



Chevron

August 16, 1995

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Site Assessment & Remediation Group
Phone (510) 842-9500

**Re: Former Chevron Service Station #9-1153
3126 Fernside Boulevard, Alameda, CA**

Dear Ms. Shin:

Thank you for your recent comments and concerns regarding the recently submitted Work Plan for Additional Site Assessment dated July 6, 1995, prepared by our consultant Groundwater Technology, Inc. for the above referenced site. I understand the specific concerns are whether the proposed wells are located correctly, and what information is available regarding environmental work at the former Phillips 66 location.

The July 6, 1995, work plan proposed monitor wells MWV-8 and MWV-9 in the locations shown on the enclosed site plan. I have compiled historic ground water gradient information and plotted the gradient vectors on the site plan in order to determine the dominant ground water flow direction. The vectors clearly indicate that the predominant flow direction is towards the west, or directly towards proposed down gradient wells MWV-8 and MWV-9. Copies of the historical gradient maps are enclosed for your reference. I believe the proposed locations for the two wells will be sufficient to obtain down gradient definition of dissolved hydrocarbons in ground water.

As requested, I have enclosed a copy of correspondence from Chevron dated April 23, 1993, summarizing available information regarding environmental information gathered during the tank removal at the former Phillips 66 service station located at 1928 High Street. Also enclosed is correspondence from your office dated April 28, 1993, indicating that your office had no information regarding this tank removal.

We are ready to move forward with the work plan as proposed following your review and formal concurrence. For your information, we have instructed our quarterly monitoring consultant to install a passive skimmer in monitor well C-1. If you have any questions or comments, please feel free to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

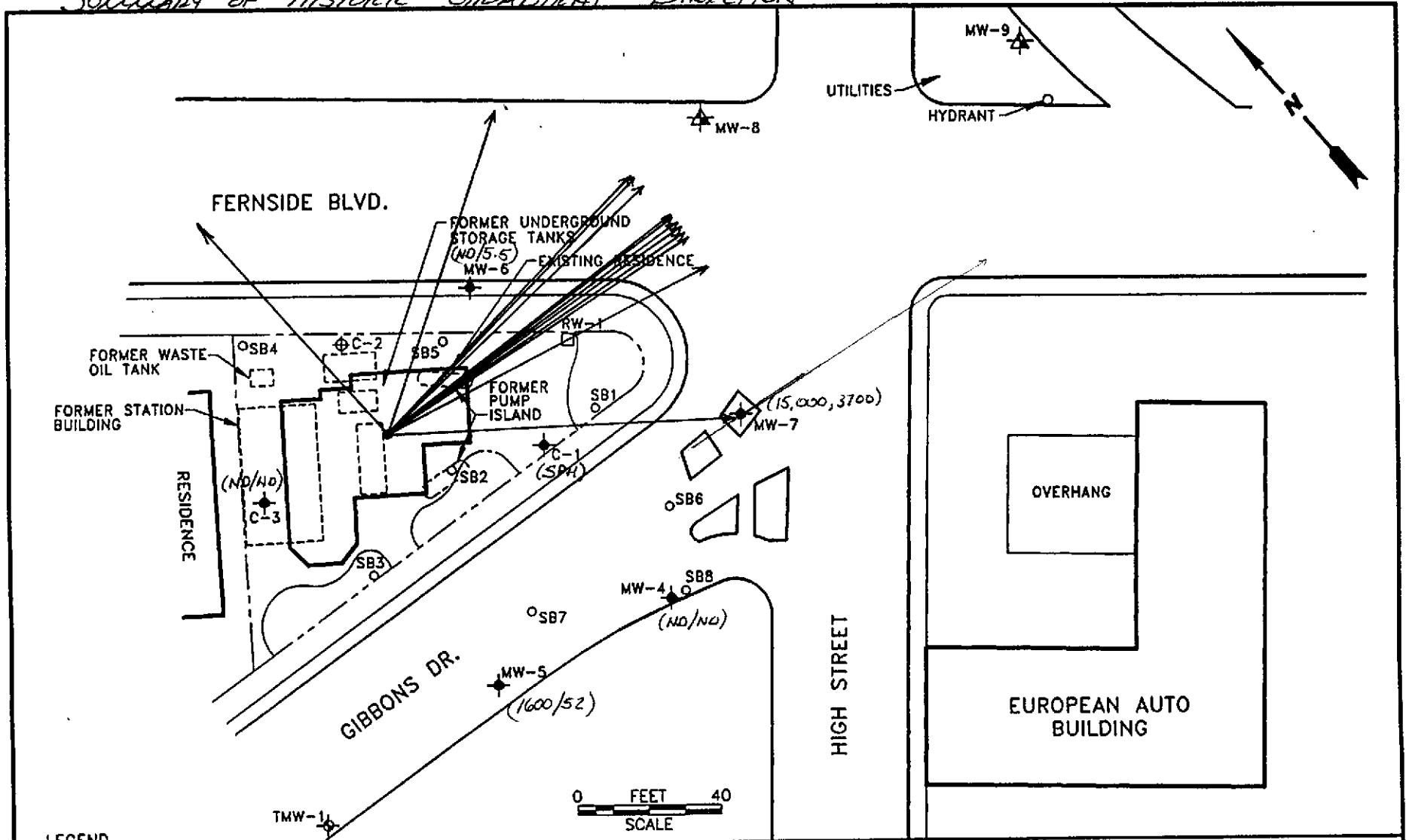
Enclosure

cc: Ms. B.C. Owen

Page 2
August 16, 1995
Former SS#9-1153


Mr. Larry Bolton
State Farm Insurance
2509 Santa Clara Avenue
Alameda, CA 94501

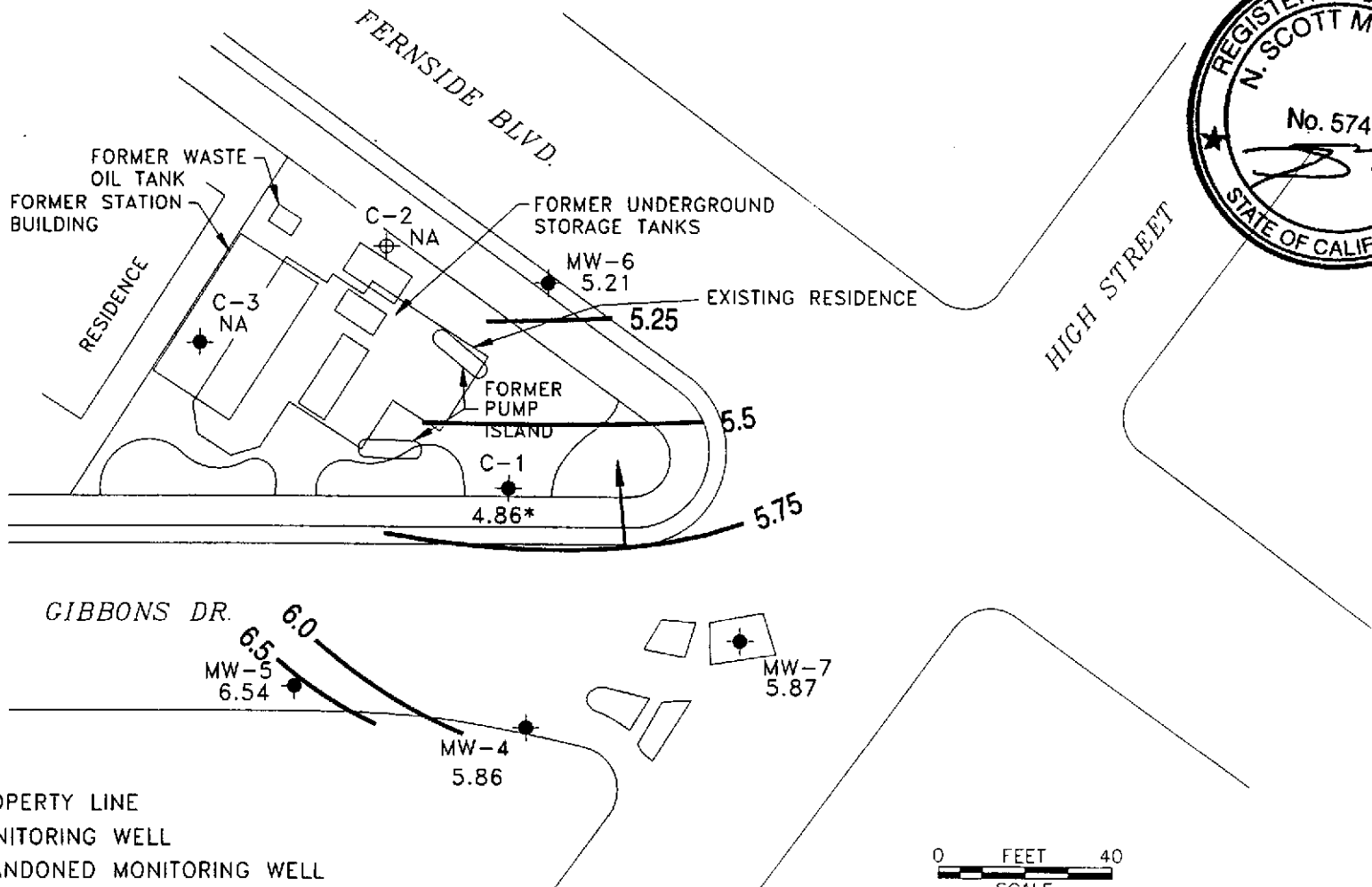
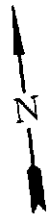
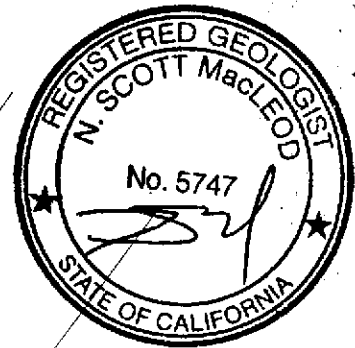
SUMMARY OF HISTORIC GRADIENT DIRECTION



LEGEND

- ★ MONITORING WELL
- EXTRACTION WELL
- ⊕ ABANDONED WELL
- ⊙ TEMPORARY MONITORING WELL
- SOIL BORING
- ▲ PROPOSED MONITORING WELL

 GROUNDWATER TECHNOLOGY				4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		SITE PLAN	
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153				LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 0	DATE: 1/7/94
PM <i>JAW</i>	PETRG <i>W</i>	DESIGNED TW	DETAILED ML	ACAD FILE: SP194	PROJECT NO.: 020204100	FIGURE: 2	



LEGEND

- PROPERTY LINE
- MONITORING WELL
- ⊕ ABANDONED MONITORING WELL
- NA NOT AVAILABLE
- X.XX POTENTIOMETRIC SURFACE ELEVATION (FT)
- * NOT CONTOURED
- POTENTIOMETRIC SURFACE CONTOUR
- GROUND WATER FLOW DIRECTION

NOTE:
1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.



Base map from Groundwater Technology, Inc.

CAMBRIA
Environmental Technology, Inc.

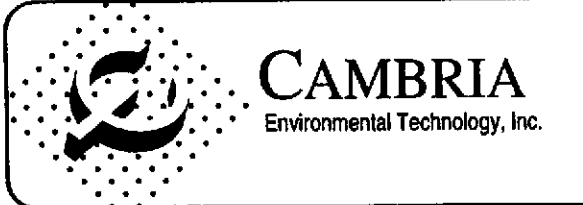
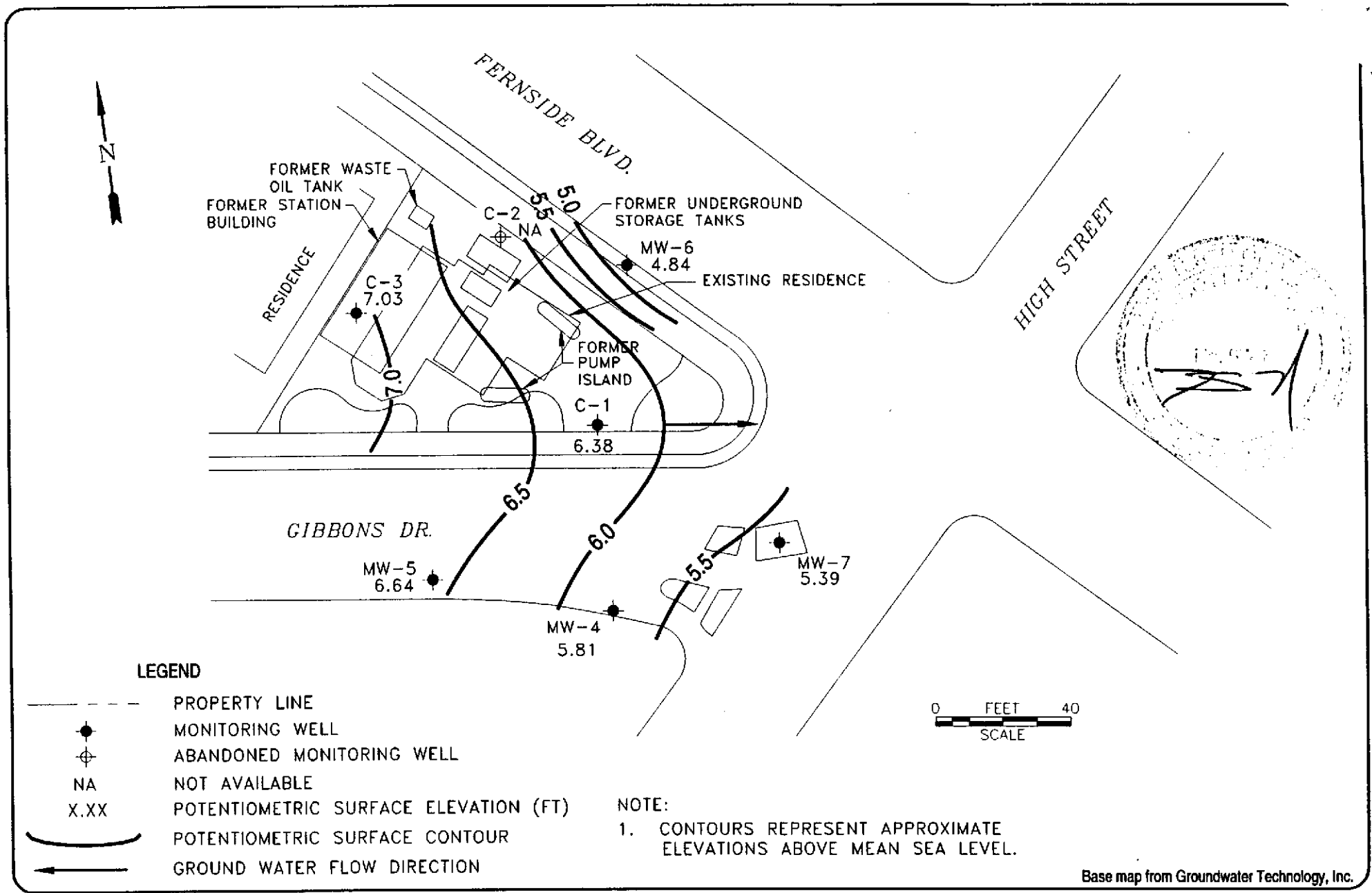
Former Chevron Station 9-1153
3126 Fernside Boulevard
Alameda, California

VCHEVRON9-1153\1153-QM.DWG

Ground Water Elevation

April 26, 1995

FIGURE
1

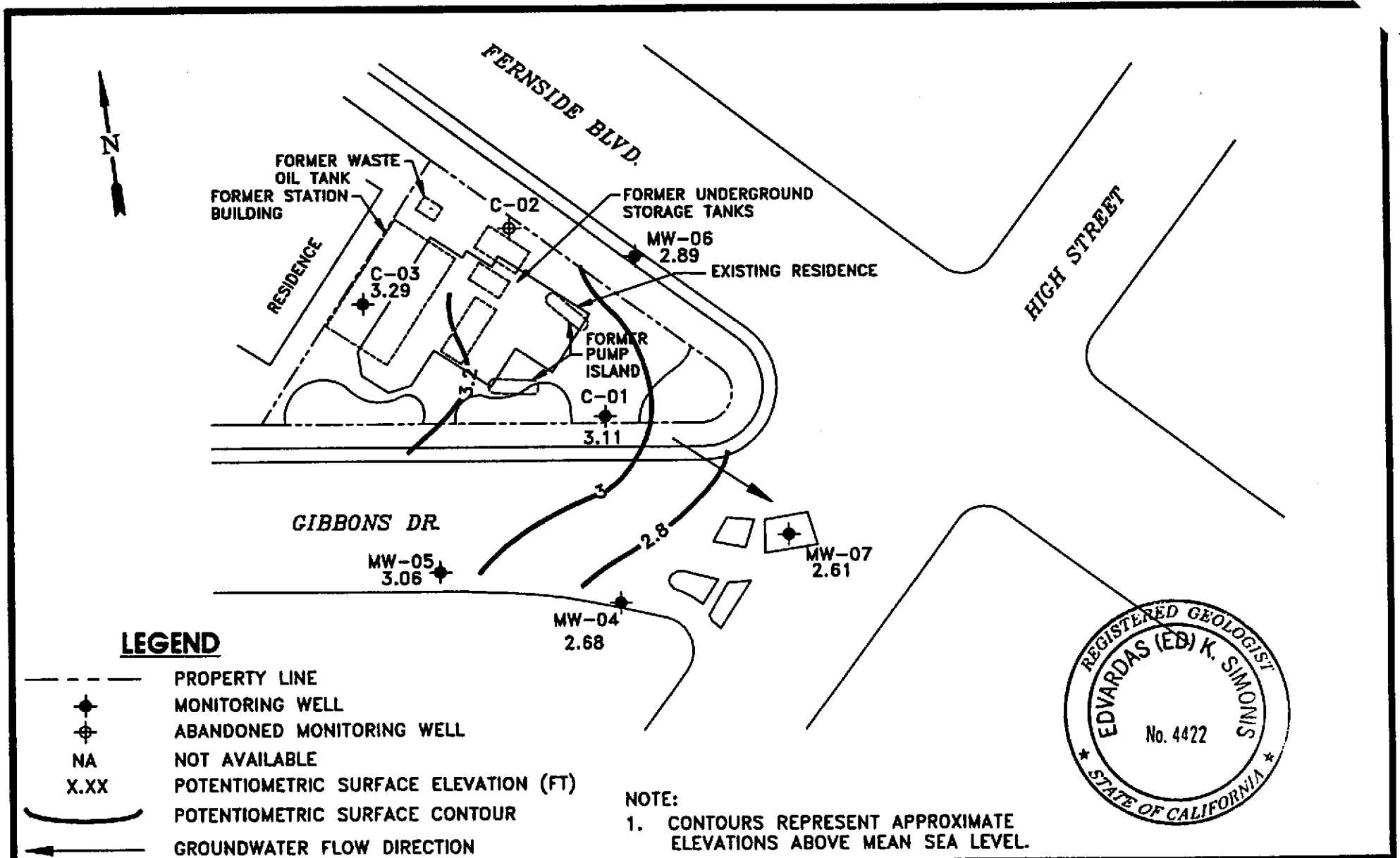


Former Chevron Station 9-1153
3126 Fernside Boulevard
Alameda, California

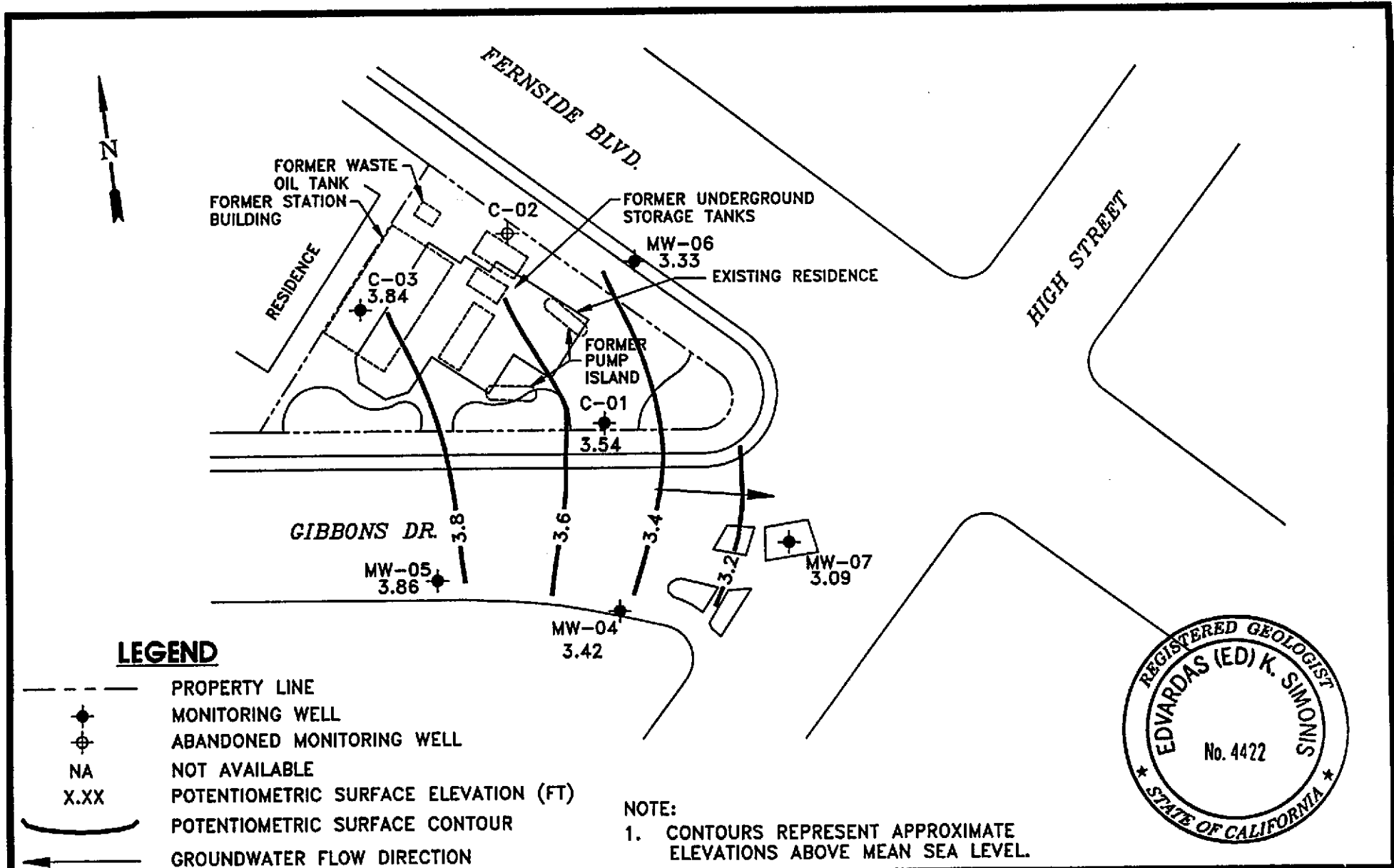
VCHEVRON9-1153\1153-QM(1-Q95).DWG

Ground Water Elevation
January 12, 1995

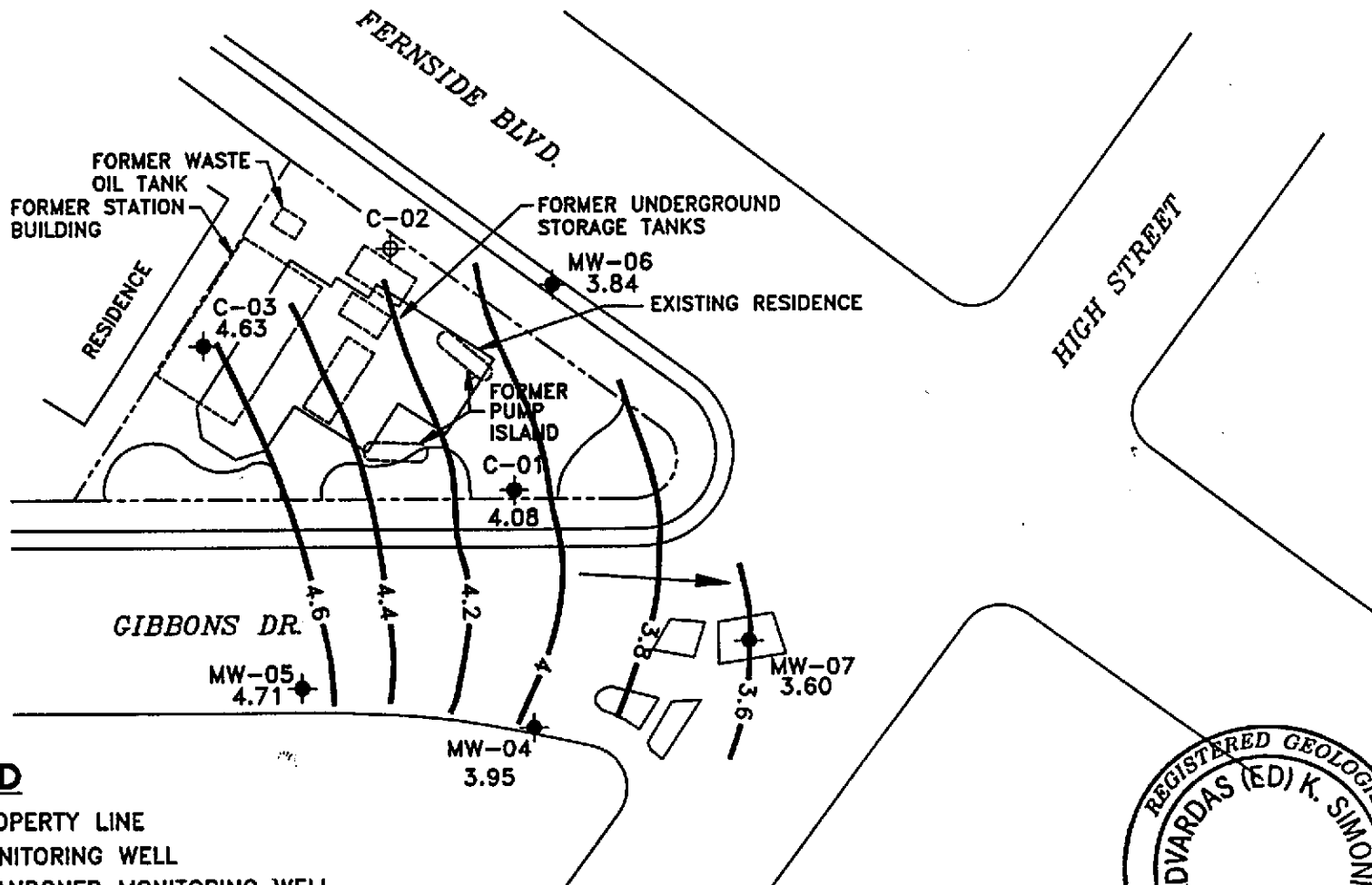
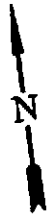
FIGURE
1



		CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION NO. 9-1153		POTENTIOMETRIC SURFACE MAP (10/05/94)	
PROJECT NO.: 02010-4100		LOCATION: 3126 FERNside BLVD. ALAMEDA, CALIFORNIA			
FILE: 4100PSM, (1:40)	REV.:	DES.: KM	DET.: KM	DATE: 10/10/94	PM: <i>KD</i>
				PE/RG: <i>ES</i>	FIGURE: 1



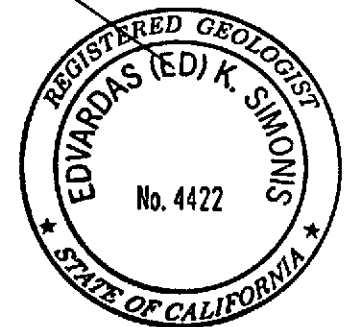
		CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION NO. 9-1153		POTENTIOMETRIC SURFACE MAP (7/1/94)	
FILE: 4100PSM, (1:40)		LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA			
PROJECT NO.: 02010-4100		DES.: SS		PE/RG: <i>ies</i>	FIGURE: 1
REV.:		DET.: SS		DATE: 7/12/94	



LEGEND

- PROPERTY LINE
- ◆ MONITORING WELL
- ⊕ ABANDONED MONITORING WELL
- NA NOT AVAILABLE
- X.XX POTENTIOMETRIC SURFACE ELEVATION (FT)
- () POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION

NOTE:
1. CONTOURS REPRESENT APPROXIMATE ELEVATIONS ABOVE MEAN SEA LEVEL.



**GROUNDWATER
TECHNOLOGY**



CLIENT:
CHEVRON U.S.A. PRODUCTS CO.
SERVICE STATION NO. 9-1153

**POTENTIOMETRIC SURFACE MAP
(4/7/94)**

LOCATION:
3126 FERNside BLVD.
ALAMEDA, CALIFORNIA

PM:

PE/RG:

FIGURE:

ES
5/2/94

1

FILE:
4100PSM, (1:40)

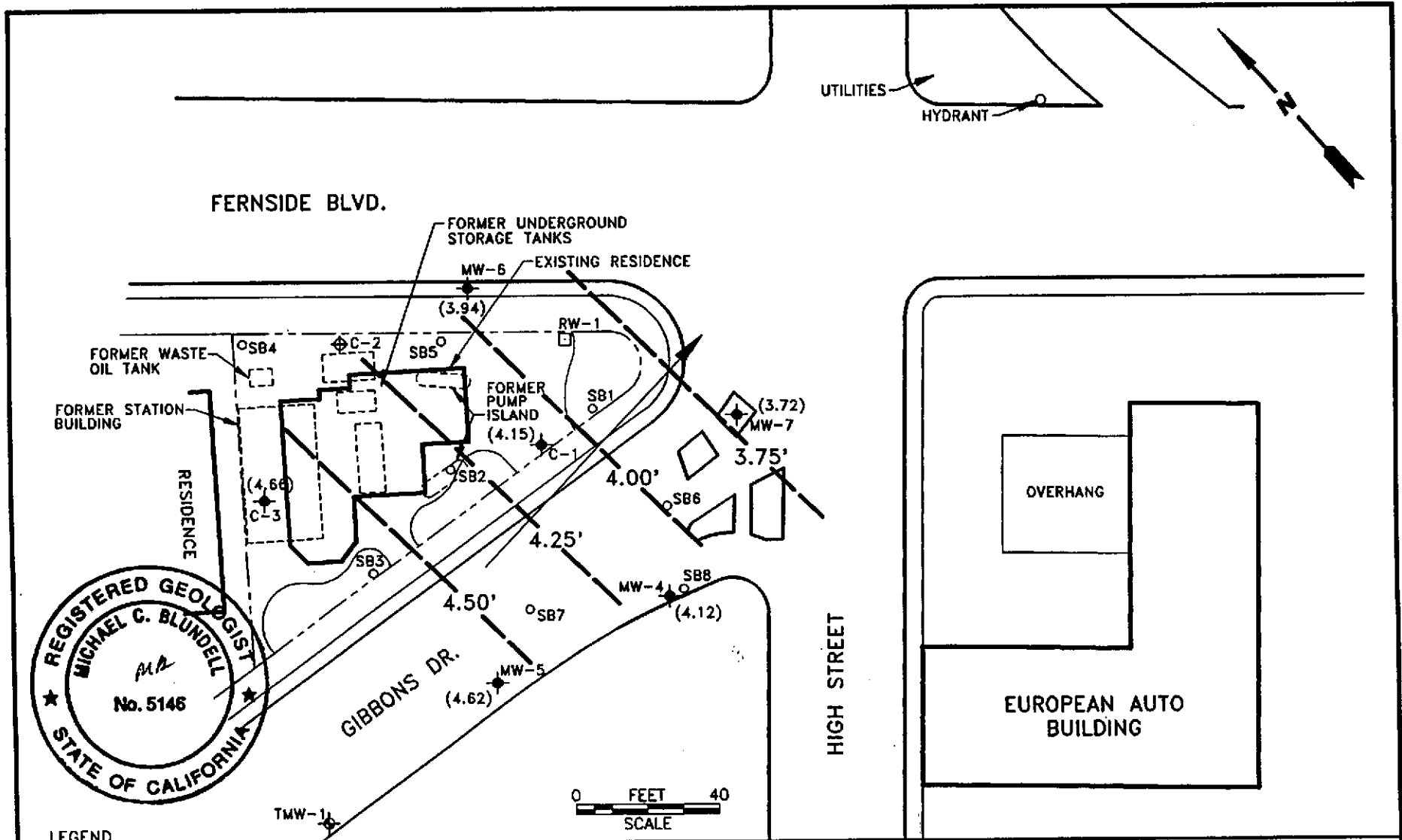
PROJECT NO.:
02010-4100

REV.:


DES.:
TW

DET.:
SS

DATE:
5/9/94

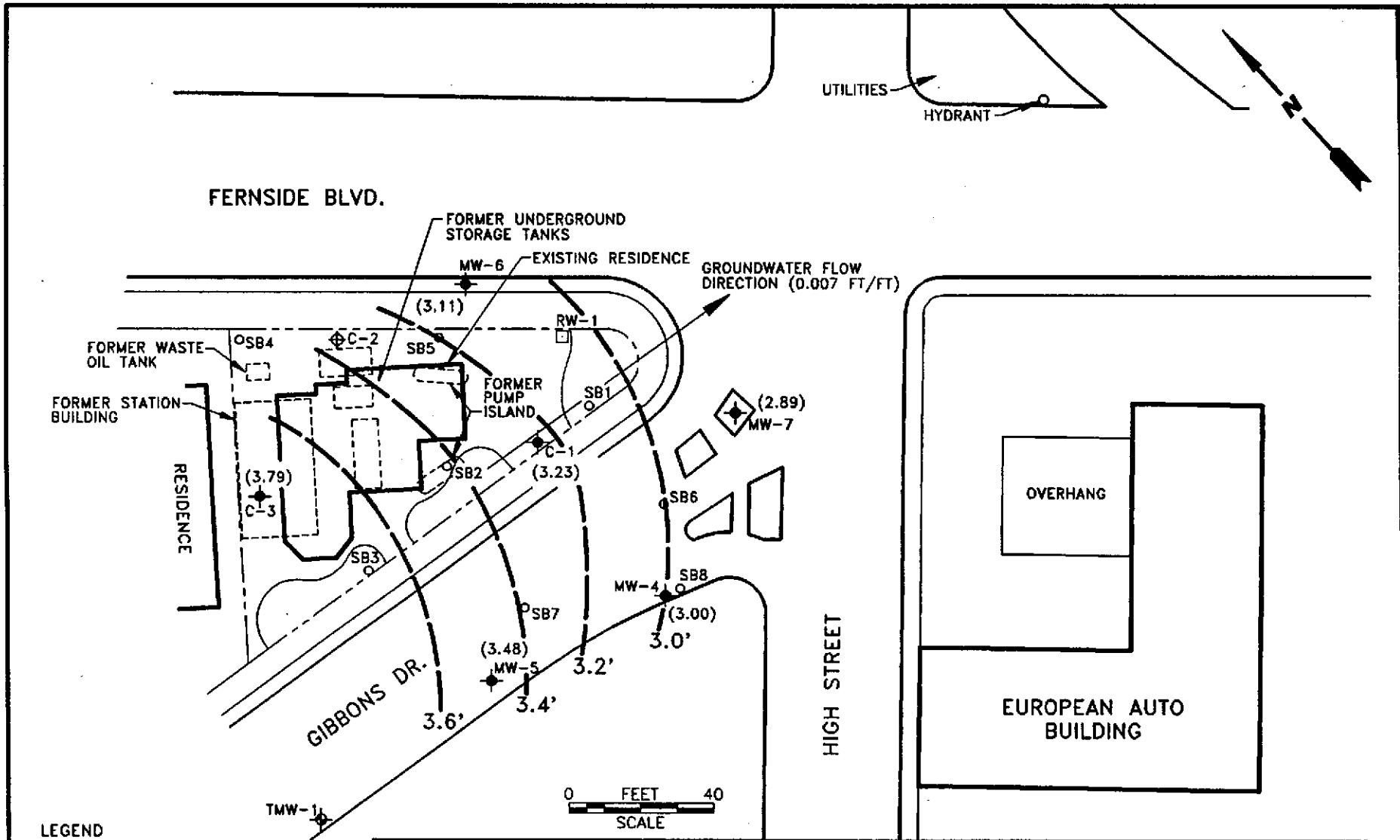


- LEGEND**
- ◆ MONITORING WELL
 - EXTRACTION WELL
 - ⊕ ABANDONED WELL
 - ◆ TEMPORARY MONITORING WELL
 - SOIL BORING
 - () POTENTIOMETRIC SURFACE ELEVATION
 - POTENTIOMETRIC SURFACE CONTOUR
 - ← GROUNDWATER FLOW DIRECTION


GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY
 CONCORD, CA 94520
 (510) 671-2387


POTENTIOMETRIC SURFACE MAP
(1/27/94)

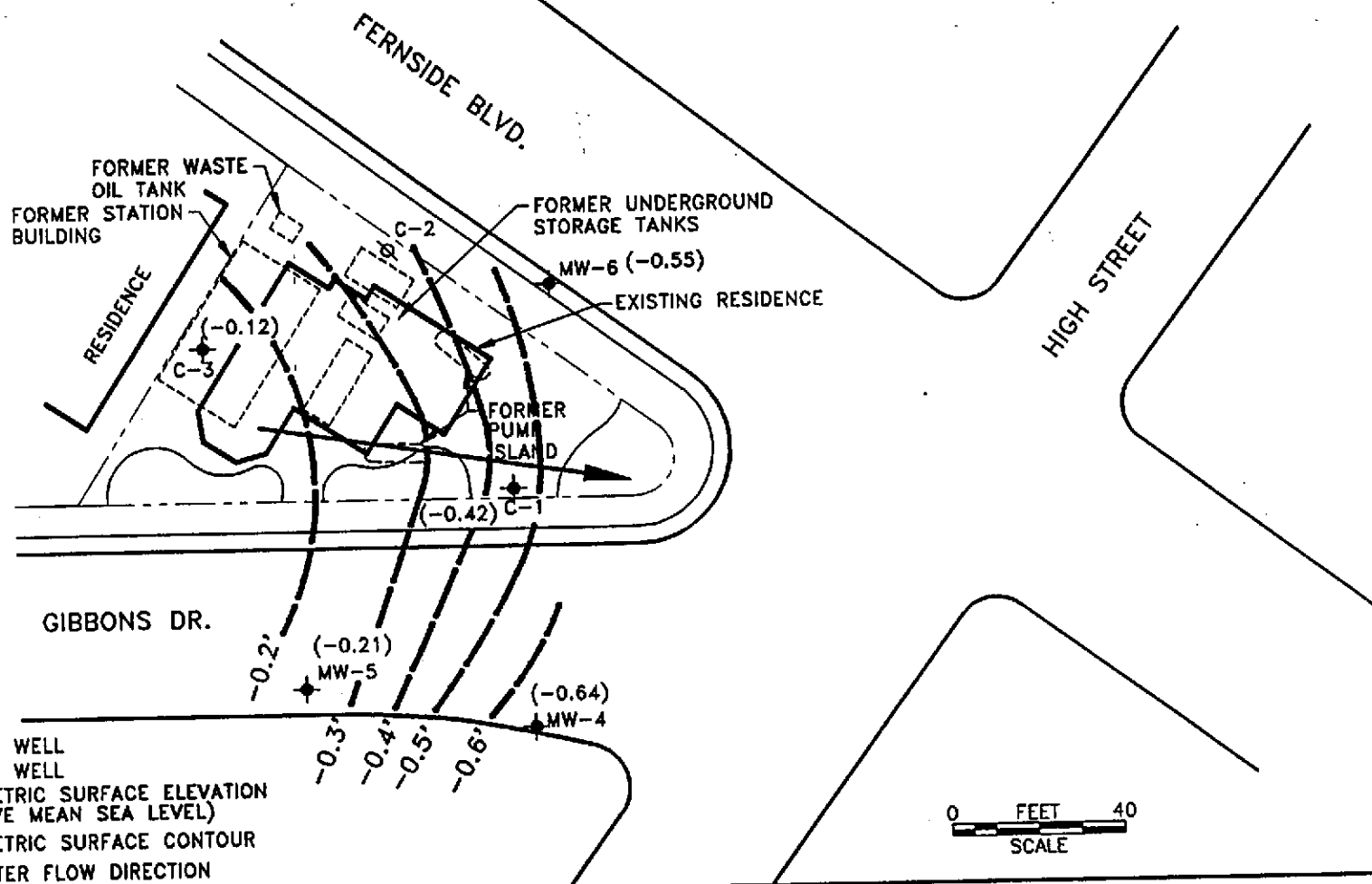
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153		LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 0	DATE: 2/24/94
PM <i>Jaw</i>	PE/RG <i>MB</i>	DESIGNED TW	DETAILED ML	ACAD FILE: PSM12794/SP194	PROJECT NO.: 020104100
					FIGURE: 1



LEGEND

- ◆ MONITORING WELL
- EXTRACTION WELL
- ⊕ ABANDONED WELL
- ◆ TEMPORARY MONITORING WELL
- SOIL BORING
- () POTENTIOMETRIC SURFACE ELEVATION
- POTENTIOMETRIC SURFACE CONTOUR

 GROUNDWATER TECHNOLOGY		4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (11/30/93)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153			LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA			REV. NO.: 0	DATE: 1/27/94
PM <i>Jm</i>	PE/RG	DESIGNED JM	DETAILED ML	ACAD FILE: PSMN3093/SP194	PROJECT NO.: 020204100	FIGURE: 8	



LEGEND

- MONITORING WELL
- ABANDONED WELL
- POTENTIOMETRIC SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

	GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387
	POTENTIOMETRIC SURFACE MAP (10/19/93)

CLIENT: CHEVRON U.S.A. PRODUCTS CO.
SERVICE STATION No. 9-1153

LOCATION: 3126 FERNSIDE BLVD.
ALAMEDA, CALIFORNIA

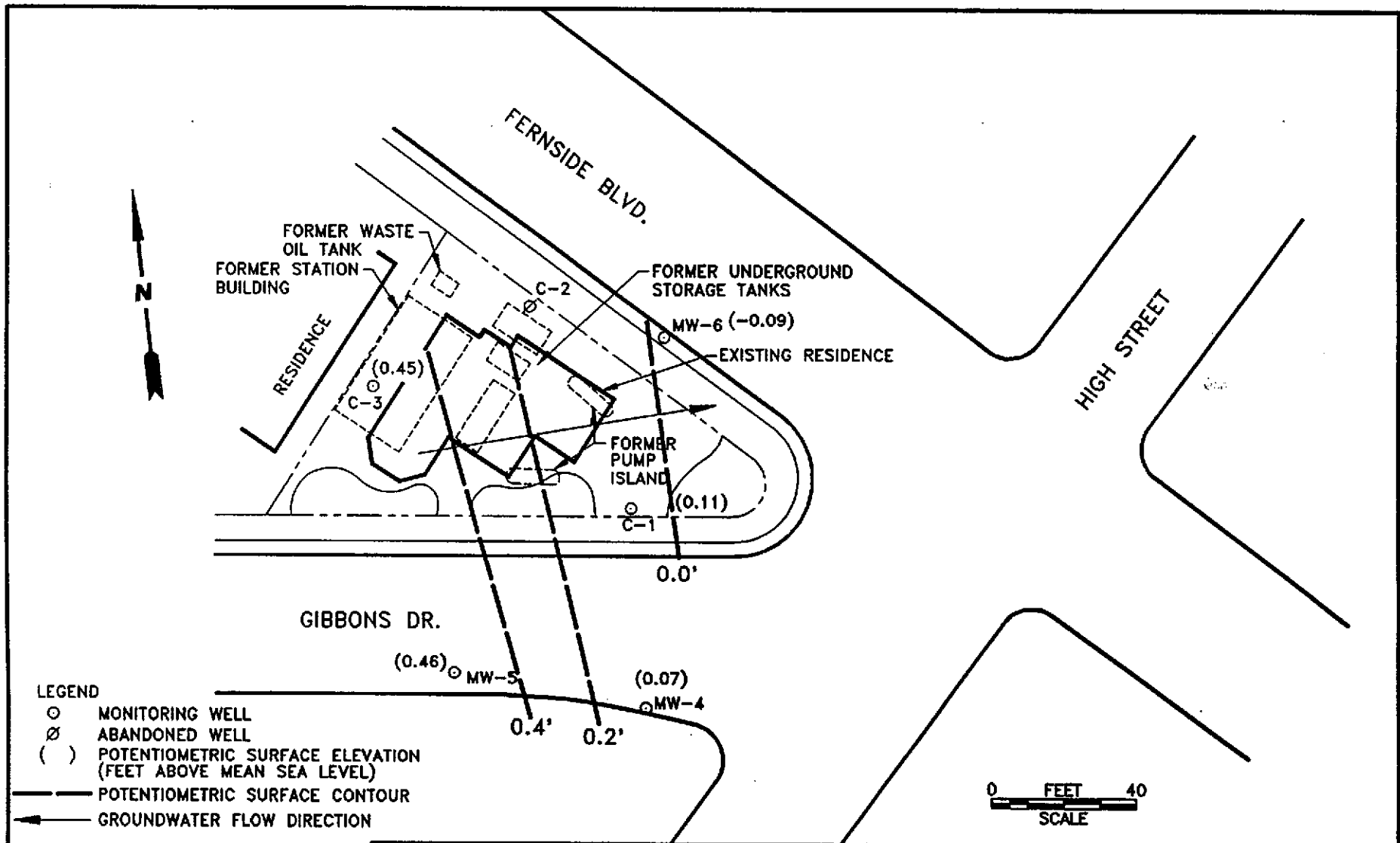
REV. NO.: 0 DATE: 11/15/93

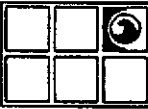
PM <i>JAW</i>	PE/RG <i>qwb</i>	DESIGNED TW	DETAILED CY
------------------	---------------------	----------------	----------------

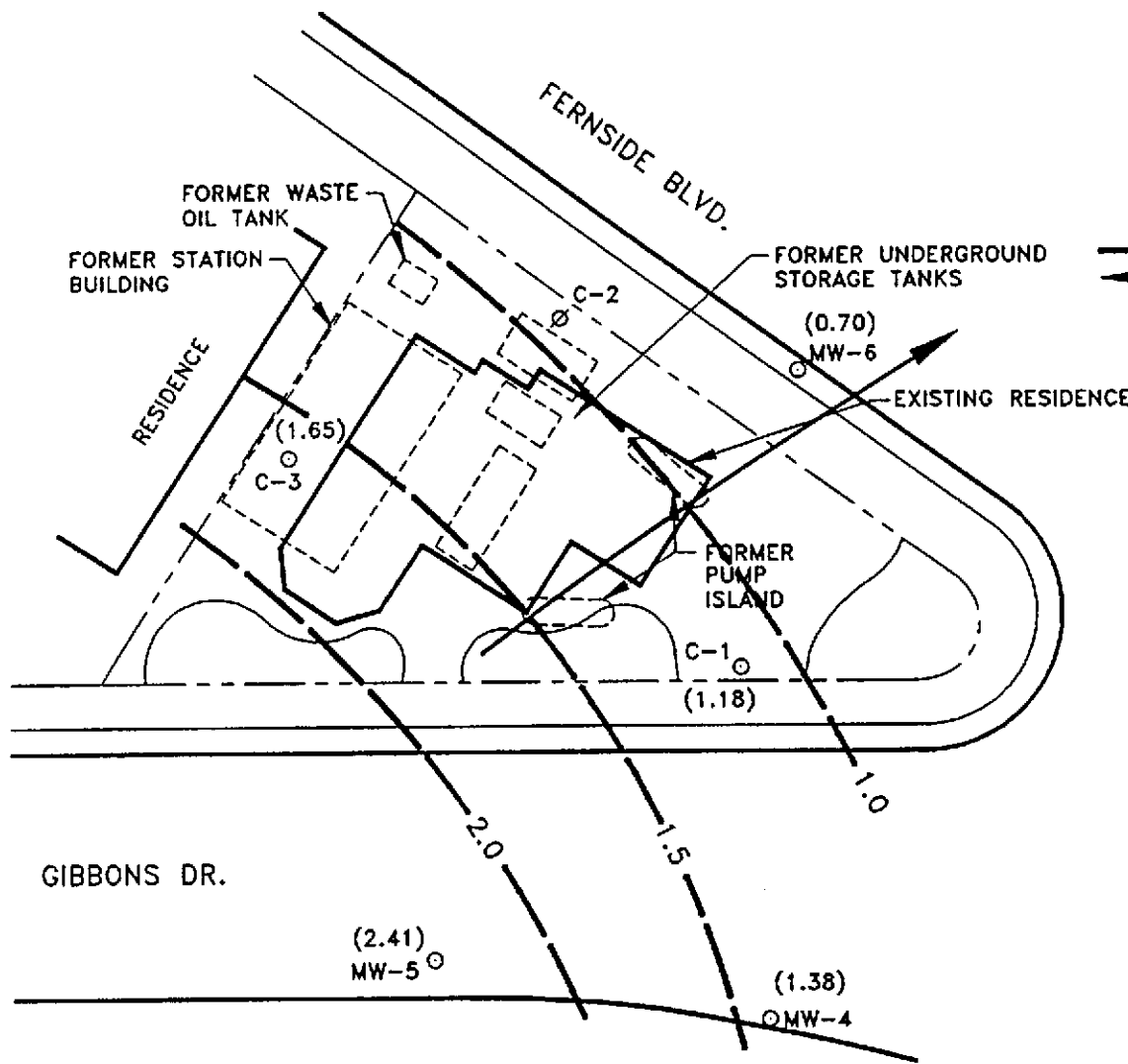
ACAD FILE: PSMN93

PROJECT NO.: 020204098

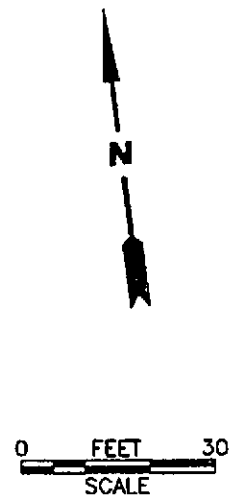
FIGURE: 1




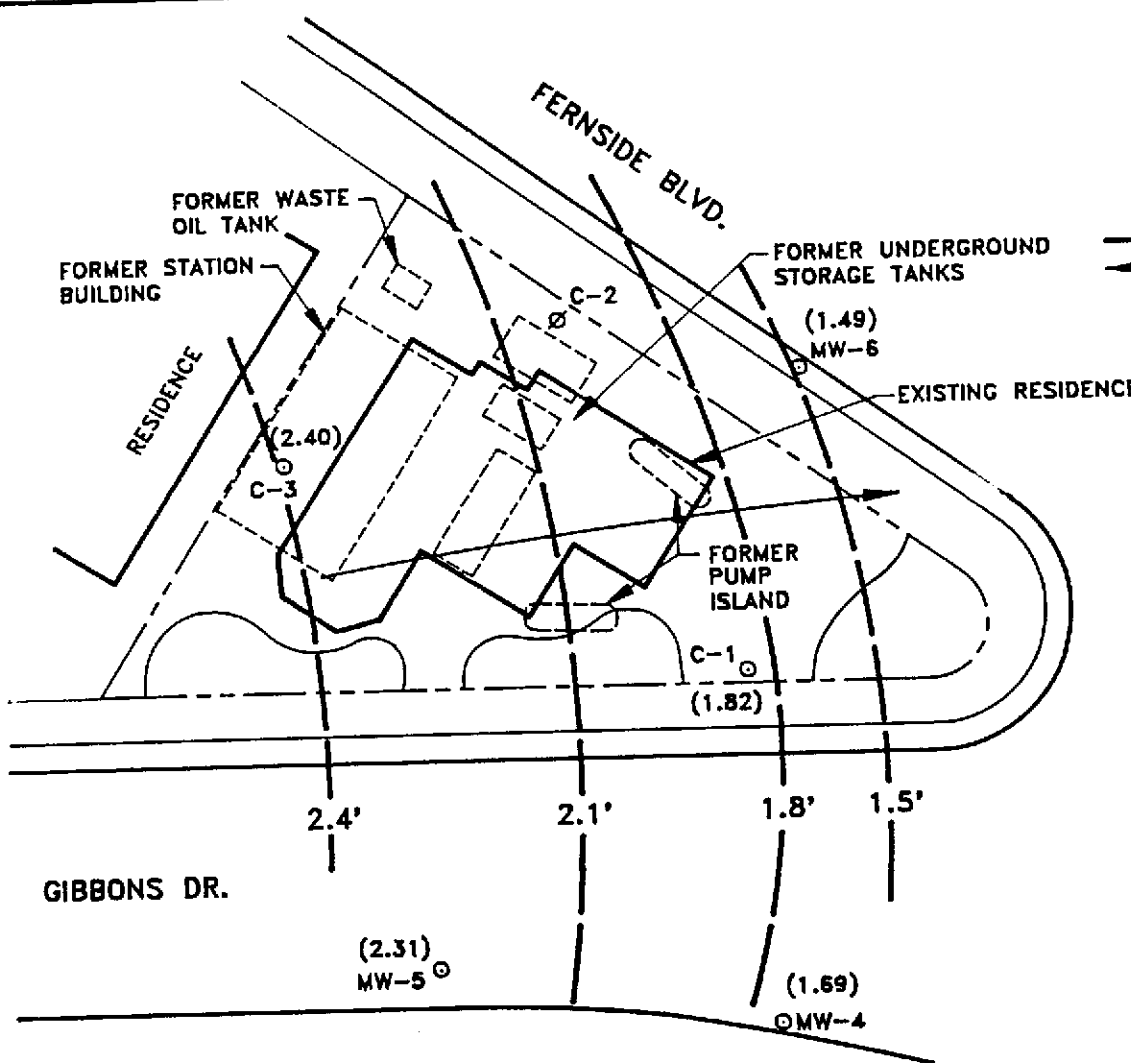
 GROUNDWATER TECHNOLOGY				4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (7/13/93)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153				LOCATION: 3126 FERNside BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 0	DATE: 8/19/93		
PM <i>JAW</i>	PE/RG <i>DRK</i>	DESIGNED TW	DETAILED ML	ACAD FILE: PSM71393/SP693		PROJECT NO.: 020204098		FIGURE: 1	



- LEGEND**
- MONITORING WELL
 - ∅ ABANDONED WELL
 - () POTENTIOMETRIC SURFACE ELEVATION
 - POTENTIOMETRIC SURFACE CONTOUR
 - GROUNDWATER FLOW DIRECTION




 GROUNDWATER TECHNOLOGY				4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (4/14/93)			
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153				LOCATION: 3126 FERNside BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 0	DATE: 5/13/93		
PM <i>JDW</i>	PE/RG <i>DRK</i>	DESIGNED TW	DETAILED CY	ACAD FILE: PSM593/SP692		PROJECT NO.: 020202747		FIGURE: 1	



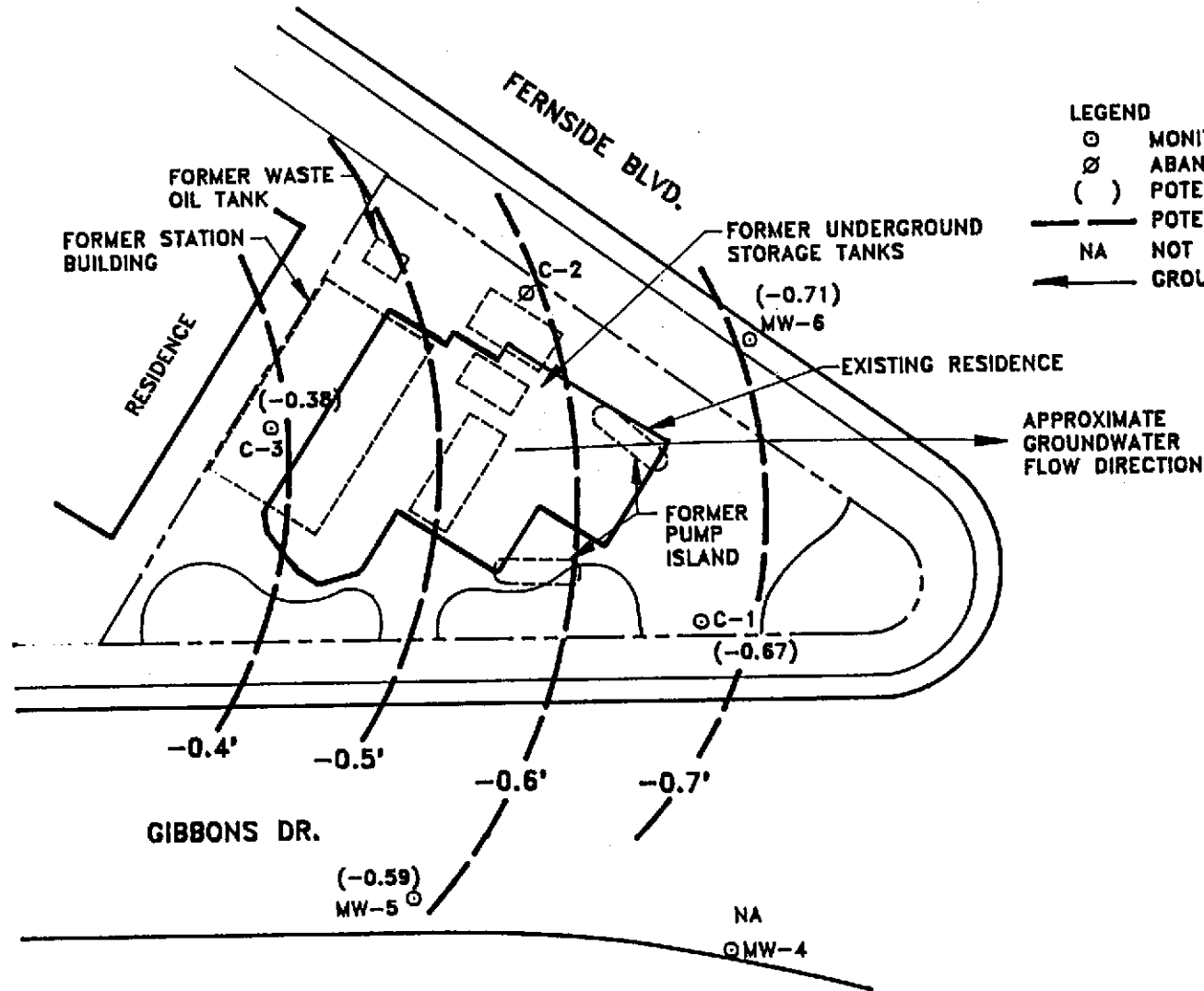
LEGEND
 ○ MONITORING WELL
 ∅ ABANDONED WELL
 () POTENTIOMETRIC SURFACE ELEVATION
 - - - POTENTIOMETRIC SURFACE CONTOUR
 ← GROUNDWATER FLOW DIRECTION




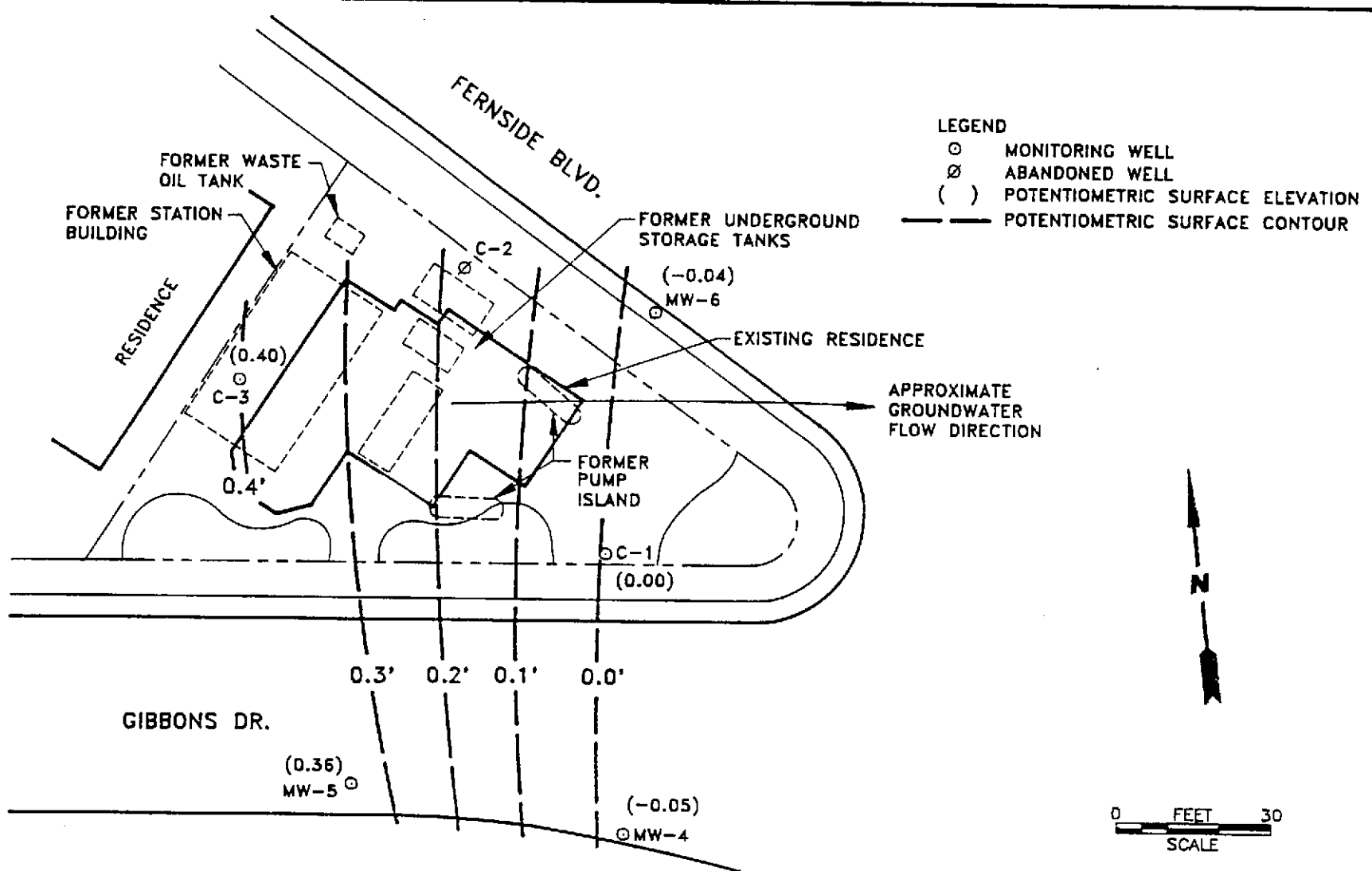
 **GROUNDWATER TECHNOLOGY** 4057 PORT CHICAGO HWY
 CONCORD, CA 94520
 (510) 671-2387

POTENTIOMETRIC SURFACE MAP
 (1/11/93)

CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153				LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 0	DATE: 2/8/93
PM JAW	PE/RG DRK	DESIGNED TW	DETAILED ML	ACAD FILE: PSM11193/SP692	PROJECT NO.: 020202747		FIGURE: 1



 GROUNDWATER TECHNOLOGY		4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (10/13/92)	
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153			LOCATION: 3126 FERNside BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 1
					DATE: 11/18/92
PM <i>JAW</i>	PE/RG	DESIGNED TW	DETAILED ML	ACAD FILE: PSM01392/SP692	PROJECT NO.: 020202747
					FIGURE: 1



		GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387		POTENTIOMETRIC SURFACE MAP (6/4/92)	
CLIENT: CHEVRON U.S.A. PRODUCTS CO. SERVICE STATION No. 9-1153			LOCATION: 3126 FERNSIDE BLVD. ALAMEDA, CALIFORNIA		REV. NO.: 1
					DATE: 7/14/92
PM GAM	PE/RG DRK	DESIGNED GM	DETAILED ML	ACAD FILE: PSM6492/SP692	PROJECT NO.: 020202747
					FIGURE: 3



Chevron U.S.A. Products Company

2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

April 23, 1993

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

**Re: Former Chevron Service Station #9-1153
3126 Fernside Boulevard, Alameda, CA**

Dear Ms. Shin:

Enclosed is the Offsite Ground Water Sampling Report dated April 1, 1993, prepared by our consultant Weiss Associates for the above referenced site. Ground water samples were collected by drilling three 2-inch diameter borings to approximately 7.5 feet below grade at three off-site locations designated BH-A, BH-B, and BH-C. Ground water was encountered at approximately 2 feet below grade. This work was performed to evaluate ground water quality down and cross gradient of the existing ground water extraction trench.

Samples collected from the boreholes were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and BTEX. Laboratory analyses indicate concentrations of dissolved hydrocarbons measured in ground water samples collected from BH-A and BH-B were low to non-detect. A ground water sample collected from BH-C contained 190,000 ppb TPH-G, and 3,200 ppm benzene.

Analytical results indicate that the majority of the dissolved hydrocarbon plume is located slightly south of the site, somewhat cross-gradient to the extraction trench. However, monitor well MW-4 located further cross-gradient in this same direction has historically reported low to non-detectable concentrations of dissolved hydrocarbons indicating that the dissolved hydrocarbon plume is limited in extent in this direction.

In your letter dated February 19, 1993, you approved the above scope of work on the condition that these borings and ground water samples be used as a screening tool for placement of permanent wells. Originally, the wells were intended for evaluating the performance of the ground water extraction system only. However, the gathered data will also be useful in selecting permanent monitor well locations. A file search was performed for the European Auto Repair located at 1928 High Street, adjacent and down gradient to the Chevron site to review the site history. Records on file with the Alameda Fire Department indicate that on June 23, 1987, three underground storage tanks were removed from that site. Only soil samples were taken at this time and analytical results reported TPH-G concentrations below the method detection limit and xylenes and toluene up to 0.092 ppm and 0.013 ppm, respectively. It appears that no ground water sampling was performed in association with the tank removal. Any information Alameda County Health Care Services may be able to provide in regards to this site would greatly assist in determining monitor well locations.

It appears that the ground water extraction system is successful in removing hydrocarbon impacted

Page 2
April 23, 1993
Former SS#9-1153

ground water. Operational records indicate that the system has removed approximately 70,000 gallons of ground water to date. Laboratory analyses on ground water collected from Boring BH-B report low to non-detectable concentrations of hydrocarbons immediately downgradient of the extraction system. Additional assessment will be necessary not only to define the hydrocarbon plume, but to evaluate system performance and determine if modifications to the treatment system are warranted.

Following the next sampling event, Chevron will instruct its consultant to prepare a work plan for additional off-site investigation. You had originally requested that such a work plan be submitted within 60 days of completion of the above field work. Chevron respectfully requests that the date for submittal of this work plan be moved to sixty days from Chevron's receipt of the current data, or June 6, 1993.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY



Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB - Bay Area
Ms. B.C. Owen
File (9-1153 SA1R)

Mr. Larry Bolten
State Farm Insurance
2509 Santa Clara Avenue
Alameda, CA 94501

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



MAY 5 '93 J.M.M.

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

April 28, 1993

Mr. Mark Miller
Chevron U.S.A. Products Co.
P.O. Box 5004
San Ramon, CA 94583-0804

STID 3565

9-1153

Re: Investigations at 3126 Fernside Blvd., Alameda, California

Dear Mr. Miller,

Per your request, this office is granting you an extension of the due date for a work plan for the above site to June 6, 1993. Additionally, you requested that this office search our records for any tank removal information on 1928 High Street in Alameda. This office has no information on the tank removals at this site.

If you have any additional questions or comments, please contact me at (510) 271-4530.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

cc: Richard Hiett, RWQCB

Tom Berry
Weiss Associates
5500 Shellmound St.
Emeryville, CA 94608-2411

Edgar Howell-File(JS)