



92 JUN 4 P.M. 20

June 2, 1992

Scott Seery  
Alameda Department of Environmental Health  
80 Swan Way #210  
Oakland, CA 94621

Dear Mr. Seery:

Enclosed is the quarterly report for groundwater monitoring at the San Francisco Water Department facility at 505 Poloma Way in Sunol. We are proceeding with monthly water level measurements and quarterly sampling on the schedule indicated in my letter of February 7, 1992.

Please call me at (415) 554-2796 if you have any comments or questions.

Sincerely,

A handwritten signature in cursive script that reads "Dave Wells".

Dave Wells



# CROSBY & OVERTON, INC.

8430 AMELIA STREET • OAKLAND, CA 94621

(800) 821-0424 • (415) 633-0336  
FAX (415) 633-0759

*Maintenance Yard*

*Received 10/1/72  
505*

June 1, 1992

9423-S

Dave Wells  
City & County of San Francisco  
Department of Public Health  
101 Grove Street Room 207  
San Francisco, California 94102

**RE: Quarterly Groundwater Monitoring Well Sampling At Sunol Water  
Department Facility, At 505 Paloma Way, Sunol CA.  
April 29, 1992 Sampling Event**

Dear Mr. Wells,

Crosby & Overton, Inc. (C&O) is pleased to submit this letter report concerning the results of groundwater monitoring well sampling and analyses for three groundwater monitoring wells (MW-1, MW-2, MW-3) on April 29, 1992 at 505 Paloma Way, Sunol, California (see figure 1A).

### Background

On May 15 and 16, 1990 three underground storage tanks (UST) used for the maintenance facility vehicles were removed from the Sunol yard by the joint venture of Stacy and Witbeck, and Rogers and Jenner. Soil samples were taken from two feet below the UST at a depth of approximately 10 feet below ground surface. Sampling results indicated that total petroleum hydrocarbons as gasoline (TPH-G) were found at 7.6 parts per million (ppm) and total petroleum hydrocarbons as diesel (TPH-D) were found at 40 ppm. Benzene, toluene, ethyl benzene, and total xylenes (BTEX) were detected in three of the four samples at concentrations up to 1.7 ppm.

In November 1989, American Environmental Management Corporation supervised excavation of oil-contaminated soil for the City and County of San Francisco Department of Public Health (SFDPH). Soil was excavated approximately 100 feet southwest of the former UST locations at the east end of the repair shop area, where San Francisco Water Department personnel disposed of used motor oil and solvents onto the ground. Approximately 225 square feet of soil was excavated. The excavation was extended to 5 to 7.5 feet below ground surface. During excavation, soil samples were collected by the SFDPH at depths where the soil appeared to be the most contaminated. Analysis of these soil samples indicated the presence of total oil and grease (TOG) at 31,000 ppm, and various volatile organic compounds (VOC) at 0.3 to 3.2 ppm. The excavated soil was sent to Laidlaw Environmental in Button Willow,

California for disposal.

On August 22, 23, and 26, 1991 Harding Lawson Associates drilled three boreholes, converting them to three groundwater monitoring wells. Well MW-1 was installed within 10 feet of the former oil spill area. Well MW-2 was installed within 10 feet of the former UST locations. Well MW-3 was installed in an assumed downgradient location from the two former source areas. At a latter date it was discovered that well MW-1 was in fact in a downgradient location from the former USTs(see figure 2).

On February 6, 1992 C&O was contracted by the SFDPH to begin quarterly sampling and monthly gauging of the three groundwater monitoring wells.

### Procedures

Standard operating procedures for groundwater monitoring well sampling is included as an attachment.

After stabilization, the wells were sampled. Samples submitted for chemical analyses were delivered to Curtis & Tompkins, Ltd.. Curtis & Tompkins is certified by the state of California for the analyses requested. Samples were analyzed for extractable petroleum hydrocarbons in aqueous solutions (California DOHS method), total volatile hydrocarbons with BTEX distinction (EPA 5030/8020), total volatile hydrocarbons as gasoline (California DOHS method), total oil and grease (gravimetric, standard methods 5520 B/F), and volatile organics in water (EPA method 8240). The laboratory report and chain of custody are included at the end of this report.

**TABLE 1**  
**GROUNDWATER TABLE ELEVATION GAUGING**

DATE	MW-1	MW-2	MW-3
8-27-91	218.87	218.30	218.28
10-3-91	218.92	219.10	219.06
2-7-92	218.21	218.30	218.28
2-21-92	219.28	219.42	219.39
4-1-92	218.39	218.62	218.69
4-29-92	218.61	218.70	218.68
5-27-92	218.55	218.64	218.62
TOC	238.79	239.32	238.70

TOC=TOP OF CASING ELEVATION CORRECTED TO USGS BENCHMARK DATUM 143  
ALL MEASUREMENTS GIVEN IN FEET AND CORRECTED TO TOC ELEVATION

**TABLE 2**  
**ANALYTIC RESULTS OF GROUNDWATER WELL SAMPLING**

DATE	SAMPLE	TPH-G	TPH-D	TOG	B	T	E	X	VOC
2-21-92	MW-1	ND	ND	ND	NA	NA	NA	NA	ND
2-21-92	MW-2	ND	ND	ND	ND	ND	ND	ND	NA
2-21-92	MW-3	ND	ND	ND	NA	NA	NA	NA	ND
4-29-92	MW-1	ND	ND	ND	NA	NA	NA	NA	ND
4-29-92	MW-2	ND	ND	ND	ND	ND	ND	ND	NA
4-29-92	MW-3	ND	ND	ND	NA	NA	NA	NA	ND

ND = NOT DETECTED AT OR ABOVE REPORTING LIMIT  
 NA = NOT ANALYZED  
 TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
 TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL  
 B = BENZENE  
 T = TOLUENE  
 E = ETHYL BENZENE  
 X = TOTAL XYLENES  
 VOC = VOLATILE ORGANIC COMPOUNDS

**Analysis**

All groundwater monitoring wells had below detectable quantities of contamination for the analyte measured (see table 2).

**TABLE 3**  
**GROUNDWATER GRADIENT**

DATE	GROUNDWATER GRADIENT	GRADIENT DIRECTION
2-7-92	0.0015	SOUTHWEST
2-21-92	0.0022	SOUTHWEST
4-1-92	0.0046	SOUTHWEST
4-29-92	0.0015	SOUTHWEST
5-27-92	0.0014	SOUTHWEST

**Conclusions**

Groundwater table elevations should continue to be monitored on a monthly basis. Quarterly, groundwater samples should be taken according to the attached standard operating procedures and analyzed by EPA methods 8240, (modified)8015, and SM 5520.

Reportage

A copy of this report should be submitted, along with a cover letter from the SFDPH, to each of the addressees listed below:

Scott Seery  
Alameda County Health  
Care Services Agency  
80 Swan Way #200  
Oakland, CA 94621

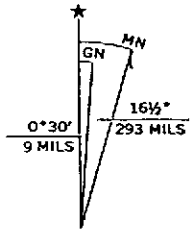
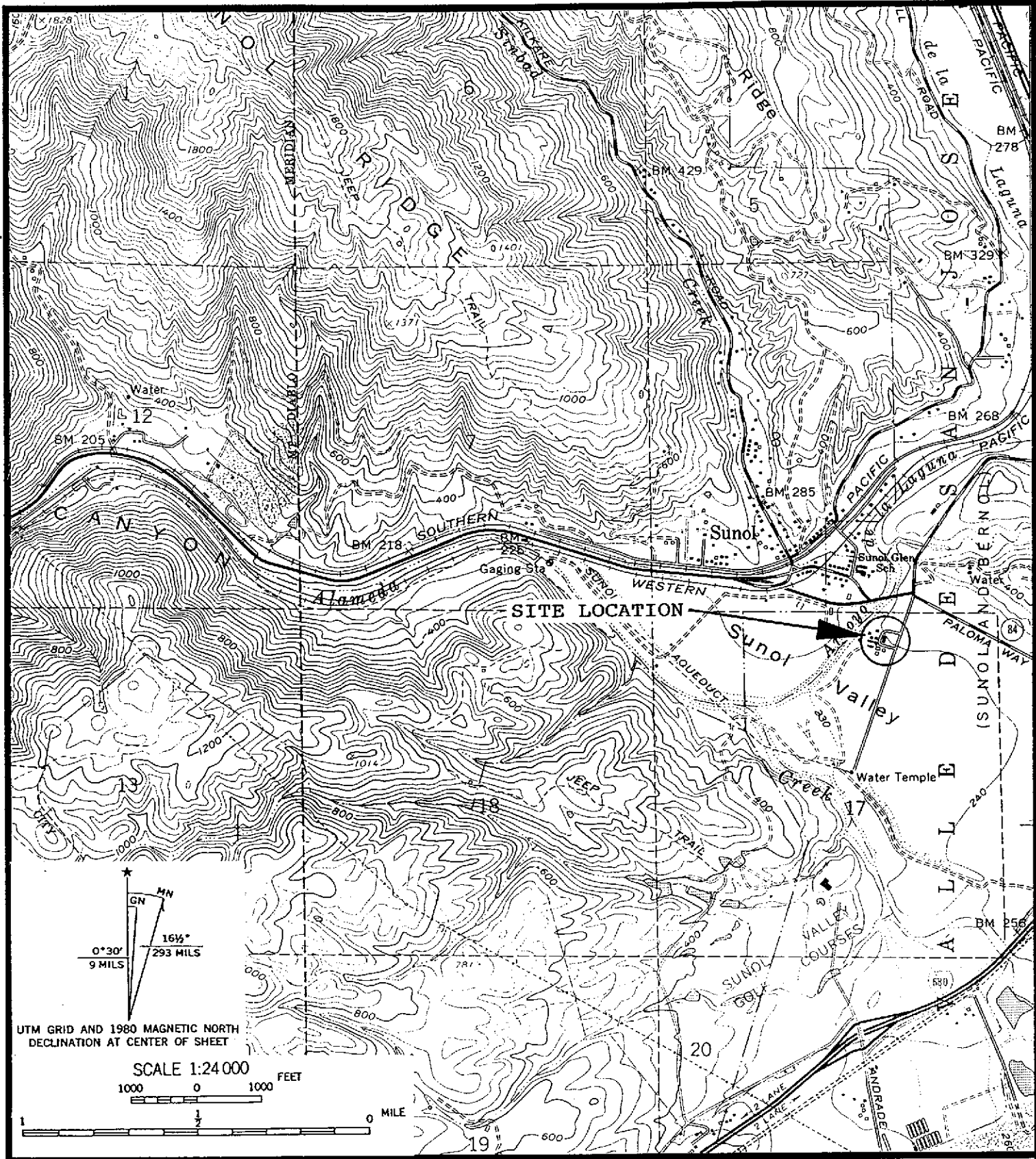
Lester Feldman  
Water Quality Control Board  
2101 Webster Street Suite 500  
Oakland, CA 94621

If we may be of further service, or if you should have any questions please do not hesitate to contact us at your convenience (510) 633-0336.

Sincerely,



Darrell Taylor  
Staff Geologist



UTM GRID AND 1980 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

1000 0 1000 FEET

1 0 MILE

CROSBY & OVERTON, INC.

FIGURE 1A  
SITE LOCATION MAP  
AFTER USGS

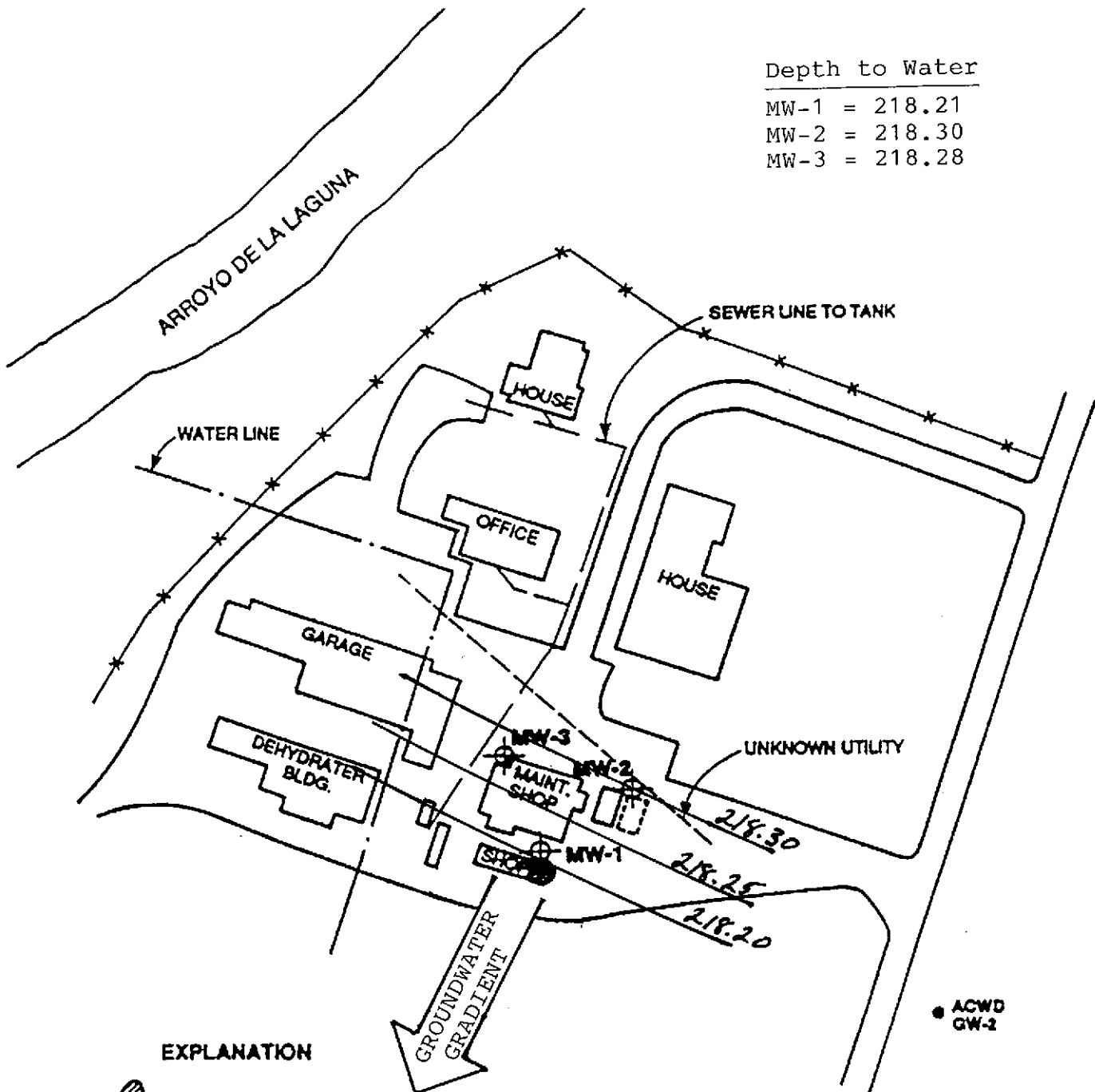
DATE: 3-16-92

JOB NUMBER: 9423-S





DRAWN BY: D. Taylor

Depth to Water

MW-1 = 218.21  
MW-2 = 218.30  
MW-3 = 218.28



EXPLANATION

-  Former Oil Spill Area
  -  Former UST Location
  -  Approximate Monitoring Well Location
  -  Alameda County Water District Well
- Gradient = 0.0015



CROSBY & OVERTON, INC.

FIGURE 1  
GROUNDWATER GRADIENT  
AND POTENTIOMETRIC SURFACE

DATE: 2-7-92

JOB NUMBER: 9423-S

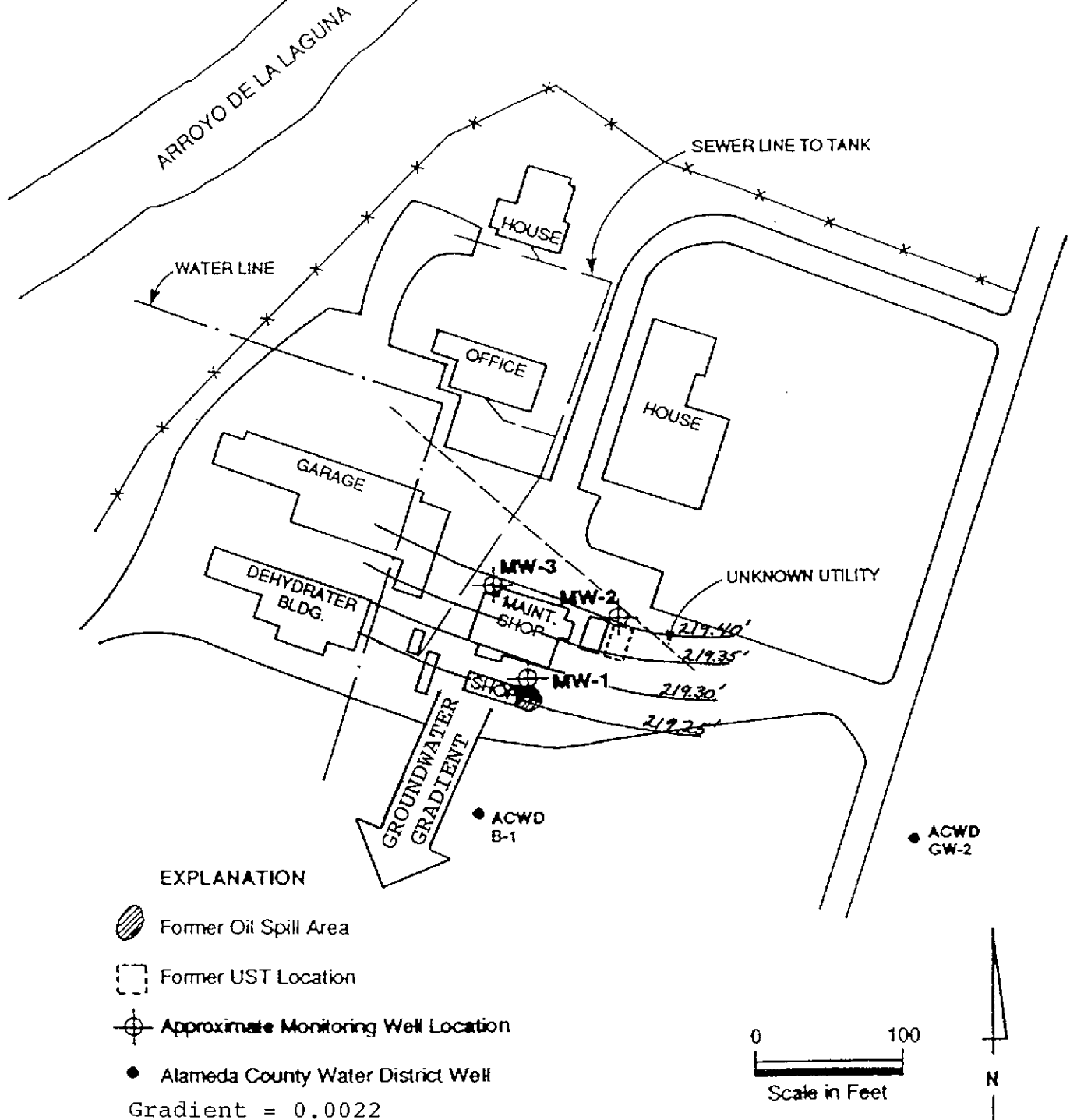
DRAWN BY: after HLA 10/90

Depth to Water

MW-1 = 219.28

MW-2 = 219.42

MW-3 = 219.39



CROSBY & OVERTON, INC.

FIGURE 2  
GROUNDWATER GRADIENT  
AND POTENTIOMETRIC SURFACE

DATE: 2-21-92

JOB NUMBER: 9423-S

DRAWN BY: after HLA 10/90

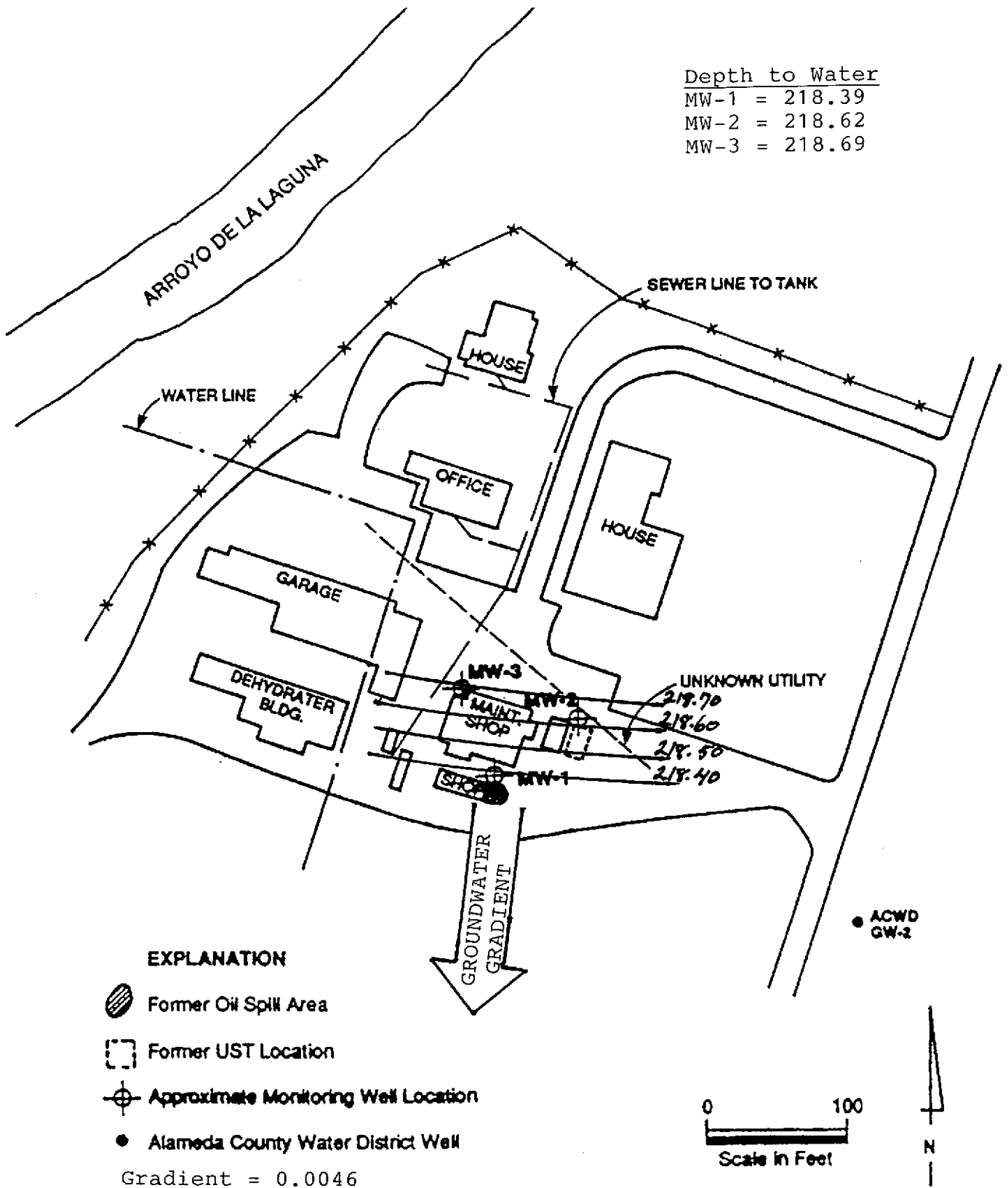


Depth to Water

MW-1 = 218.39

MW-2 = 218.62

MW-3 = 218.69



CROSBY & OVERTON, INC.

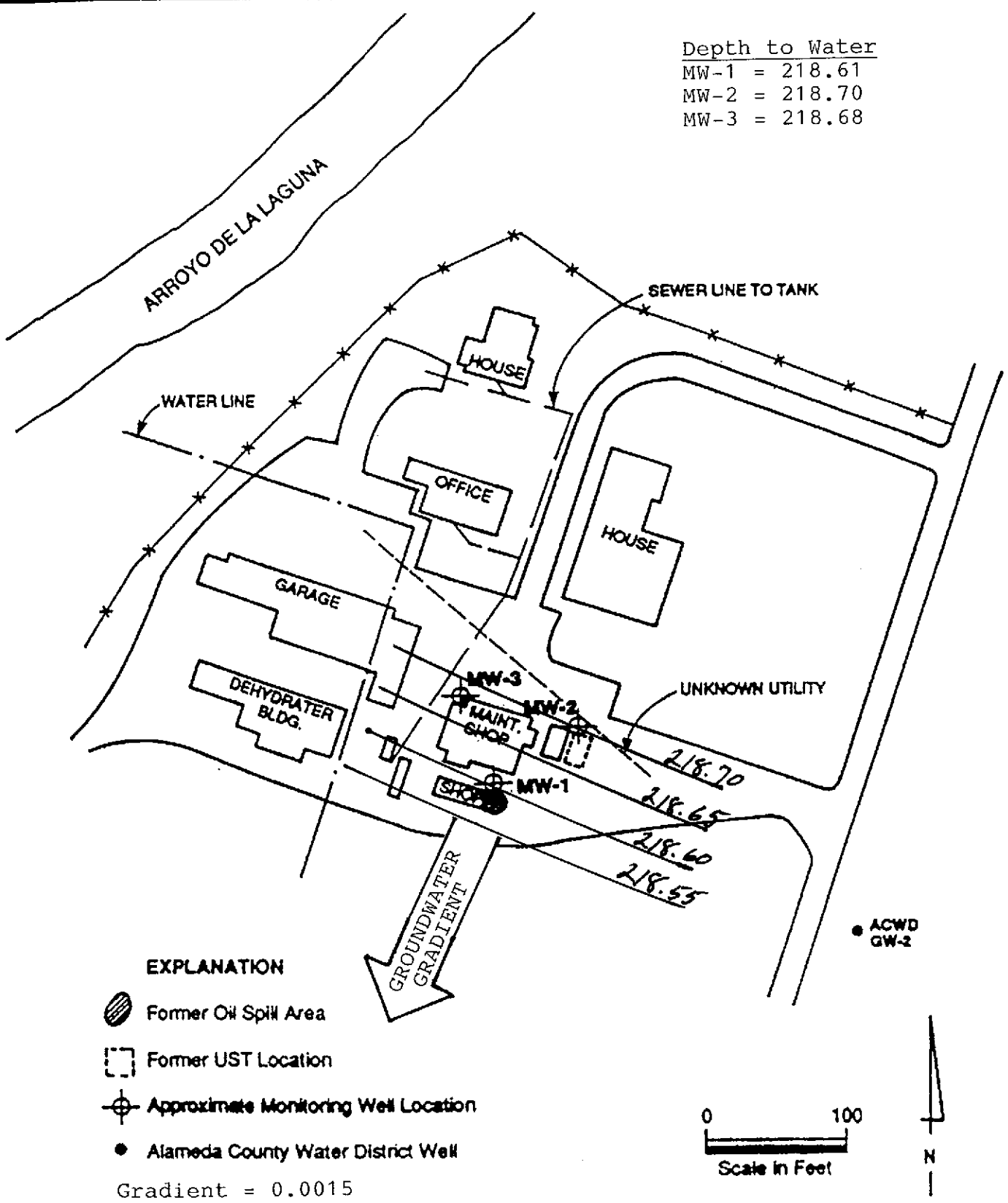
FIGURE 3  
GROUNDWATER GRADIENT  
AND POTENTIOMETRIC SURFACE

DATE: 4-1-92





JOB NUMBER: 9423-S

DRAWN BY: after HLA 10/90

Depth to Water  
 MW-1 = 218.61  
 MW-2 = 218.70  
 MW-3 = 218.68



**EXPLANATION**

-  Former Oil Spill Area
-  Former UST Location
-  Approximate Monitoring Well Location
-  Alameda County Water District Well

Gradient = 0.0015

CROSBY & OVERTON, INC.

FIGURE 4  
 GROUNDWATER GRADIENT  
 AND POTENTIOMETRIC SURFACE

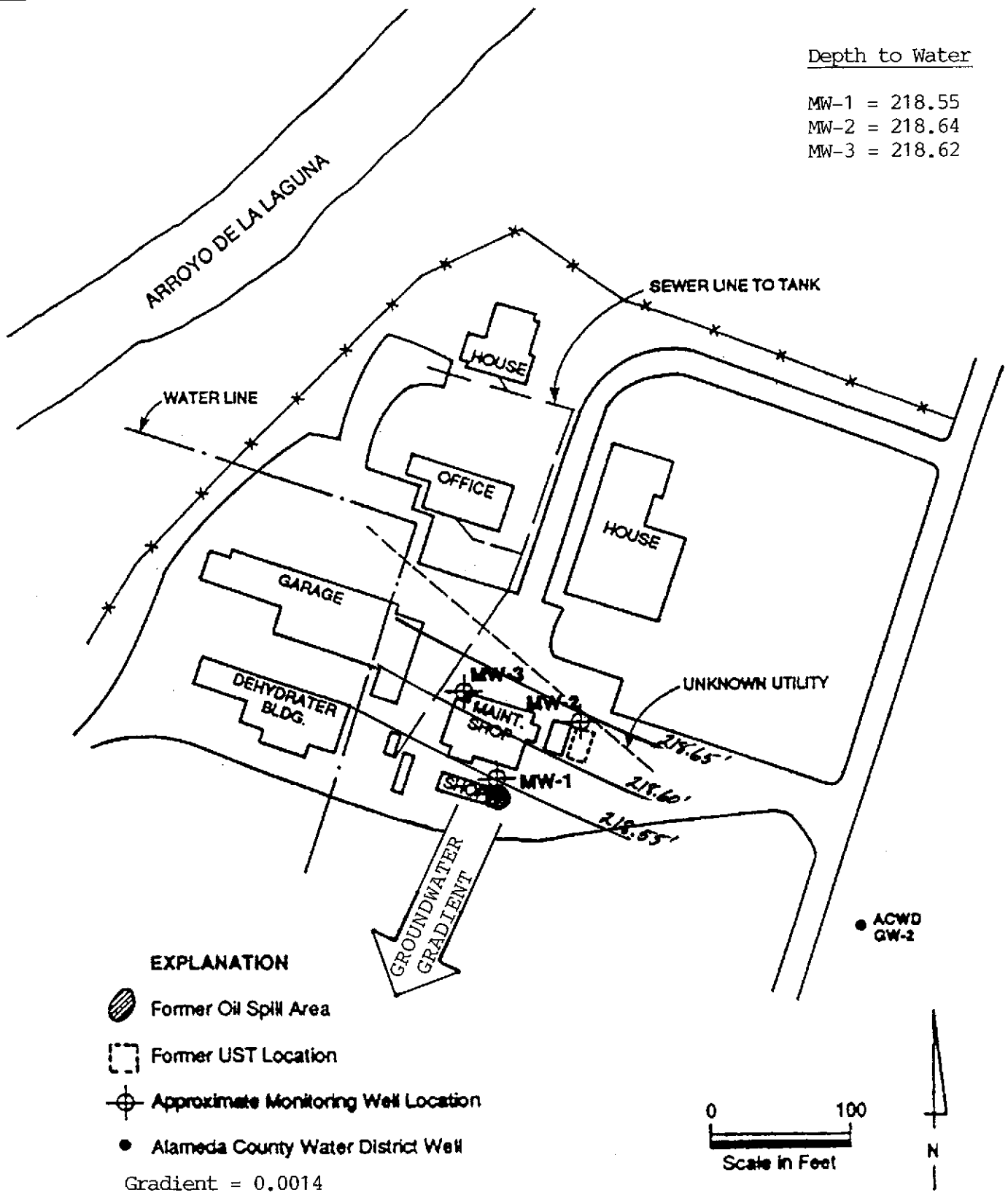
DATE: 4-29-92

JOB NUMBER: 9423-S





DRAWN BY: after HLA 10/90

Depth to Water

MW-1 = 218.55  
 MW-2 = 218.64  
 MW-3 = 218.62



**EXPLANATION**

-  Former Oil Spill Area
  -  Former UST Location
  -  Approximate Monitoring Well Location
  -  Alameda County Water District Well
- Gradient = 0.0014

CROSBY & OVERTON, INC.

FIGURE 5  
 GROUNDWATER GRADIENT  
 AND POTENTIOMETRIC SURFACE

DATE: 5-27-92

JOB NUMBER: 9423-S

DRAWN BY: after HLA 10/90

**STANDARD OPERATING PROCEDURES****Monitoring Well Sampling**

A minimum of three well volumes are pumped from each well, each well is permitted to recharge to  $\geq 80\%$  of original capacity and stabilize. Stabilization is determined by measuring the parameters of pH; temperature; and electrical conductivity. When two subsequent measurements of these three parameters are within 10% of each other, the well is considered stabilized and is 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. Duplicate water samples for volatile organic compounds are collected from the well and siphoned into three (3) clear 40 ml VOA vials with all headspace removed, and preserved with hydrochloric acid. For all other analyses, samples are collected in 950 ml amber glass bottles. All samples are labeled, chilled to 4°C (utilizing either crushed ice or Blue-Ice®) in an ice chest, and sent to a California State Certified hazardous materials testing laboratory under chain-of-custody documentation.

Groundwater sampling is performed in accordance with the 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 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.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 04/30/92

DATE REPORTED: 05/18/92


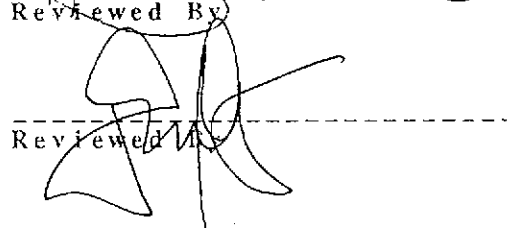
LABORATORY NUMBER: 107264

CLIENT: SAN FRANCISCO DEPARTMENT OF HEALTH

PROJECT ID: 9423-S2

LOCATION: SUNOL

RESULTS: SEE ATTACHED

  
Reviewed By  
  
Reviewed By



LABORATORY NUMBER: 107264

DATE SAMPLED: 04/29/92

CLIENT: SAN FRANCISCO DEPARTMENT OF HEALTH

DATE RECEIVED: 04/30/92

PROJECT ID: 9423-S2

DATE ANALYZED: 05/05/92

LOCATION: SUNOL

DATE REPORTED: 05/18/92

Total Volatile Hydrocarbons as Gasoline in Aqueous Solutions  
California DOHS Method  
LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (ug/L)	REPORTING LIMIT (ug/L)
107264-1	MW-1	ND	50
107264-3	MW-3	ND	50

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	101

LABORATORY NUMBER: 107264	DATE SAMPLED: 04/29/92
CLIENT: SAN FRANCISCO DEPARTMENT OF HEALTH	DATE RECEIVED: 04/30/92
PROJECT ID: 9423-S2	DATE ANALYZED: 05/05/92
LOCATION: SUNOL	DATE REPORTED: 05/18/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions  
 TVH by California DOHS Method/LUFT Manual October 1989  
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
107264-2	MW-2	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %	3
RECOVERY, %	101

Client: San Francisco Department of Health

Laboratory Login Number: 107264

 Project Name: Sunol  
 Project Number: 9423-S2

Report Date: 15 May 92

ANALYSIS: Hydrocarbon Oil &amp; Grease (Gravimetric)      METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
107264-001	MW-1	Water	29-APR-92	30-APR-92	01-MAY-92	ND	mg/L	5	TR	5157
107264-002	MW-2	Water	29-APR-92	30-APR-92	01-MAY-92	ND	mg/L	5	TR	5157
107264-003	MW-3	Water	29-APR-92	30-APR-92	01-MAY-92	ND	mg/L	5	TR	5157

ND = Not Detected at or above Reporting Limit (RL).



## Q C B a t c h R e p o r t

Client: San Francisco Department of Health Laboratory Login Number: 107264  
 Project Name: Sunol Report Date: 15 May 92  
 Project Number: 9423-S2

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) QC Batch Number: 5157

## Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	01-MAY-92

## Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	82%	SMWW 17:5520BF	01-MAY-92
BSD	86%	SMWW 17:5520BF	01-MAY-92

		Control Limits
Average Spike Recovery	84%	80% - 120%
Relative Percent Difference	4.3%	< 20%



LABORATORY NUMBER: 107264

DATE SAMPLED: 04/29/92

CLIENT: SAND FRANCISCO DEPARTMENT OF HEALTH

DATE RECEIVED: 04/30/92

PROJECT ID: 9423-S2

DATE EXTRACTED: 05/04/92

LOCATION: SUNOL

DATE ANALYZED: 05/07/92

DATE REPORTED: 05/18/92

Extractable Petroleum Hydrocarbons in Aqueous Solutions  
California DOHS Method  
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
107264-1	MW-1	ND	ND	50
107264-2	MW-2	ND	ND	50
107264-3	MW-3	ND	ND	50

ND = Not detected at or above reporting limit.

\*Reporting limit applies to all analytes.

QA/QC SUMMARY

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=====
RPD, %                                     6
RECOVERY, %                               89
=====

```

LABORATORY NUMBER: 107264-1  
 CLIENT: SAN FRANCISCO DEPARTMENT OF HEALTH  
 PROJECT ID: 9423-S2  
 LOCATION: SUNOL  
 SAMPLE ID: MV-1

DATE SAMPLED: 04/29/92  
 DATE RECEIVED: 04/30/92  
 DATE ANALYZED: 05/13/92  
 DATE REPORTED: 05/18/92

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result ug/L	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
cis-1,2-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
Chloroform	ND	5
Freon 113	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
Vinyl acetate	ND	10
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
Trichloroethylene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
trans-1,3-Dichloropropene	ND	5
2-Chloroethylvinyl ether	ND	10
Bromoform	ND	5
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethylene	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethyl benzene	ND	5
Styrene	ND	5
Total xylenes	ND	5

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	121 %
Toluene-d8	110 %
Bromofluorobenzene	127 %

LABORATORY NUMBER: 107264-3

DATE SAMPLED: 04/29/92

CLIENT: SAN FRANCISCO DEPARTMENT OF HEALTH

DATE RECEIVED: 04/30/92

PROJECT ID: 9423-S2

DATE ANALYZED: 05/13/92

LOCATION: SUNOL

DATE REPORTED: 05/18/92

SAMPLE ID: MW-3

## EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result ug/L	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
cis-1,2-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
Chloroform	ND	5
Freon 113	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
Vinyl acetate	ND	10
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
Trichloroethylene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
trans-1,3-Dichloropropene	ND	5
2-Chloroethylvinyl ether	ND	10
Bromoform	ND	5
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethylene	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethyl benzene	ND	5
Styrene	ND	5
Total xylenes	ND	5

ND = Not detected at or above reporting limit

## QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	114 %
Toluene-d8	110 %
Bromofluorobenzene	133 %



LABORATORY NUMBER: 107264

DATE ANALYZED: 05/13/92

CLIENT: SAN FRANCISCO DEPARTMENT OF HEALTH DATE REPORTED: 05/18/92

PROJECT ID: 9423-S2

LOCATION: SUNOL

SAMPLE ID: METHOD BLANK

## EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result ug/L	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
cis-1,2-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	5
Chloroform	ND	5
Freon 113	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
Vinyl acetate	ND	10
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
Trichloroethylene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	ND	5
trans-1,3-Dichloropropene	ND	5
2-Chloroethylvinyl ether	ND	10
Bromoform	ND	5
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethylene	ND	5
Toluene	ND	5
Chlorobenzene	ND	5
Ethyl benzene	ND	5
Styrene	ND	5
Total xylenes	ND	5

ND = Not detected at or above reporting limit

## QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	119 %
Toluene-d8	116 %
Bromofluorobenzene	134 %

## Curtis &amp; Tompkins, Ltd

## Laboratory Control Sample Report

Lab No: QC28387  
Date Analyzed: 12-MAY-92  
Matrix: Soil  
Batch No: 5251 923832

LCS Datafile: &gt;CEC03

Operator: AV

Compound	Instrdg	SpikeAmt	% Rec	Limits
1,1-Dichloroethene	38.42	50	77 %	48-116%
Trichloroethene	45.43	50	91 %	77-110%
Benzene	47.01	50	94 %	79-114%
Toluene	46.76	50	94 %	60-149%
Chlorobenzene	48.23	50	96 %	80-115%

## Surrogate Recoveries

1,2-Dichloroethane-d4	58.12	50	116 %	68-135%
Toluene-d8	55.25	50	111 %	72-145%
Bromofluorobenzene	62.32	50	125 %	44-228%

Results within Specifications - PASS

## Curtis &amp; Tompkins, Ltd

## MS/MSD Report

Lab No: QC28462 QC28463  
 Date Analyzed: 13-MAY-92  
 Matrix: Water  
 Batch No: 5251 923884 923887

Spike File: >CEC23  
 Spike Dup File:>CEC24  
 Analyst: AV

	Instrdgc	SpikeAmt	% Rec	Limits
<u>MS RESULTS</u>				
1,1-Dichloroethene	58.23	50	116 %	34-128%
Trichloroethene	52.95	50	106 %	37-160%
Benzene	51.57	50	103 %	79-109%
Toluene	54.9	50	110 %	74-115%
Chlorobenzene	53.95	50	108 %	79-118%
Surrogate Recoveries				
1,2-Dichloroethane-d4	50.33	50	101 %	53-170%
Toluene-d8	49.71	50	99 %	85-114%
Bromofluorobenzene	63.64	50	127 %	91-133%
<u>MSD RESULTS</u>				
1,1-Dichloroethene	58.42	50	117 %	34-128%
Trichloroethene	54.56	50	109 %	37-160%
Benzene	52.34	50	105 %	79-109%
Toluene	54.65	50	109 %	74-115%
Chlorobenzene	53.84	50	108 %	79-118%
Surrogate Recoveries				
1,2-Dichloroethane-d4	53.15	50	106 %	53-170%
Toluene-d8	50.19	50	100 %	85-114%
Bromofluorobenzene	59.45	50	119 %	91-133%
<u>RPD DATA</u>				
1,1-Dichloroethene	0 %			< 24%
Trichloroethene	3 %			< 25%
Benzene	1 %			< 23%
Toluene	0 %			< 37%
Chlorobenzene	0 %			< 27%

Results within Specifications - PASS

PROJ. NO. 442352 PROJECT NAME SUNDOL P.O. NO. B.L.L. CITY & COUNTY OF S.F.

NO. OF CONTAINERS

SAMPLERS: Signature *Daniel Taylor* Send report attention to

STA NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ANALYSIS					REMARKS
							TPH-g	TPH-g-BTEX	TPH-d	CHLORO VOC	TOG-B	
MW-1	4/21/92	3:00		X	SUNDOL MW-1	4 vert	X		X			HCL PRESENT
MW-2	4/29/92	1:00		X	SUNDOL MW-2	4 vert		X				HCL PRESENT
MW-3	4/24/92	2:00		X	SUNDOL MW-3	4 vert	X		X			HCL PRESENT
MW-1	4/21/92	5:00		X	SUNDOL MW-1	2 bags		X	X			
MW-2	4/21/92	1:00		X	SUNDOL MW-2	2 bags		X	X			
MW-3	4/24/92	2:00		X	SUNDOL MW-3	2 bags		X	X			

Relinquished by: Signature <i>Daniel Taylor</i>	Date/Time 4/30/92/4:16	Received by: Signature <i>Janice Wilkinson</i>	Date/Time 4/30/92 04:16
Relinquished by: Signature <i>Janice Wilkinson</i>	Date/Time 4/30/92 1:16pm	Received by: Signature <i>Tracy E. Williams</i>	Date/Time 4-30-92 1315
Relinquished by: Signature	Date/Time	Received by: Signature	Date/Time

REMARKS: B.L.L. CITY & COUNTY OF S.F.  
 INCLUDE THAT  
 Company Name  
 Address

