



Working To Restore Nature

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LETTER REPORT
QUARTERLY GROUNDWATER MONITORING
Third Quarter 1992
at
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

11-30-92

69036.04



Working To Restore Nature

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November 30, 1992
1030MWHE
69036.04

Mr. Michael Whelan
ARCO Products Company
P.O. Box 5811
San Mateo, California 94402

Subject: Third Quarter 1992 Groundwater Monitoring Report for ARCO Station 2035,
1001 San Pablo Avenue, Albany, California.

Mr. Whelan:

As requested by ARCO Products Company (ARCO), this letter report summarizes the results of the third quarter 1992 groundwater monitoring performed by ARCO's contractor, EMCON Associates (EMCON) of San Jose, at the above-referenced site. The objectives of this quarterly groundwater monitoring are to evaluate changes in the groundwater flow direction and gradient, and changes in concentrations of petroleum hydrocarbons in the local groundwater associated with the former waste-oil and former underground gasoline-storage tanks (USTs) at the site. The field work and laboratory analyses of groundwater samples during this quarter were performed under the direction of EMCON and included measuring depths to groundwater, subjectively analyzing groundwater for the presence of petroleum product, collecting groundwater samples from the wells for laboratory analyses, and directing a State-certified laboratory to analyze the groundwater samples. Field procedures and acquisition of field data were performed under the direction of EMCON; evaluation and warrant of their field data and field protocols is beyond RESNA Industries Inc.'s (RESNA's) scope of work. RESNA's scope of work was limited to interpretation of field and laboratory analytical data, which included evaluating trends in reported hydrocarbon concentrations in the local groundwater, the groundwater gradient, and direction of groundwater flow beneath the site.

The operating ARCO Station 2035 is located at the southeastern corner of the intersection of Marin and San Pablo Avenues in Albany, California, as shown on the Site Vicinity Map, Plate 1.

Prior to the present monitoring, RESNA (formerly Applied GeoSystems [AGS]) performed investigations related to the former underground waste-oil and former gasoline-storage tanks

at the site. In August 1989, RESNA performed a limited environmental site assessment (AGS, January 1990) which included drilling of five soil borings (B-1 through B-5) in the vicinity of the former gasoline underground storage tanks (USTs). In June through August 1991, RESNA performed an environmental investigation related to UST removal and replacement, which included the drilling of two soil borings (B-6 and B-7) in the area of new tank pit and observing excavation and removal of four USTs, (three 6,000-gallon USTs [T2 and T3], and one 10,000-gallon UST [T4]) and product lines (RESNA, September 1991). The removed gasoline-storage tanks were replaced with four 10,000 gallon gasoline-storage tanks. A 550-gallon waste-oil tank was removed from the site in 1977 during ARCO's conversion of the station to a mini-market. In October and November 1991, RESNA performed a subsurface environmental investigation, which included the drilling of four soil borings (B-8 through B-11) and installation of recovery well RW-1 in boring B-8, and three groundwater monitoring wells (MW-1 through MW-3) in borings B-9 through B-11 respectively; performing an aquifer pumping test; performing well research for water supply and monitoring wells within a 1/2 mile radius of the site, and performing a record search for possible offsite sources of gasoline hydrocarbons detected in the soil and groundwater at the subject site (RESNA, March 1992). In October 1991, RESNA began quarterly monitoring of the onsite wells. The results of the above environmental investigations and assessments are presented in the reports listed in the References section. In August 1992 RESNA performed an additional environmental subsurface investigation, which included drilling and sampling of eight soil borings (B-12 through B-19), installation of six vapor extraction wells (VW-1 through VW-6) in borings B-14 through B-19, respectively, and performing a vapor extraction test. The results of this investigation will be summarized in a forthcoming report. The approximate locations of the former and existing USTs, the former waste-oil tank, and other pertinent features at the site are shown on Plate 2, Generalized Site Plan.

Groundwater Sampling and Gradient Evaluation

Depth-to-water levels (DTW) were measured by EMCON field personnel on July 15, August 7, and September 8, 1992. Quarterly sampling was performed by EMCON field personnel on September 8, 1992. The results of EMCON's field work on the site, including DTW levels and subjective analyses for the presence of product in the groundwater in MW-1 through MW-3, and RW-1, are presented on EMCON's Field Report sheets. These data are included in Appendix A.

The DTW levels, wellhead elevations, groundwater elevations, and subjective observations of product in the groundwater for this quarter and previous groundwater monitoring at the site are summarized in Table 1, Cumulative Groundwater Monitoring Data. Floating

product was observed and its thickness was estimated in recovery well RW-1 during August and September monitoring events. Visual evidence of product or sheen was not noted in the other monitoring wells during this quarter. EMCON's DTW levels were used to evaluate the groundwater elevations. Groundwater elevations were highest in August. Groundwater elevations in wells MW-1 through MW-3 decreased approximately ½ foot between August 7 and September 8, 1992. Groundwater elevation in recovery well RW-1 increased 0.55 feet between July 15 and August 7, and did not change between August 7 and September 8, 1992. The groundwater gradients and flow directions evaluated for July, August and September 1992 are shown on the Groundwater Gradient Maps, Plates 3 through 5. The interpreted groundwater gradients and flow direction averaged approximately 0.02 toward the southwest, which is generally consistent with monitoring data from the last quarter.

Groundwater monitoring wells MW-1 through MW-3 were purged and sampled by EMCON field personnel on September 8, 1992; RW-1 was not sampled due to the presence of floating product. Field data collected during purging and sampling of the onsite wells are summarized in EMCON's Water Sample Field Data Sheets, included in Appendix A. Approximately 3 to 5 well volumes were purged from wells MW-1 through MW-3. The purge water was removed from the site by a licensed hazardous waste hauler; the Monitoring Well Purge Water Disposal Form is also included in Appendix A.

Laboratory Methods and Results

Under the direction of EMCON, water samples collected from the wells were analyzed by Columbia Analytical Services, Inc. (California Department of Health Services Certification No. 1426) for total petroleum hydrocarbons as gasoline (TPHg) and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using modified Environmental Protection Agency (EPA) Methods 5030/8020/DHS LUFT Method. Results of these and previous water analyses are summarized in Table 2, Cumulative Results of Laboratory Analyses of Water Samples. TPHg and benzene concentrations are shown on Plate 6, TPHg/Benzene Concentrations in Groundwater. The Chain of Custody Records and Laboratory Analytical Reports are included in Appendix A.

Analytical results of groundwater samples from MW-1 through MW-3 for this quarter's monitoring indicate:

- o Concentrations of TPHg were detected in well MW-1 (820 parts per billion [ppb]), and were nondetectable (<50 ppb) in wells MW-2 and MW-3.

- o Concentrations of benzene were detected in well MW-1 (350 ppb) and in well MW-3 (5.3 ppb), and were nondetectable (<0.5 ppb) in well MW-2. Concentrations of benzene in wells MW-1 and MW-3 exceed the Maximum Contaminant Level (MCL) of 1.0 ppb benzene in drinking water.
- o Concentrations of toluene, ethylbenzene and total xylenes were nondetectable in wells MW-1 (<5 ppb), MW-2 and MW-3 (<0.5 ppb). In the groundwater sample from well MW-1 the Method Reporting Limit (MRL) was raised due to a high analyte concentration requiring sample dilution. Concentrations of toluene were below the Department of Health Services Drinking Water Action Level (DWAL) of 100 ppb toluene, and concentrations of ethylbenzene and total xylenes were below the State MCL of 680 ppb ethylbenzene, and 1750 ppb total xylenes.

The following general trends were noted in reported hydrocarbon concentrations in groundwater from the three monitoring wells since the last quarterly monitoring: concentrations of TPHg decreased significantly in well MW-1 (from 2,900 ppb to 820 ppb) and in MW-3 (from 720 ppb to nondetectable), and remained nondetectable in MW-2; concentrations of benzene decreased significantly in monitoring well MW-1 (from 1,100 ppb to 350 ppb) and in MW-3 (from 210 ppb to 5.3 ppb), and remained nondetectable in MW-2; concentrations of toluene, ethylbenzene and total xylene decreased to nondetectable levels in MW-1 and MW-3, and remained nondetectable in MW-2. The thickness of floating product in recovery well RW-1 averaged approximately 0.5 foot during this quarter, which is 0.2 foot increase comparing to last quarter.

Product Removal

The floating product skimmer was inspected and floating product was measured and removed from well RW-1 by RESNA field personnel on July 23, August 5 and 17, and September 10 and 22, 1992. Quantities of floating product recovered and thickness of floating product during 1992 are presented in Table 3, Approximate Cumulative Product Recovered. The total cumulative recovered product from RW-1 is approximately 15 gallons.

Conclusions

Groundwater at the site has been impacted by petroleum hydrocarbons. The extent of petroleum hydrocarbons in the local groundwater has not been delineated with the exception of northwestern portion of the site (MW-2), where TPHg concentrations were less than 50 ppb. As indicated by Plate 6, TPHg/Benzene Concentrations in Groundwater, the greatest concentrations of petroleum hydrocarbons appear to be present in the location of the former

Quarterly Groundwater Monitoring
ARCO Station 2035, Albany, California

USTs in the northeastern portion of the site, and in the vicinity of RW-1, situated downgradient of the former tanks.

RESNA concludes that monthly groundwater monitoring, quarterly groundwater sampling, and biweekly measurement and removal of product from the skimmer installed in well RW-1 should continue at the site.

Distribution

RESNA recommends that copies of this report be forwarded to:

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Mr. Richard Hiatt
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612


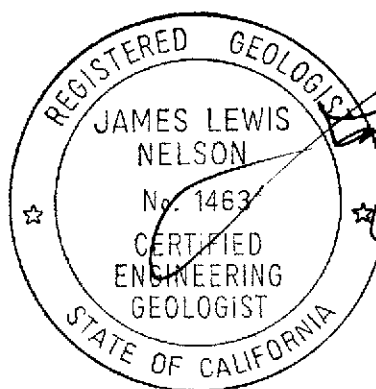
Quarterly Groundwater Monitoring
ARCO Station 2035, Albany, California

If you have any questions or comments, please call us at (408) 264-7723.

Sincerely,
RESNA Industries Inc.



Barbara Sieminski
Assistant Project Geologist



James L. Nelson
Certified Engineering
Geologist # 1463

Enclosures:

- References
- Plate 1, Site Vicinity Map
- Plate 2, Generalized Site Plan
- Plate 3, Groundwater Gradient Map, July 15, 1992
- Plate 4, Groundwater Gradient Map, August 7, 1992
- Plate 5, Groundwater Gradient Map, September 8, 1992
- Plate 6, TPHg/Benzene Concentrations in Groundwater, September 8, 1992

- Table 1, Cumulative Groundwater Monitoring Data
- Table 2, Cumulative Results of Laboratory Analyses of Water Samples
- Table 3, Approximate Cumulative Product Recovered

Appendix A: EMCON's Field Report Sheets; Summary of Groundwater Monitoring Data, Certified Analytical Reports with Chain-of-Custody, and Water Sample Field Data Sheets

Monitoring Well Purge Water Disposal Form

REFERENCES

Applied GeoSystems. January 24, 1990. Limited Environmental Site Assessment at ARCO Station 2035. AGS 96036-1.

Department of Health Services, State of California. October 24, 1990. Summary of California Drinking Water Standards.

RESNA/Applied GeoSystems. April 29, 1991. Work Plan for Subsurface Investigations and Remediation at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. AGS 69036.02.

RESNA/Applied GeoSystems. April 29, 1991. Addendum One to Work Plan at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. AGS 69036.02

RESNA/Applied GeoSystems. June 24, 1991. Site Safety Plan for the ARCO Service Station 2035, 1001 San Pablo Avenue, Albany, California. AGS 69036.03S.

RESNA/Applied GeoSystems. September 11, 1991. Underground Gasoline-Storage Tank Removal and Replacement. AGS 69036.03.

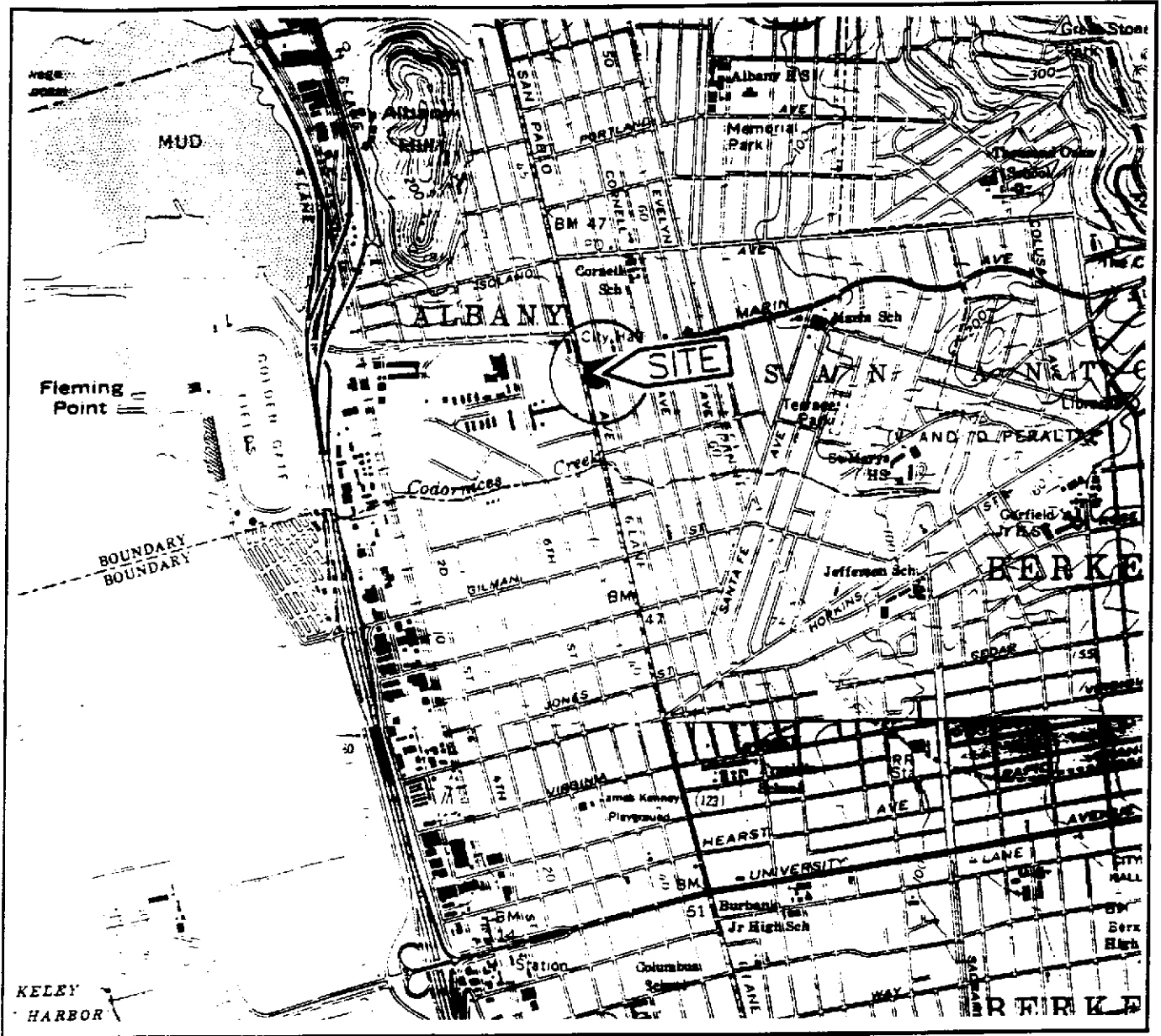
RESNA/Applied GeoSystems. September 24, 1991. Addendum Two to Work Plan at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. AGS 69036.02

RESNA March 6, 1992. Subsurface Environmental Investigation and Pump Test at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. 69036.02.

RESNA May 4, 1992. Letter Report, Quarterly Groundwater Monitoring First Quarter 1992 at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. 69036.04

RESNA May 28, 1992. Addendum Three to Work Plan at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. AGS 69036.05

RESNA August 31, 1992. Letter Report, Quarterly Groundwater Monitoring Second Quarter 1992 at ARCO Station 2035, 1001 San Pablo Avenue, Albany, California. 69036.04



Base: U.S. Geological Survey
 7.5-Minute Quadrangles
 Richmond/Oakland West, California.
 Photorevised 1980

LEGEND

● = Site Location

Approximate Scale

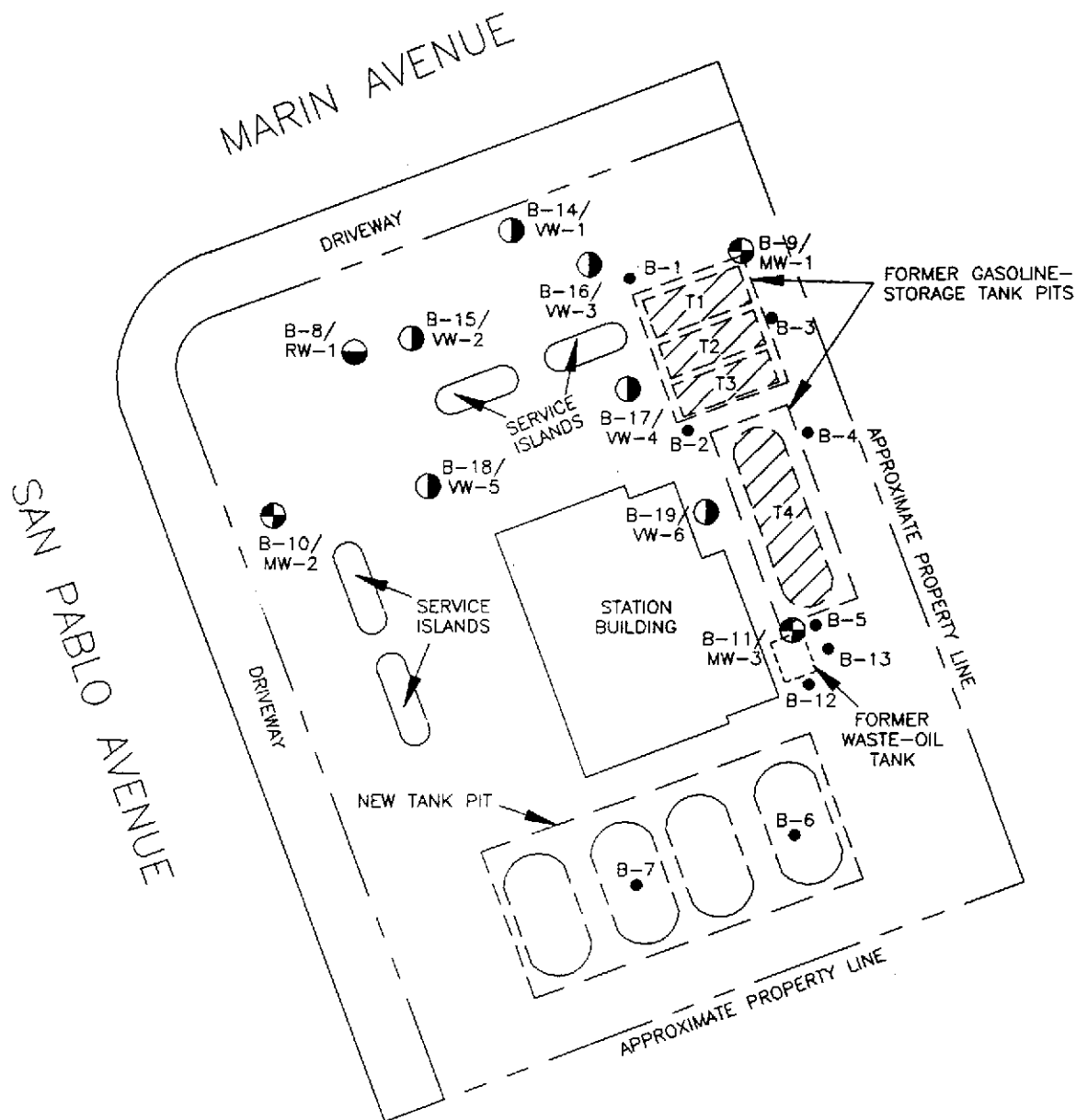


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SITE VICINITY MAP
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
1

PROJECT 69036.04



EXPLANATION

- B-19/
VW-6  = Boring/vapor extraction well
(RESNA, August 1992)
- B-8/
RW-1  = Boring/recovery well
(Exceltech, October 1991)
- B-11/
MW-3  = Boring/monitoring well
(Exceltech, October 1991)
- B-13  = Soil boring
(RESNA, August 1989, June 1991, and August 1992)

Approximate Scale



Source: Surveyed by John E. Koch, Land Surveyor.
Dated October 29, 1991.

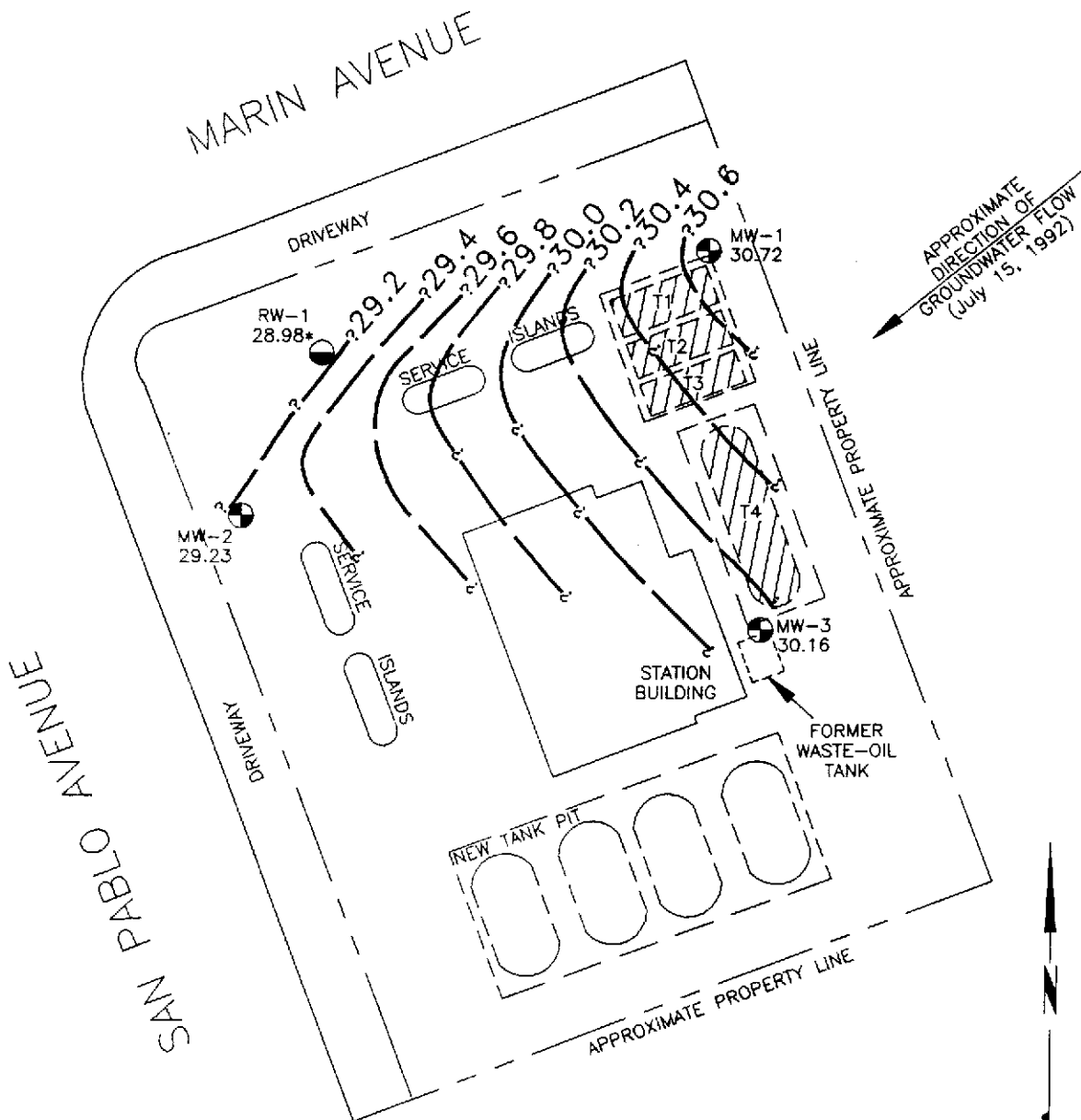
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GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE

2

PROJECT 69036.04



EXPLANATION

RW-1 = Recovery well
(Exceltech, October 1991)

MW-3 = Monitoring well
(Exceltech, October 1991)

= Former underground gasoline tank pits

30.6 = Line of equal elevation of groundwater
in feet above mean sea level (MSL)

30.72 = Elevation of groundwater in feet above MSL,
July 15, 1992

* = Floating product

Approximate Scale



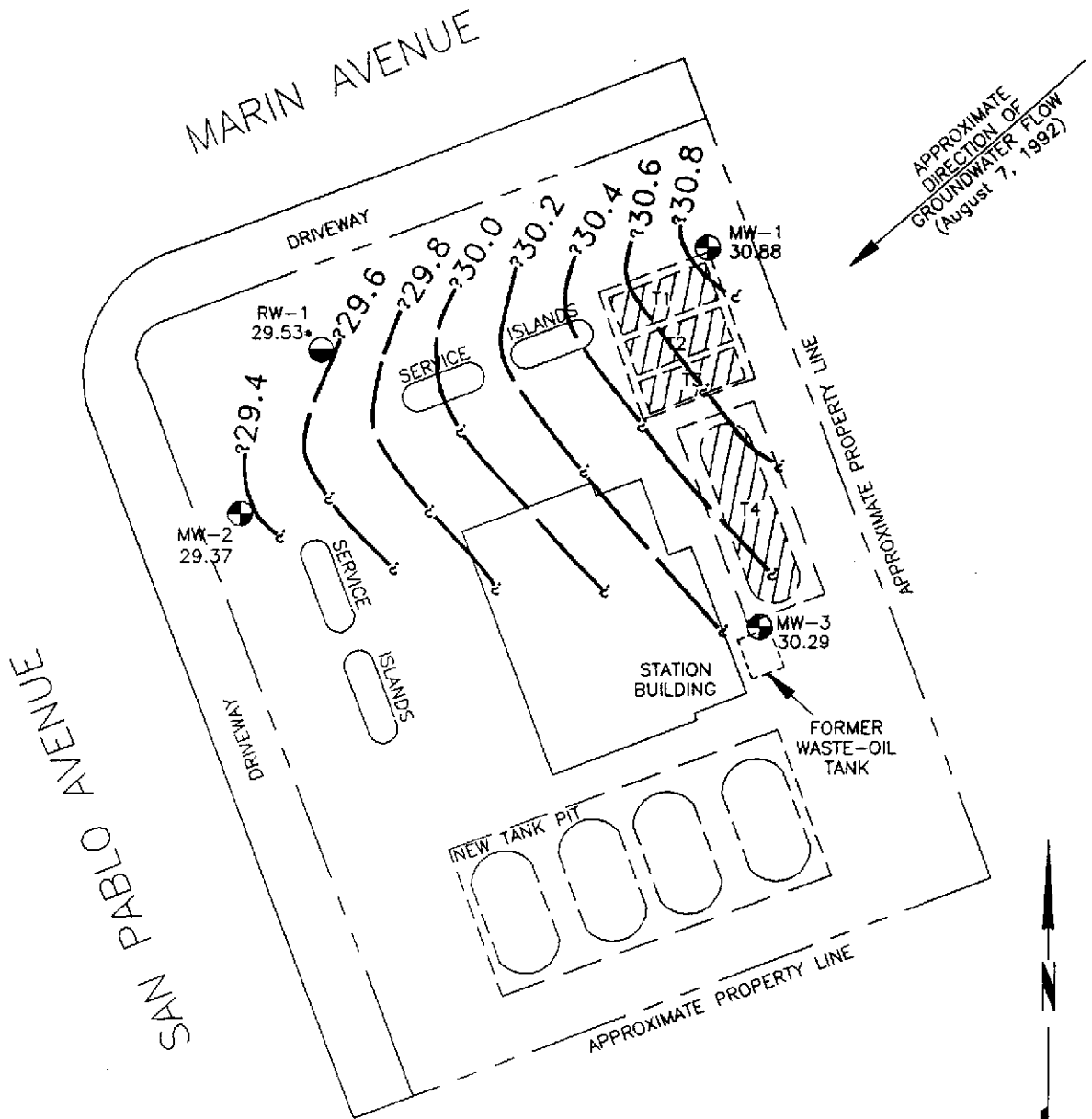
Source: Surveyed by John E. Koch, Land Surveyor.
Dated October 29, 1991.

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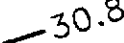
GROUNDWATER GRADIENT MAP
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

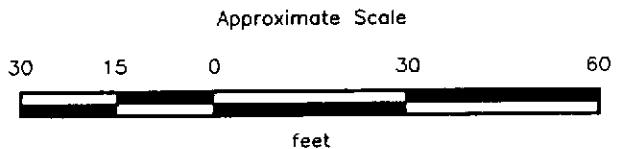
PLATE
3

PROJECT 69036.04



EXPLANATION

- RW-1  = Recovery well (Exceltech, October 1991)
- MW-3  = Monitoring well (Exceltech, October 1991)
-  = Former underground gasoline tank pits
-  - 30.8 = Line of equal elevation of groundwater in feet above mean sea level (MSL)
- 30.88 = Elevation of groundwater in feet above MSL, August 7, 1992
- * = Floating product



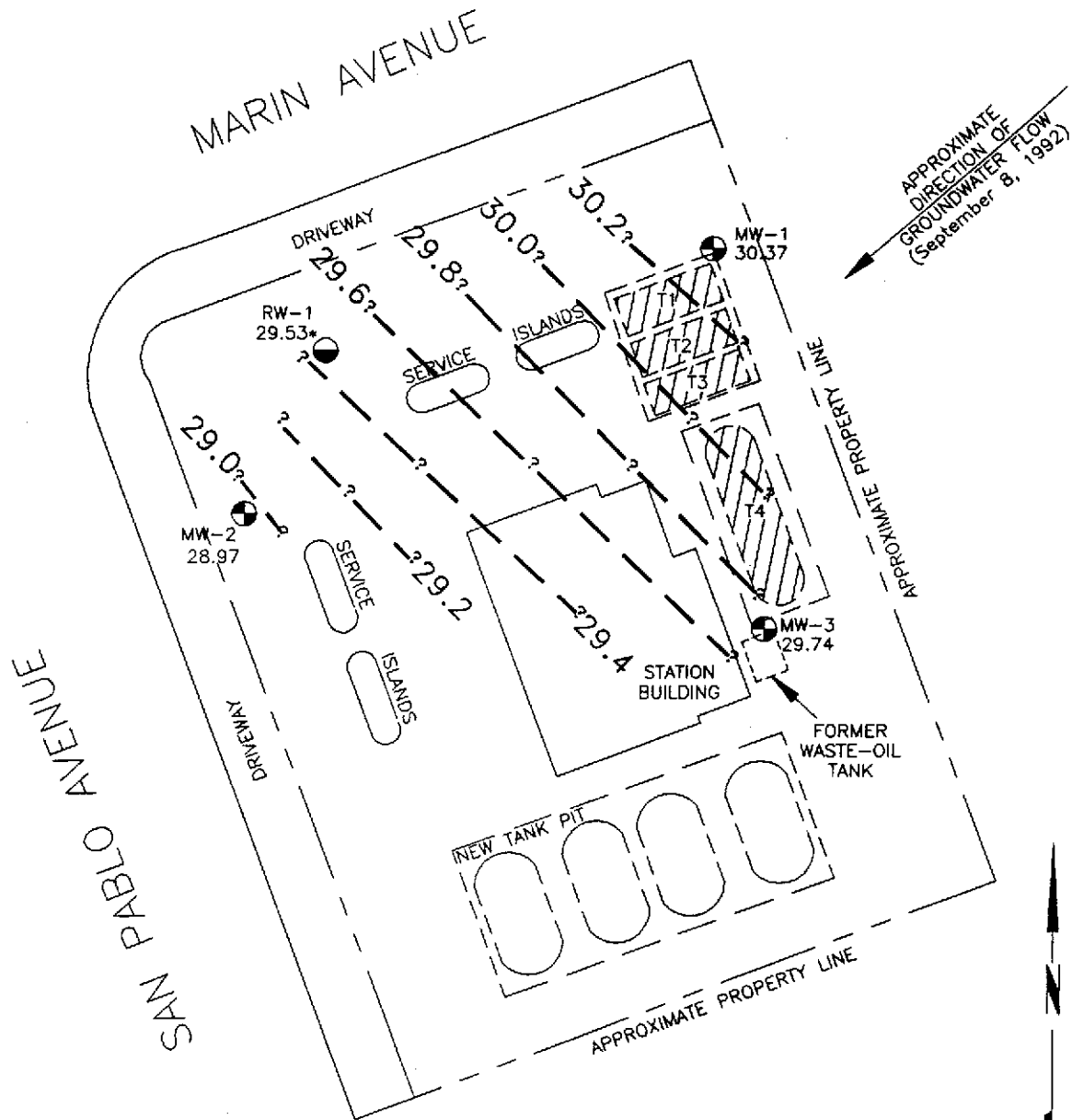
Source: Surveyed by John E. Koch, Land Surveyor.
Dated October 29, 1991.

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GROUNDWATER GRADIENT MAP
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

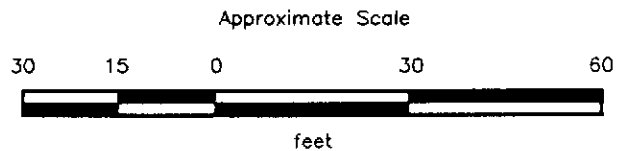
PLATE
4

PROJECT 69036.04



EXPLANATION

- RW-1  = Recovery well (Exceltech, October 1991)
- MW-3  = Monitoring well (Exceltech, October 1991)
-  = Former underground gasoline tank pits
- 30.2 = Line of equal elevation of groundwater in feet above mean sea level (MSL)
- 30.37 = Elevation of groundwater in feet above MSL, September 8, 1992
- * = Floating product



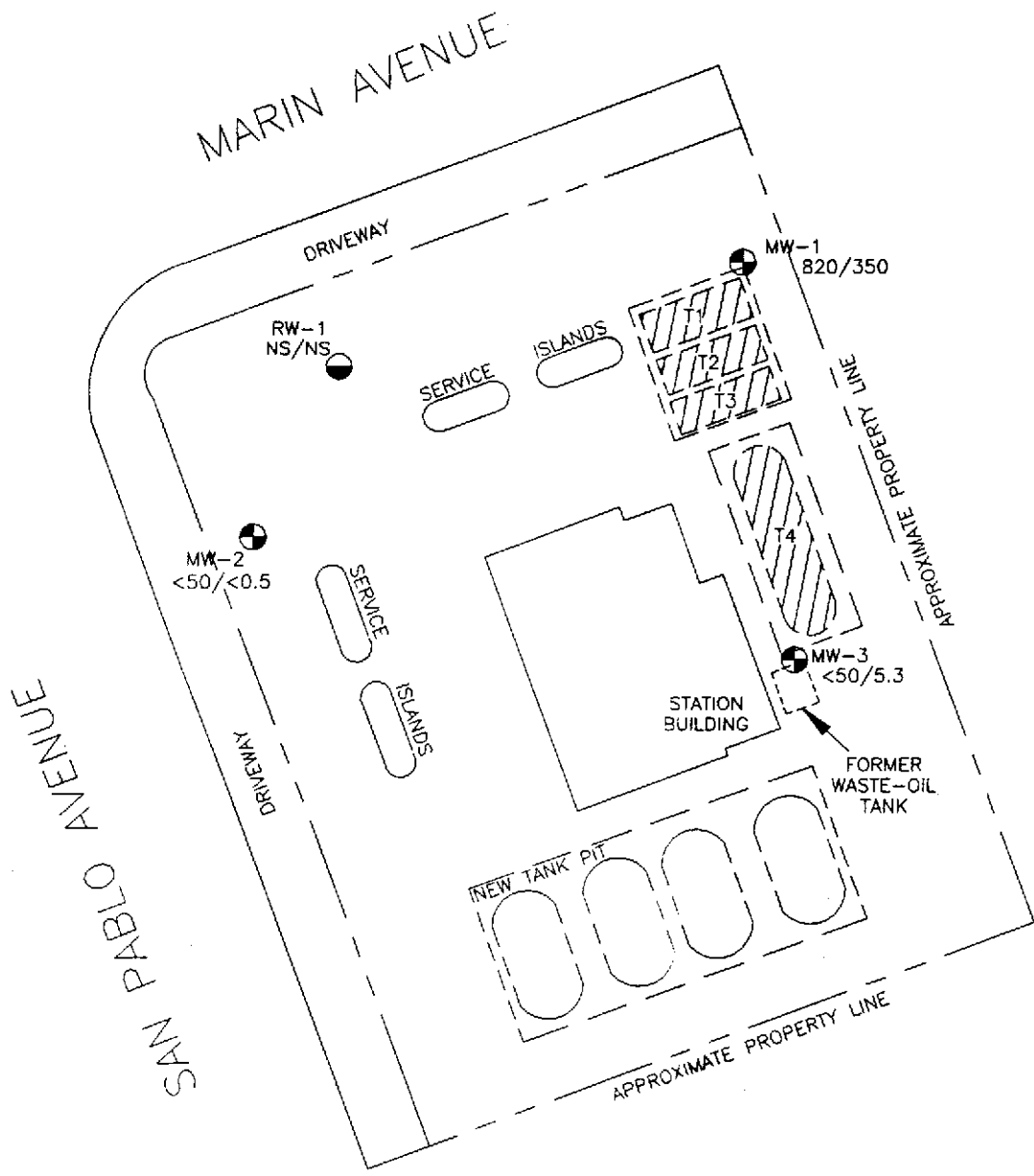
Source: Surveyed by John E. Koch, Land Surveyor.
Dated October 29, 1991.

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GROUNDWATER GRADIENT MAP
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

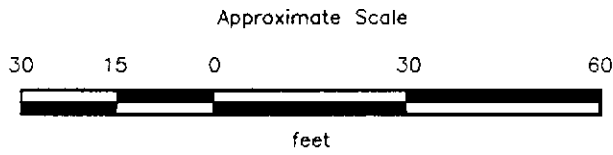
PLATE
5

PROJECT 69036.04



EXPLANATION

- RW-1  = Recovery well (Exceltech, October 1991)
- MW-3  = Monitoring well (Exceltech, October 1991)
-  = Former underground gasoline tank pits
- 820/350 = Concentration of TPHg/Benzene in groundwater, in parts per billion (ppb), Sept. 8, 1992
- NS = Not sampled due to floating product



Source: Surveyed by John E. Koch, Land Surveyor.
Dated October 29, 1991.



**TPHg/BENZENE CONCENTRATIONS
IN GROUNDWATER
ARCO Station 2035
1001 San Pablo Avenue
Albany, California**

**PLATE
6**

PROJECT 69036.04

Quarterly Groundwater Monitoring
 ARCO Station 2035, Albany, California

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING DATA
 ARCO Station 2035
 Albany, California
 (Page 1 of 2)

<u>Well Date</u>	<u>Elevation of Wellhead</u>	<u>Depth to Water</u>	<u>Elevation of Groundwater</u>	<u>Evidence of Product</u>
<u>MW-1</u>				
10/29/91	41.41	11.86	29.55	None
11/07/91		10.94	30.47	None
11/14/91		10.97	30.44	None
01/19/92		10.06	31.35	None
02/19/92		8.65	32.76	None
03/19/92		8.33	33.08	None
04/21/92		9.32	32.09	None
05/12/92		9.82	31.59	None
06/12/92		10.50	30.91	None
07/15/92		10.69	30.72	None
08/07/92		10.53	30.88	None
09/08/92		11.04	30.37	None
<u>MW-2</u>				
10/29/91	40.38	11.10	29.28	None
11/07/91		11.20	29.18	None
11/14/91		11.21	29.17	None
01/19/92		10.44	29.94	None
02/19/92		8.70	31.68	None
03/19/92		8.84	31.54	None
04/21/92		9.80	30.58	None
05/12/92		10.29	30.09	None
06/12/92		10.95	29.43	None
07/15/92		11.15	29.23	None
08/07/92		11.01	29.37	None
09/08/92		11.41	28.97	None
<u>MW-3</u>				
10/29/91	41.44	11.62	29.82	None
11/07/91		11.52	29.92	None
11/14/91		11.50	29.94	None
01/19/92		10.56	30.88	None
02/19/92		9.52	31.92	None
03/19/92		9.01	32.43	None
04/21/92		9.70	31.74	None
05/12/92		10.29	31.15	None
06/12/92		11.26	30.18	None
07/15/92		11.28	30.16	None
08/07/92		11.15	30.29	None
09/08/92		11.70	29.74	None

See notes on Page 2 of 2.

Quarterly Groundwater Monitoring
 ARCO Station 2035, Albany, California

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING DATA
 ARCO Station 2035
 Albany, California
 (Page 2 of 2)

<u>Well</u> <u>Date</u>	<u>Elevation</u> <u>of Wellhead</u>	<u>Depth</u> <u>to Water</u>	<u>Elevation</u> <u>of Groundwater</u>	<u>Evidence of</u> <u>Product</u>
<u>RW-1</u>				
10/29/91	40.33	10.85	29.48	Sheen
11/07/91		11.97	28.36	0.01
11/14/91		11.03	29.30	0.01
01/19/92		10.22*	30.11*	3.26
02/19/92		8.49*	31.84*	2.14
03/19/92		8.50*	31.83*	0.50
04/21/92		9.68*	30.65	0.03
05/12/92		10.47	29.86	Product not measured
06/12/92		11.41	28.92	Product not measured
07/15/92		11.35	28.98	None
08/07/92		10.80*	29.53*	0.02
09/08/92		10.80*	29.53*	0.62

Wellhead Elevation based on benchmark (B1198): A standard Bronze Disk in the sidewalk 0.8' behind the face of curb on the northerly side of Marin Avenue 6' +/- westerly of the curb return at the northeast corner of Marin Avenue and San Pablo Avenue at an elevation of 40.426 feet above mean sea level, City of Albany, California.

Depth-to-water measurements in feet below the top of the well casing.

*Adjusted water level due to product. The static water level in each well that was suspected to contain floating product was measured with an ORS® interface probe; this instrument is accurate to the nearest 0.01 foot. The probe contains two different sensor units, one for detecting the liquid/air interface, and one for distinguishing between water and hydrocarbon. The thickness of the floating product and the groundwater depths in each well were recorded. The recorded thickness of the floating product was then multiplied by 0.80 to obtain an approximate value for the displacement of water by the floating product. This approximate displacement value was then subtracted from the measured depth to water to obtain a calculated depth to water. These calculated groundwater depths were subtracted from surveyed wellhead elevations to calculate the differences in groundwater elevations.

Quarterly Groundwater Monitoring
 ARCO Station 2035, Albany, California

TABLE 2
 CUMULATIVE RESULTS OF LABORATORY ANALYSES OF WATER SAMPLES
 ARCO Station 2035
 Albany, California

WELL DATE	TPHg	B	T	E	X	TOG	VOC	Cd	Cr	Pb	Ni	Zn
<u>MW-1</u>												
10/29/91	620	76	69	15	60	NA	NA	NA	NA	NA	NA	NA
03/19/92	6,500	2,600	89	42	290	NA	NA	NA	NA	NA	NA	NA
06/12/92	2,900	1,100	2.5	21	15	NA	NA	NA	NA	NA	NA	NA
09/08/92	820	350	<5*	<5*	<5*	NA	NA	NA	NA	NA	NA	NA
<u>MW-2</u>												
10/29/91	<60	2.4	4.6	0.48	2.3	NA	ND	NA	NA	NA	NA	NA
03/19/92	<50	6.8	0.9	<0.5	1.1	NA	NA	NA	NA	NA	NA	NA
06/12/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA
09/08/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA
<u>MW-3</u>												
10/29/91	32	2.1	2.8	0.35	1.8	<5.0	ND**	<0.010	<0.010	<0.0050	<0.050	0.045
03/19/92	2,100	780	8.8	16	58	NA	NA	NA	NA	NA	NA	NA
06/12/92	720	210	<2.5*	23	4.0	NA	NA	NA	NA	NA	NA	NA
09/08/92	<50	5.3	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA
<u>RW-1</u>												
10/29/91			Not sampled--sheen									
03/19/92			Not sampled--floating product									
06/12/92			Not sampled--floating product									
09/08/92			Not sampled--floating product									
MCL:		1		680	1,750			10	50	50	—	—
DWAL:			100									

Results in parts per billion (ppb).

TPHg: Total petroleum hydrocarbons as gasoline by EPA method 5030/8015/8020.

B: benzene, T: toluene, E: ethylbenzene, X: total xylenes isomers

BTEX: Analyzed by EPA method 5030/8015/8020.

TOG: Total oil and grease by Standard method 5520 B&F.

VOC: Volatile organic compounds by EPA method 624.

*: Laboratory Raised Methods Reporting Limit (MRL) due to high analyte concentration requiring sample dilution.

** : All compounds were nondetectable except for toluene (3.0 ppb).

Cd: Cadmium by EPA method 200.7.

Cr: Chromium by EPA method 200.7.

Ni: Nickel by EPA method 200.7.

Zn: Zinc by EPA method 200.7.

Pb: Lead by EPA method 3010.

NA: Not analyzed.

<: Results reported below the laboratory detection limit.

ND: Not detected; detection limit varied according to analyte.

MCL: State Maximum Contaminant Level (October 1990).

DWAL: State Drinking Water Action Level (October 1990).

Sample Identification: W-11-MW-3



Monitoring well number
 Depth in feet
 Water Sample

Quarterly Groundwater Monitoring
ARCO Station 2035, Albany, California

November 30, 1992
69036.04

TABLE 3
APPROXIMATE CUMULATIVE PRODUCT RECOVERED
ARCO Station 2035
Albany, California

<u>Well</u> Date	Product Thickness (feet)	Product Recovered (gallons)
YEAR: 1992		
<u>RW-1</u>		
01/29/92	3.35	5.0
02/28/92	2.58	3.8
03/12/92	1.28	2.0
03/25/92	0.91	0.5
05/29/92	0.23	0.3
06/08/92	0.60	0.5
06/30/92	0.15	0.25
07/23/92	0.27	0.5
08/05/92	0.45	0.25
08/17/92	0.50	0.5
09/10/92	0.75	0.5
09/22/92	0.80	1.2
	1992 TOTAL:	15.30

Product measured and bailed by RESNA personnel.

APPENDIX A
EMCON'S FIELD REPORT SHEETS;
SUMMARY OF GROUNDWATER MONITORING DATA,
CERTIFIED ANALYTICAL REPORTS WITH CHAIN-OF-CUSTODY, AND
WATER SAMPLE FIELD DATA SHEETS

MONITORING WELL PURGE WATER DISPOSAL FORM

RECEIVED

AUG 4 1992



EMCON
ASSOCIATES

Consultants in Wastes
Management and
Environmental Control

Date July 31, 1992
Project G70-17.01

To:
Mr. Joel Coffman
RESNA/ Applied Geosystems
3315 Almaden Expressway, Suite 34
San Jose, California 95118

We are enclosing:

Copies	Description
<u>1</u>	<u>Depth To Water/Floating Product Survey Results</u>
<u> </u>	<u>July 1992 monthly water level survey, ARCO</u>
<u> </u>	<u>station 2035. 1001 San Pablo Avenue, Albany, CA</u>

For your: X Information Sent by: X Mail

Comments:

Monthly water level data for the above mentioned site are attached. Please call if you have any questions: (408) 453-2266.

Reviewed by:



Jim Butera JB.

Robert Porter

Robert Porter, Senior Project
Engineer.





RECEIVED
SEP 31 1992
RESNA
SAN JOSE

Date Sept 01 31, 1992
Project G70-17.01

To:
Mr. Joel Coffman
RESNA/ Applied Geosystems
3315 Almaden Expressway, Suite 34
San Jose, California 95118

We are enclosing:

Copies	Description
<u>1</u>	<u>Depth To Water/Floating Product Survey Results</u>
	<u>August 1992 monthly water level survey, ARCO</u>
	<u>station 2035, 1001 San Pablo Avenue, Albany, CA</u>

For your: X Information Sent by: X Mail

Comments:

Monthly water level data for the above mentioned site are attached. Please call if you have any questions: (408) 453-2266.

Reviewed by:



Jim Butera JB

Robert Porter
Robert Porter, Senior Project Engineer.





EMCON
ASSOCIATES

Consultants in Wastes
Management and
Environmental Control

RECEIVED

FEB 22 1992

FEWA
3/1/92

Date Sept 22, 1992
Project G70-17.01

To:

Mr. Joel Coffman
RESNA/ Applied Geosystems
3315 Almaden Expressway, Suite 34
San Jose, California 95050

We are enclosing:

Copies	Description
<u>1</u>	<u>Depth To Water / Floating Product Survey Results</u>
<u>1</u>	<u>Summary of Groundwater Monitoring Data</u>
<u>1</u>	<u>Certified Analytical Reports with Chain-of-Custody</u>
<u>4</u>	<u>Water Sample Field Data Sheets</u>

For your: X Information Sent by: X Mail

Comments:

Enclosed are the data from the third quarter 1992 monitoring event at ARCO service station 2035, 1001 San Pablo Avenue, Albany, California. Groundwater monitoring is conducted consistent with applicable regulatory guidelines. Please call if you have any questions: (408) 453-2266.

Reviewed by:



Jim Butera JB

Robert Porter
Robert Porter, Senior Project
Engineer.



Summary of Groundwater Monitoring Data
 Third Quarter 1992
 ARCO Service Station 2035
 1001 San Pablo Avenue, Albany, California
 micrograms per liter ($\mu\text{g/l}$) or parts per billion (ppb)

Well ID and Sample Depth	Sampling Date	Depth To Water (feet)	Floating Product Thickness (feet)	TPH ¹ as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)
MW-1(29)	09/08/92	11.04	ND. ²	820.	350.	<5.	<5.	<5.
MW-2(27)	09/08/92	11.41	ND.	<50	<0.5	<0.5	<0.5	<0.5
MW-3(32)	09/08/92	11.70	ND.	<50	5.3	<0.5	<0.5	<0.5
RW-1	09/08/92	11.30	NS. ³	NS.	NS.	NS.	NS.	NS.
FB-14	09/08/92	NA. ⁵	NA.	<50	<0.5	<0.5	<0.5	<0.5

-
1. TPH. = Total petroleum hydrocarbons
 2. ND. = Not detected
 3. NS. = Not sampled; well was not sampled due to detection of floating product
 4. FB. = Field blank
 5. NA. = Not applicable
-



September 15, 1992

Jim Butera
EMCON Associates
1921 Ringwood Avenue
San Jose, CA 95131

Re: **EMCON Project No. G70-17.01**
Arco Facility No. 2035

Dear Mr. Butera:

Enclosed are the results of the water samples submitted to our lab on September 9, 1992. For your reference, our service request number for this work is SJ92-1127.


All analyses were performed in accordance with the laboratory's quality assurance program.

Please call if you have any questions.

Respectfully submitted:

COLUMBIA ANALYTICAL SERVICES, INC.


Keoni A. Murphy
Laboratory Manager


Annelise J. Bazar
Regional QA Coordinator

le/KAM

Analytical Report

Client: EMCON Associates
 Project: EMCON Project No. G70-17.01
 Arco Facility No. 2035

Date Received: 09/09/92
 Work Order #: SJ92-1127
 Sample Matrix: Water

BTEX and TPH as Gasoline
 EPA Methods 5030/8020/DHS LUFT Method
 µg/L (ppb)

Sample Name:	<u>MW-1 (29)</u>	<u>MW-2 (27)</u>	<u>MW-3 (32)</u>
Date Analyzed:	09/11/92	09/10/92	09/11/92

<u>Analyte</u>	<u>MRL</u>			
Benzene	0.5	350.	ND	5.3
Toluene	0.5	<5.*	ND	ND
Ethylbenzene	0.5	<5.*	ND	ND
Total Xylenes	0.5	<5.*	ND	ND
TPH as Gasoline	50	820.	ND	ND

TPH Total Petroleum Hydrocarbons

MRL Method Reporting Limit

ND None Detected at or above the method reporting limit

* Raised MRL due to high analyte concentration requiring sample dilution.

Approved by

Kenneth Murphy

Date

September 15, 1992

Analytical Report

Client: EMCON Associates
 Project: EMCON Project No. G70-17.01
 Arco Facility No. 2035

Date Received: 09/09/92
 Work Order #: SJ92-1127
 Sample Matrix: Water

BTEX and TPH as Gasoline
 EPA Methods 5030/8020/DHS LUFT Method
 µg/L (ppb)

Sample Name: FB-1 Method Blank Method Blank
 Date Analyzed: 09/10/92 09/10/92 09/11/92

<u>Analyte</u>	<u>MRL</u>			
Benzene	0.5	ND	ND	ND
Toluene	0.5	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND

TPH Total Petroleum Hydrocarbons
 MRL Method Reporting Limit
 ND None Detected at or above the method reporting limit

Approved by Kenneth Murphy Date September 15, 1992

APPENDIX A
LABORATORY QC RESULTS

COLUMBIA ANALYTICAL SERVICES, INC.

Client: EMCON Associates
 Project: EMCON Project No. G70-17.01
 Arco Facility No. 2035

Date Received: 09/09/92
 Work Order #: SJ92-1127

QA/QC Report
 Initial Calibration Verification
 BTEX and TPH as Gasoline
 EPA Methods 5030/8020/DHS LUFT Method
 Nanograms

Date Analyzed: 09/10/92

<u>Analyte</u>	<u>True Value</u>	<u>Result</u>	<u>Percent Recovery</u>	<u>CAS Percent Recovery Acceptance Criteria</u>
Benzene	250.	243.	97.	85-115
Toluene	250.	254.	102.	85-115
Ethylbenzene	250.	241.	96.	85-115
Total Xylenes	750.	693.	92.	85-115
TPH as Gasoline	2,500.	2,516.	101.	90-110

Date Analyzed: 09/11/92

<u>Analyte</u>	<u>True Value</u>	<u>Result</u>	<u>Percent Recovery</u>	<u>CAS Percent Recovery Acceptance Criteria</u>
Benzene	250.	257.	103.	85-115
Toluene	250.	260.	104.	85-115
Ethylbenzene	250.	255.	102.	85-115
Total Xylenes	750.	728.	97.	85-115
TPH as Gasoline	2,500.	2,420.	97.	90-110

TPH Total Petroleum Hydrocarbons

Approved by *Karen Amundson* Date *September 15, 1992*

Client: EMCON Associates
 Project: EMCON Project No. G70-17.01
 Arco Facility No. 2035

Date Received: 09/09/92
 Work Order #: SJ92-1127
 Sample Matrix: Water

QA/QC Report
 Surrogate Recovery Summary
 BTEX and TPH as Gasoline
 EPA Methods 5030/8020/DHS LUFT Method

<u>Sample Name</u>	<u>Date Analyzed</u>	<u>Percent Recovery</u> <i>a,a,a</i> -Trifluorotoluene
MW-1 (29)	09/11/92	97.
MW-2 (27)	09/10/92	90.
MW-3 (32)	09/11/92	98.
FB-1	09/10/92	93.
MS	09/10/92	90.
DMS	09/10/92	77.
Method Blank	09/10/92	100.
Method Blank	09/11/92	103.

CAS Acceptance Criteria 70-130

TPH Total Petroleum Hydrocarbons

Approved by *K. O. Murphy* Date *September 15, 1992*

COLUMBIA ANALYTICAL SERVICES, INC.

Client: EMCON Associates
 Project: EMCON Project No. G70-17.01
 Arco Facility No. 2035

Date Received: 09/09/92
 Work Order #: SJ92-1127
 Sample Matrix: Water

QA/QC Report
 Matrix Spike/Duplicate Matrix Spike Summary
 BTE
 EPA Methods 5030/8020
 µg/L (ppb)

Date Analyzed: 09/10/92

Percent Recovery

Analytes	Spike Level	Sample Result	Spike Result		Percent Recovery		Acceptance Criteria
			MS	DMS	MS	DMS	
Benzene	25.	ND	28.2	33.8	113.	135.	39-150
Toluene	25.	ND	28.7	34.5	115.	138.	46-148
Ethylbenzene	25.	ND	28.6	33.7	114.	135.	32-160

ND None Detected at or above the method reporting limit

Approved by *Kenneth Murphy* Date *September 15, 1992*

APPENDIX B
CHAIN OF CUSTODY

ARCO Facility no. **2035** City (Facility) **Albany** Project manager (Consultant) **JIM BUTERA**
 ARCO engineer **Kyle Christie** Telephone no. (ARCO) **571-2434** Telephone no. (Consultant) **408 453-0719** Fax no. (Consultant) **408 453-0452**
 Consultant name **EMCON ASSOCIATES** Address (Consultant) **1938 JUNCTION AVENUE SEWISSE**

Laboratory name **CAS**
Contract number **67077**

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602EPA 8020	BTEX/TPH EPA 1602/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 6010/7000 TTLIC <input type="checkbox"/> STLIC <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>	
			Soil	Water	Other	Ice	Acid															
MW-1(24)	1-2	2		X		X	HCl	9-8-92	1515-		X											
MW-2(24)	3-4	2		X		X	HCl	9-8-92	1302		X											
MW-3(32)	5-b	2		X		X	HCl	9-8-92	1410		X											
RW-1()		2		X		X	HCl		NO Sample		X											
FB-1	7-8	2		X		X	HCl	9-8-92	1520		X											

Method of shipment **Sampler will deliver**

Special detection Limit/reporting **None Request Possible**

Special QA/QC **Normal**

Remarks **2-40ml HCl
VOA's**

670-1701

Lab number **5592-1127**

Turnaround time
 Priority Rush 1 Business Day
 Rush 2 Business Days
 Expedited 5 Business Days
 Standard 10 Business Days

Condition of sample: **OK** Temperature received: **cool**

Relinquished by sampler <i>Joe Williams</i>	Date 9-9-92	Time 9:20	Received by
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory <i>JA</i>

Date **9-9-92** Time **9:20am**



EMCON ASSOCIATES

WATER SAMPLE FIELD DATA SHEET

Rev. 2, 5/91

PROJECT NO: G70-17 01
PURGED BY: S. Williams
SAMPLED BY: S. Williams

SAMPLE ID: MW-1
CLIENT NAME: ARCO 2035
LOCATION: 1001 Santa Pablo Ave Albany, CA

TYPE: Ground Water Surface Water Treatment Effluent Other
CASING DIAMETER (inches): 2 3 4 4.5 6 Other

CASING ELEVATION (feet/VMSL): 112 VOLUME IN CASING (gal.): 12.17
DEPTH TO WATER (feet): 11.04 CALCULATED PURGE (gal.): 60.87
DEPTH OF WELL (feet): 29.60 ACTUAL PURGE VOL (gal.): 51.0

DATE PURGED: 05-08-92 Start (2400 Hr) 1440 End (2400 Hr) 1505
DATE SAMPLED: 05-08-92 Start (2400 Hr) End (2400 Hr) 1515

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
<u>1444</u>	<u>12.5</u>	<u>0478</u>	<u>604</u>	<u>69.4</u>	<u>BROWN</u>	<u>HEAVY</u>
<u>1450</u>	<u>25</u>	<u>480</u>	<u>653</u>	<u>67.2</u>	<u>L</u>	<u>L</u>
<u>1456</u>	<u>37</u>	<u>481</u>	<u>725</u>	<u>65.8</u>	<u>L</u>	<u>L</u>
<u>1500</u>	<u>49</u>	<u>476</u>	<u>730</u>	<u>69.8</u>	<u>L</u>	<u>L</u>
<u>1514</u>	<u>Rel. Charge</u>	<u>476</u>	<u>717</u>	<u>69.4</u>	<u>L</u>	<u>L</u>

D. O. (ppm): NR ODOR: None NR (COBALT 0 - 100) NR (NTU 0 - 200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1): FB-1

PURGING EQUIPMENT

SAMPLING EQUIPMENT

- 2" Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Well Wizard™
 - Other: _____
- Bailer (Teflon®)
 - Bailer (PVC)
 - Bailer (Stainless Steel)
 - Dedicated
 - Other: _____
- 2" Bladder Pump
 - Bailer (Teflon®)
 - Bailer (Stainless Steel)
 - Submersible Pump
 - Dedicated
 - Other: _____
- ODL Sampler
 - Dipper
 - Well Wizard™
 - Other: _____

WELL INTEGRITY: OK LOCK #: 3950

REMARKS: WELL DRIED AFTER 51 GALLON TIME 1505

Meter Calibration: Date: 9-8-92 Time: 12:05 Meter Serial #: _____ Temperature °F: _____
(EC 1000 _____ / _____) (DI _____) (pH 7 _____ / _____) (pH 10 _____ / _____) (pH 4 _____ / _____)
Location of previous calibration: MW-2

Signature: [Signature] Reviewed By: JL Page 1 of 4



EMCON ASSOCIATES

WATER SAMPLE FIELD DATA SHEET

Rev. 2, 5/91

(27)

PROJECT NO: 670-17.01

SAMPLE ID: MW-2

PURGED BY: J.W. Williams

CLIENT NAME: ARCO 2035

SAMPLED BY: J.W. Williams

LOCATION: 1001 SAN PABLO AVE

ALBANY, CA

TYPE: Ground Water Surface Water Treatment Effluent Other

CASING DIAMETER (inches): 2 3 4 4.5 6 Other

CASING ELEVATION (feet/MSL): NR VOLUME IN CASING (gal.): 11.34

DEPTH TO WATER (feet): 11.41 CALCULATED PURGE (gal.): 56.71

DEPTH OF WELL (feet): 28.70 ACTUAL PURGE VOL. (gal.): 57

328

DATE PURGED: 09-08-92 Start (2400 Hr) 12:35 End (2400 Hr) 12:52

DATE SAMPLED: 09-08-92 Start (2400 Hr) 13:00 End (2400 Hr) 13:02

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
<u>1239</u>	<u>11.5</u>	<u>6.39</u>	<u>671</u>	<u>69.1</u>	<u>BROOBN</u>	<u>HEAVY</u>
<u>1242</u>	<u>23</u>	<u>6.50</u>	<u>688</u>	<u>67.9</u>	<u>GREY</u>	<u>MOD</u>
<u>1245</u>	<u>34.5</u>	<u>6.51</u>	<u>682</u>	<u>66.4</u>	<u>↓</u>	<u>↓</u>
<u>1247</u>	<u>46</u>	<u>6.50</u>	<u>681</u>	<u>66.1</u>	<u>↓</u>	<u>↓</u>
<u>1252</u>	<u>57</u>	<u>6.49</u>	<u>679</u>	<u>65.7</u>	<u>CLEAR</u>	<u>MOD</u>

D. O. (ppm): NR ODOR: NONE NR (COBALT 0 - 100) NR (NTU 0 - 200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1): NR

PURGING EQUIPMENT

SAMPLING EQUIPMENT

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> 2" Bladder Pump | <input type="checkbox"/> Bailer (Teflon®) | <input type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer (Teflon®) |
| <input checked="" type="checkbox"/> Centrifugal Pump | <input type="checkbox"/> Bailer (PVC) | <input type="checkbox"/> DDL Sampler | <input type="checkbox"/> Bailer (Stainless Steel) |
| <input type="checkbox"/> Submersible Pump | <input type="checkbox"/> Bailer (Stainless Steel) | <input type="checkbox"/> Dipper | <input type="checkbox"/> Submersible Pump |
| <input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Dedicated | <input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Dedicated |
- Other: _____ Other: _____

WELL INTEGRITY: OK LOCK #: 3259

REMARKS: _____

Meter Calibration: Date: 9-8-92 Time: 12:05 Meter Serial #: _____ Temperature °F: 77.1

(EC 1000 1335/1000) (DI _____) (pH 7 7.02/7.00) (pH 10 10.00/10.00) (pH 4 3.99/)

Location of previous calibration: _____

Signature: J.W. Williams

Reviewed By: JB

Page 2 of 4



EMCON ASSOCIATES

WATER SAMPLE FIELD DATA SHEET

Rev. 2, 5/91

PROJECT NO: 670-17.01

SAMPLE ID: MW-3 (32)

PURGED BY: J Williams

CLIENT NAME: ARCO 2035

SAMPLED BY: J Williams

LOCATION: 1001 SAN PABLO AVE
ALBANY, CA

TYPE: Ground Water Surface Water Treatment Effluent Other

CASING DIAMETER (inches): 2 3 4 4.5 6 Other

CASING ELEVATION (feet/MSL): 115 VOLUME IN CASING (gal.): 1351

DEPTH TO WATER (feet): 1170 CALCULATED PURGE (gal.): 6756

DEPTH OF WELL (feet): 3230 ACTUAL PURGE VOL. (gal.): 45.5

DATE PURGED: 09-08-92 Start (2400 Hr) 1335 End (2400 Hr) 1358

DATE SAMPLED: 09-08-92 Start (2400 Hr) End (2400 Hr) 1410

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
<u>1342</u>	<u>13.5</u>	<u>6.01</u>	<u>701</u>	<u>68.1</u>	<u>BROWN</u>	<u>HEAVY</u>
<u>1346</u>	<u>27</u>	<u>5.44</u>	<u>745</u>	<u>64.4</u>	<u>L</u>	<u>L</u>
<u>1352</u>	<u>40.5</u>	<u>5.29</u>	<u>707</u>	<u>67.1</u>	<u>L</u>	<u>L</u>
	<u>DRIED</u>	<u>AFTER</u>	<u>45.5 GALLON</u>			
<u>1417</u>	<u>Recharge</u>	<u>5.18</u>	<u>604</u>	<u>66.8</u>	<u>BROWN</u>	<u>HEAVY</u>
D. O. (ppm):	<u>NR</u>	ODOR:	<u>Slight</u>		<u>NR</u>	<u>NR</u>
					(COBALT 0 - 100)	(NTU 0 - 200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1): NR

PURGING EQUIPMENT

SAMPLING EQUIPMENT

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> 2" Bladder Pump | <input type="checkbox"/> Bailer (Teflon®) | <input type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer (Teflon®) |
| <input checked="" type="checkbox"/> Centrifugal Pump | <input type="checkbox"/> Bailer (PVC) | <input type="checkbox"/> DDL Sampler | <input type="checkbox"/> Bailer (Stainless Steel) |
| <input type="checkbox"/> Submersible Pump | <input type="checkbox"/> Bailer (Stainless Steel) | <input type="checkbox"/> Dipper | <input type="checkbox"/> Submersible Pump |
| <input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Dedicated | <input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Dedicated |
| Other: <u> </u> | | Other: <u> </u> | |

WELL INTEGRITY: OK LOCK #: 3259

REMARKS: WELL DRIED AFTER 45.5 GALLONS TIME 1358

Meter Calibration: Date: Time: 12:05 Meter Serial #: Temperature °F:

(EC 1000 /) (DI) (pH 7 /) (pH 10 /) (pH 4 /)

Location of previous calibration: MW-2

Signature: J Williams Reviewed By: TB Page 3 of 4



EMCON ASSOCIATES

WATER SAMPLE FIELD DATA SHEET

Rev. 2, 5/91

PROJECT NO: G70-17-01
PURGED BY: Williams
SAMPLED BY: Williams

SAMPLE ID: RW-1
CLIENT NAME: ARCO 2035
LOCATION: ALBANY

TYPE: Ground Water Surface Water _____ Treatment Effluent _____ Other _____

CASING DIAMETER (inches): 2 _____ 3 _____ 4 _____ 4.5 _____ 6 Other _____

CASING ELEVATION (feet/MSL): -WR VOLUME IN CASING (gal.): NA
DEPTH TO WATER (feet): 11.30 CALCULATED PURGE (gal.): _____
DEPTH OF WELL (feet): 25.1 ACTUAL PURGE VOL. (gal.): _____

DATE PURGED: 9/8/92 Start (2400 Hr) _____ End (2400 Hr) _____
DATE SAMPLED: _____ Start (2400 Hr) _____ End (2400 Hr) _____

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25° C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (visual)
<u>PRODUCT #62</u>						
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
D. O. (ppm): <u>NA</u>	_____	ODOR: <u>NA</u>	_____	_____	<u>NA</u>	<u>NA</u>
					(COBALT 0 - 100)	(NTU 0 - 200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1): NA

PURGING EQUIPMENT

SAMPLING EQUIPMENT

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> 2" Bladder Pump | <input type="checkbox"/> Bailer (Teflon®) | <input type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer (Teflon®) |
| <input type="checkbox"/> Centrifugal Pump | <input type="checkbox"/> Bailer (PVC) | <input type="checkbox"/> DDL Sampler | <input type="checkbox"/> Bailer (Stainless Steel) |
| <input type="checkbox"/> Submersible Pump | <input type="checkbox"/> Bailer (Stainless Steel) | <input type="checkbox"/> Dipper | <input type="checkbox"/> Submersible Pump |
| <input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Dedicated | <input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Dedicated |
| Other: <u>NA</u> | _____ | Other: <u>NA</u> | _____ |

WELL INTEGRITY: OK LOCK #: 3259

REMARKS: PRODUCT #62 NO SAMPLES TAKEN!

Meter Calibration: Date: _____ Time: _____ Meter Serial #: _____ Temperature °F: _____
(EC 1000 _____ / _____) (DI _____) (pH 7 _____ / _____) (pH 10 _____ / _____) (pH 4 _____ / _____)
Location of previous calibration: _____

Signature: Cecilia Reviewed By: TB Page 4 of 4

MONITORING WELL PURGE WATER TRANSPORT REPORT FORM

RECEIVED
OCT 32 1992
RESNA
3441755

GENERATOR INFORMATION

NAME: ARCO PRODUCTS

ADDRESS: P.O. BOX 5811

CITY, STATE, ZIP: SAN MATEO, CA 94402 PHONE #: (415) 571-2434

DESCRIPTION OF WATER: PURGE WATER GENERATED DURING SAMPLING OR DEVELOPMENT OF MONITORING WELLS LOCATED AT VARIOUS SITES. AUGER RINSATE GENERATED DURING THE INSTALLATION OF MONITORING WELLS AT VARIOUS SITES. THE WATER MAY CONTAIN DISSOLVED HYDROCARBONS.

THE GENERATOR CERTIFIES THAT THIS WATER AS DESCRIBED IS NON-HAZARDOUS

Kyle Christie by Don DeFon 9-9-92
(Typed or printed full name & signature) (Date)

SITE INFORMATION

STA #	JOB #	ADDRESS	GALS
A-2035	21024-DW	1001 SAN PABLO AVE., ALBANY, CA	41
A-465	21032-BW	151 SOUTHGATE AVE., DALY CITY, CA	300
A-TERM	21003-PW	301-411 HIGH ST., OAKLAND, CA	136
A-6206	20917-DW	43500 GRIMMER BLVD., FREMONT, CA	210
A-2121	20991-PW	43 SO. ABBOTT ST., MILPITAS, CA	304
A-2121	20959-DW	43 SO. ABBOTT ST., MILPITAS, CA	114
A-2100	20996-PW	98 SO. PARK VICTORIA, MILPITAS, CA	121
A-6072	20995-PW	1575 LANDESS AVE., MILPITAS, CA	136
A-1319	20993-PW	365 JACKSON ST., HAYWARD, CA	221
A-2153	21006-PW	2800 HOMESTEAD RD., SANTA CLARA, CA	328
A-6019	21020-PW	2933 65TH ST., SACRAMENTO, CA	199
TOTAL GALLONS:			2,110

TRANSPORTER INFORMATION

NAME: BALCH PETROLEUM

ADDRESS: 930 AMES AVE.

CITY, STATE, ZIP: MILPITAS, CA 95035 PHONE #: (408) 942-8686

TRUCK ID #: PETERBILT HURSHEL WARD 9-10-92
(Typed or printed full name & signature) (Date)

TSD FACILITY INFORMATION

NAME: GIBSON ENVIRONMENTAL

ADDRESS: 475 SEAPORT BLVD

CITY, STATE, ZIP: REDWOOD CITY, CA 94063 PHONE #: (415) 368-5511

RELEASE #: 11320 Steven P. Gibson 9-10-92
(Typed or printed full name & signature) (Date)