet(TOC)	346.61	Purge End	12:53
Groundwater Elevation (feet)	337.44	Purge Rate	1.30 GPM
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: None
 Bottom: None
 Detection Method: Visual
 Collection Method: Clear point-source bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (Ec/Range)	pH	TEMP. (°F)	COLOR/COMMENTS
12:47	2.5	1218	5.86	58.9	Medium gray
12:49	5.0	1169	5.70	63.8	Light gray-brown
12:51	7.5	1101	5.68	64.9	Very light gray
12:53	9.0	1086	5.72	63.7	"
12:54	Depth to water (feet): 9.25				

SAMPLE COLLECTION DATA:

Sampling Equipment: Electric submersible pump

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
12:55	TPHg, BTEX	2-40 ml glass VOC w/HCl	12-14'
"	TPHd	1-liter amber glass w/H ₂ SO ₄	"
"	Total Lead	1-8 oz. plastic w/HNO ₃ , filtered	"

Field Observations: None

WELL FIELD LOG

Well Observation: x Date: 01/05/94
 Sample Collection: x Date: 01/05/94

Project Name: DRFA MFI
 Location: 7494 Donohue Drive, Dublin, CA
 Personnel: TWB
 Weather: Clear, ±65° F.

WELL INFORMATION:

Well Number	MW-2	Date Purged	01/05/94
Depth to Water - feet(TOC)	9.09	Purge Method	Electric submersible pump
Well Depth (feet)	25		
Water Volume (gallons)	2.50	Purge Begin	11:32
Reference Elevation - feet(TOC)	346.40	Purge End	11:42
Groundwater Elevation (feet)	337.31	Purge Rate	0.75 GPM
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: None
 Bottom: None
 Detection Method: Visual
 Collection Method: Clear point-source bailer

WELL DEVELOPMENT/PURGE DATA:

TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (Ec/Range)	pH	TEMP. (°F)	COLOR/COMMENTS
11:35	2.5	1280	6.02	62.4	Light gray
11:37	5.0	1250	5.88	62.2	"
11:41	7.0	1244	5.85	61.5	"
11:42	7.5	1244	5.76	61.5	"
11:47	Depth to water (feet): 10.30				

SAMPLE COLLECTION DATA:

Sampling Equipment: Electric submersible pump

TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
11:48	TPHg, BTEX	2-40 ml glass VOC w/HCl	12-13'
"	TPHd	1-liter amber glass w/H ₂ SO ₄	"
"	Total Lead	1-8 oz. plastic w/HNO ₃ , filtered	"

Field Observations: None

BSK Job No.: P93156.3
 Date: January 1994
 Figure No.: 5

WELL FIELD LOG

Well Observation: x Date: 01/05/94
 Sample Collection: x Date: 01/05/94

Project Name: DRFA MFI
 Location: 7494 Donohue Drive, Dublin, CA
 Personnel: TWB
 Weather: Overcast, ±55° F.

WELL INFORMATION:

Well Number	MW-3	Date Purged	01/05/94
Depth to Water - feet(TOC)	9.02	Purge Method	Electric submersible pump
Well Depth (feet)	24		
Water Volume (gallons)	2.40	Purge Begin	10:10
Reference Elevation - feet(TOC)	347.16	Purge End	10:25
Groundwater Elevation (feet)	338.14	Purge Rate	0.5 GPM
Measurement Technique	Solinst Electric Well Sounder		

IMMISCIBLE LAYERS:

Top: None observed
 Bottom: 18" Cloudy
 Detection Method: Visual
 Collection Method: Clear point-source bailer

WELL DEVELOPMENT/PURGE DATA:

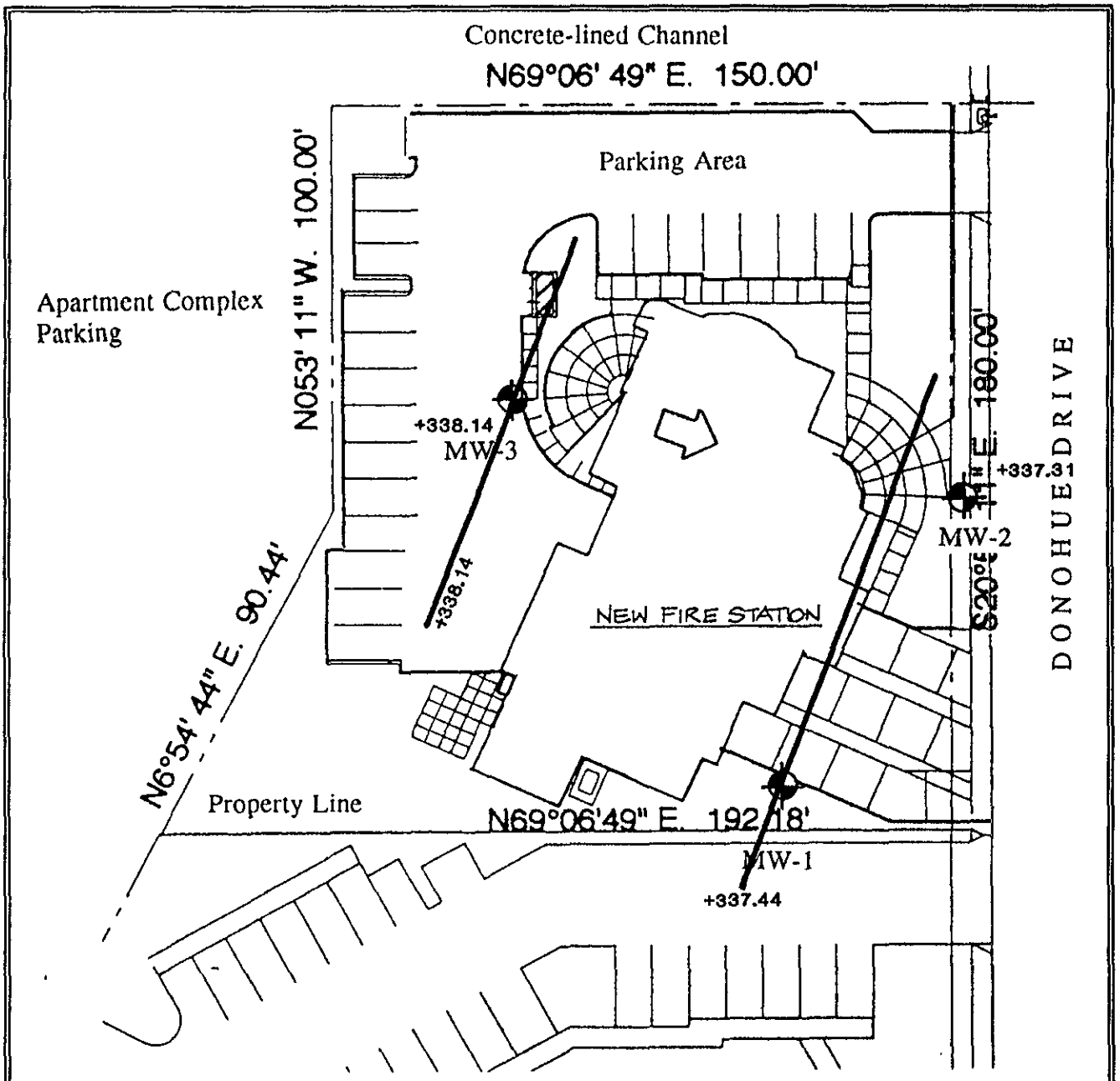
TIME	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (Ec/Range)	pH	TEMP. (°F)	COLOR/COMMENTS
10:11	1.0	331	7.10	52.5	Clear
10:13	2.5	1652	6.31	57.2	Light brown
10:17	5.0	1233	6.05	59.5	Very light gray
10:19	7.0	1256	5.93	62.9	"
10:20	8.0	1247	5.87	63.5	"
10:25	Depth to water (feet): 9.95				

SAMPLE COLLECTION DATA:

Sampling Equipment: Electric submersible pump




TIME	ANALYSIS	AMOUNT/CONTAINER USED	SAMPLE INTERVAL
10:00	TPHg, BTEX	2-40 ml glass VOC w/HCl	15-16'
"	TPHd	1-liter amber glass w/H ₂ SO ₄	"
"	Total Lead	1-8 oz. plastic w/HNO ₃ , filtered	"

Field Observations: None



LEGEND:

Scale: 1" = 40'

-  - Location and Designation of Groundwater Monitoring Well
-  - Line of Equal Potentiometric Surface Elevation (01/05/94)
-  - Groundwater Flow Direction

0.7% - Gradient (01/05/94)



APPENDIX "A"

CHEMICAL TEST DATA SHEETS

CHAIN-OF-CUSTODY RECORD



1414 Stanislaus Street
 Fresno, California 93706
 Telephone (209) 497-2889
 FAX (209) 485-6935
 1-800-877-8310

BSK-Pleasanton
 DRFA

Date Sampled : 01/05/94
 Time Sampled : 1255
 Date Received : 01/06/94
 Report Issue Date: 01/19/94

Case Number : Ch940041
 Lab ID Number : 0041-3
 Project Number : P93156.3
 Sample Description: MW-1

Sample Type: LIQUID

Analyses for BTEX by EPA Method 8020 and TPH(G) by EPA Method 8015
Prepared by Method 5030

Results Reported in Micrograms per Liter (ug/L)
 Date of Analysis : 01/06/94

Compound	Results	DLR
Benzene	ND	0.3
Toluene	ND	0.3
Ethylbenzene	ND	0.3
Total Xylene Isomers	ND	0.3
Total Petroleum Hydrocarbons (G)	ND	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

NOTE:
 Hydrocarbons in the gasoline boiling point range are reported, in accordance with the method, as gasoline.

Analyses for TPH (Total Petroleum Hydrocarbons) as Diesel
by Method DHS GC/FID.

Results Reported in Micrograms per Liter (ug/L)
 Date of Analysis : 01/12/94

Analyte	Results	DLR
Total Petroleum Hydrocarbons (D)	ND	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

NOTE:
 Hydrocarbons in the diesel boiling point range are reported, in accordance with the method, as diesel.

LEGEND:

DLR: Detection Limit for the Purposes of Reporting.

ND: None Detected

Exceptional sample conditions or matrix interferences may result in higher detection limits.

Cynthia Pigman, QA/QC Supervisor

Jeffrey Creager, Organics Manager



1414 Stanislaus Street
Fresno, California 93706
Telephone (209) 497-2889
FAX (209) 485-6935
1-800-877-8310

BSK-Pleasanton
DRFA

Date Sampled : 01/05/94
Time Sampled : 1255
Date Received : 01/06/94
Report Issue Date: 01/19/94

Case Number : Ch940041
Lab ID Number : 0041-3
Project Number : P93156.3
Sample Description: MW-1

Sample Type: LIQUID

Analyses for Total Lead by EPA Method 7421

Results Reported in Micrograms Per Liter ($\mu\text{g/L}$)

Compound	Results	DLR
Total Lead (Pb).....	ND	5.0

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

DLR: Detection Limit for the Purposes of Reporting.
Exceptional sample conditions or matrix interferences
may result in higher detection limits.
ND: None Detected

Cynthia Pigman, QA/QC Supervisor

Inorganics Manager



1414 Stanislaus Street
 Fresno, California 93706
 Telephone: (209) 497-2889
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 1-800-877-8310

BSK-Pleasanton
 DRFA

Date Sampled : 01/05/94
 Time Sampled : 1148
 Date Received : 01/06/94
 Report Issue Date: 01/19/94

Case Number : Ch940041
 Lab ID Number : 0041-2
 Project Number : P93156.3
 Sample Description: MW-2

Sample Type: LIQUID

Analyses for BTEX by EPA Method 8020 and TPH(G) by EPA Method 8015
Prepared by Method 5030

Results Reported in Micrograms per Liter (ug/L)
 Date of Analysis : 01/06/94

Compound	Results	DLR
Benzene	ND	0.3
Toluene	ND	0.3
Ethylbenzene	ND	0.3
Total Xylene Isomers	ND	0.3
Total Petroleum Hydrocarbons (G)	ND	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

NOTE:
 Hydrocarbons in the gasoline boiling point range are reported, in accordance with the method, as gasoline.

Analyses for TPH (Total Petroleum Hydrocarbons) as Diesel
by Method DHS GC/FID.

Results Reported in Micrograms per Liter (ug/L)
 Date of Analysis : 01/12/94

Analyte	Results	DLR
Total Petroleum Hydrocarbons (D)	ND	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

NOTE:
 Hydrocarbons in the diesel boiling point range are reported, in accordance with the method, as diesel.

LEGEND:

DLR: Detection Limit for the Purposes of Reporting.
 Exceptional sample conditions or matrix interferences
 may result in higher detection limits.

ND: None Detected

Cynthia Pigman, QA/QC Supervisor

Jeffrey Creager, Organics Manager



1414 Stanislaus Street
Fresno, California 93706
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BSK-Pleasanton
DRFA

Date Sampled : 01/05/94
Time Sampled : 1148
Date Received : 01/06/94
Report Issue Date: 01/19/94

Case Number : Ch940041
Lab ID Number : 0041-2
Project Number : P93156.3
Sample Description: MW-2

Sample Type: LIQUID


Analyses for Total Lead by EPA Method 7421

Results Reported in Micrograms Per Liter ($\mu\text{g/L}$)


Compound	Results	DLR
Total Lead (Pb).....	ND	5.0

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

DLR: Detection Limit for the Purposes of Reporting.
Exceptional sample conditions or matrix interferences
may result in higher detection limits.
ND: None Detected



Cynthia Pigman, QA/QC Supervisor



Inorganics Manager



1414 Stanislaus Street
 Fresno, California 93706
 Telephone (209) 497-2889
 FAX (209) 485-6935
 1-800-877-8310

BSK-Pleasanton
 DRFA

Date Sampled : 01/05/94
 Time Sampled : 1025
 Date Received : 01/06/94
 Report Issue Date: 01/19/94

Case Number : Ch940041
 Lab ID Number : 0041-1
 Project Number : P93156.3
 Sample Description: MW-3

Sample Type: LIQUID

Analyses for BTEX by EPA Method 8020 and TPH(G) by EPA Method 8015
 Prepared by Method 5030

Results Reported in Micrograms per Liter (ug/L)

Date of Analysis : 01/06/94

Compound	Results	DLR
Benzene	ND	0.3
Toluene	ND	0.3
Ethylbenzene	ND	0.3
Total Xylene Isomers	ND	0.3
Total Petroleum Hydrocarbons (G)	ND	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

NOTE:
 Hydrocarbons in the gasoline boiling point range are reported, in accordance with the method, as gasoline.

Analyses for TPH (Total Petroleum Hydrocarbons) as Diesel
 by Method DHS GC/FID.

Results Reported in Micrograms per Liter (µg/L)

Date of Analysis : 01/12/94

Analyte	Results	DLR
Total Petroleum Hydrocarbons (D)	ND	50

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

NOTE:
 Hydrocarbons in the diesel boiling point range are reported, in accordance with the method, as diesel.

LEGEND:

DLR: Detection Limit for the Purposes of Reporting.
 Exceptional sample conditions or matrix interferences
 may result in higher detection limits.

ND: None Detected

Cynthia Pigman, QA/QC Supervisor

Jeffrey Creager, Organics Manager



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Fresno, California 93706
Telephone (209) 497-2889
FAX (209) 485-6935
1-800-877-8310

BSK-Pleasanton
DRFA

Date Sampled : 01/05/94
Time Sampled : 1025
Date Received : 01/06/94
Report Issue Date: 01/19/94

Case Number : Ch940041
Lab ID Number : 0041-1
Project Number : P93156.3
Sample Description: MW-3

Sample Type: LIQUID

Analyses for Total Lead by EPA Method 7421

Results Reported in Micrograms Per Liter ($\mu\text{g/L}$)

Compound	Results	DLR
Total Lead (Pb).....	ND	5.0

Sample DLR = DLR x DLR Multiplier, DLR Multiplier = 1

DLR: Detection Limit for the Purposes of Reporting.
Exceptional sample conditions or matrix interferences
may result in higher detection limits.
ND: None Detected

Cynthia Pigman, QA/QC Supervisor

Inorganics Manager

Analyses Request / Chain of Custody

BSK Log Number: 0041

Analytical Due Date: 1/10/94

Shaded areas for LAB use only

Requested Analyses

Environmental Services

Client Name: <i>DRFA</i>	Report Attention: <i>Tim Berger</i>	Phone #: <i>510 462 4000</i>
Address: <i>1181 Quarry Ln, Bldg. 300</i>	Project, Quote or PO #: <i>P93156.3</i>	FAX #: <i>510 462 6283</i>
City, State, Zip: <i>Pleasanton, CA 94566</i>	Copy to: <i>Tim Berger</i>	System #

LAB use only			Date Sampled	Time Sampled	Sampled by: <i>Tim Berger</i>	Sample Description/Location	Comment or Station Code	BTX	TPH	Total Lead									
Sample #	Type	# Cont.																	
1	SL		1/5/94	10:25	<i>Tim Berger</i>	MLW-3		X	Y	X									
2	SL			11:48		MLW-2		X	X	X									
3	SL			12:55		MLW-1		X	Y	X									

Matrix Type: L Liquid S - Solid G - Gas
 Type of Hazards Associated with Samples:

Additional Services:
 Rush Priority: [] - 2 Day [] - 5 Day
 [] - Formal Chain of Custody [] - QC Data package

Additional Services Authorized by:

Payment Received with Delivery
 Date: _____ Amount: \$ _____
 Check # _____ Initials _____
 Receipt # _____

(Signature)

Signature	Print Name	Company	Date	Time
<i>Tim Berger</i>	Tim Berger	BSK - P	1/5/94	14:43
<i>Jamiece Garrison</i>	Jamiece Garrison	BSK	1/6/94	09:40

FIGURE: A-7