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Chevron

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

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

December 9, 1994

Ms. Eva Chu
Alameda County Department of Environmental Health
1131 Harbor Bay Pkwy, 2nd Floor
Alameda, CA 94502-6577

Before install MWs across street, do a survey of sewer trenches down San Leandro and 98th. If trenches at 8-10' depth then MWs should not be across street.

Re: Former Chevron Service Station No. 9-1723
98th & San Leandro Str., Oakland, California

Dear Ms. Chu :

At the request of Chevron U.S.A. Products Co., Groundwater Technology, Inc. has prepared the enclosed work plan dated December 6, 1994. Groundwater Technology will drill 18 soil borings in the former tank locations to determine if hydrocarbons reside in the area. Groundwater Technology will convert two of the borings into monitoring wells. Soil and groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, and xylene.

To see if there is offsite source.

Please review the enclosed work plan. If you approved the work plan, please send Chevron a letter. If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-1723R9

Enclosure

cc: Mr. Kevin Graves
RWQCB-San Francisco Bay Region
2101 Webster Str., Suite 500
Oakland, CA 94612

Mr. Ron Hothem
Pacific American Management Co.
369 Broadway
San Francisco, CA 94133

Ms. Bette Owen
Chevron U.S.A. Products Co.

GROUNDWATER TECHNOLOGY, INC.

1401 Halyard Drive, Suite 140, West Sacramento, CA 95691, (916) 372-4700
FAX (916) 372-8781

December 6, 1994

Mr. Kenneth Kan
Chevron U.S.A. Products Company
6001 Bollinger Canyon Road, Building L
San Ramon, California 94583

Subject: Work Plan for Additional Soil and Groundwater Assessment
Chevron Service Station No. 9-1723
9757 San Leandro Boulevard
Oakland, California
GTI Project 02070 0080

Dear Mr. Kan:

Groundwater Technology, Inc. submits this letter as a work plan for soil and groundwater assessment at the Chevron service station located at 9757 San Leandro Boulevard, in Oakland, California (Figures 1 and 2, Attachment 1). The scope of work is designed to further investigate the extent of hydrocarbon-impacted soil and groundwater. Specifically, the work scope includes the drilling and sampling of 18 soil borings, installation of groundwater monitoring wells in two of the borings, and preparation of an assessment report summarizing the methods and results of the work performed. Details of the scope of work for soil and groundwater assessment are summarized below.

TASK 1: SITE-SPECIFIC HEALTH AND SAFETY PLAN/BACKGROUND REVIEW/ PERMITTING

A site-specific ***Health and Safety Plan*** will be prepared by Groundwater Technology as required by the Occupational Safety and Health Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR 1910.120). The document will be reviewed and signed by all Groundwater Technology personnel and subcontractors performing work at the site.

Groundwater Technology will conduct a technical review of the pertinent information associated with the site. Permits for well installation will be obtained from the Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7).

TASK 2: SOIL BORINGS/SOIL SAMPLING

Groundwater Technology will drill 18 soil borings at the locations shown on Figure 2 using a truck-mounted drill rig equipped with 8-inch-diameter hollow-stem augers. Five soil borings will be drilled/sampled to 5 feet below ground surface (BGS) and eleven soil borings will be drilled/sampled to 10 feet below ground surface (Figure 2). The sixteen soil borings drilled between 5 and 10 feet BGS will be backfilled with a neat cement/bentonite grout to the surface upon reaching the desired sampling depth. Borings drilled to five feet BGS will be advanced to 10 feet BGS if field observations of the samples indicate the presence of hydrocarbons. The remaining two soil borings will be drilled/sampled to approximately 20 feet BGS to accommodate groundwater monitoring well installation.

Soil samples will be collected from each soil boring at 5-foot intervals beginning at 5 feet BGS using a split-spoon sampler lined with 2-inch-diameter by 6-inch-long brass sample tubes. The hollow-stem augers will be steam cleaned before drilling, and sampling equipment will be cleaned between each sampling interval. Each soil sample will be screened for hydrocarbon vapors using a photoionization detector (PID). Soils encountered during drilling will be logged using the Unified Soil Classification System by a Groundwater Technology field geologist, working under the supervision of a California registered geologist. One sample tube from each sampling interval will be sealed with aluminum foil, capped, taped, labeled, and placed on ice in an insulated container. Based on field observations, selected soil samples from each borehole will be analyzed by a State-certified analytical laboratory for benzene, toluene, ethylbenzene and xylenes (BTEX), and total petroleum hydrocarbons-as-gasoline (TPH-G). In addition to the above analysis, samples collected from the soil boring near the used oil tank will be analyzed for oil and grease by EPA 418.1.

All soil generated through drilling will be placed on and covered with plastic sheeting on site pending characterization and disposal. Water generated by steam cleaning will be contained in a steam-clean trailer and temporarily stored on site in Department-of-Transportation (DOT) approved 55-gallon drums.

TASK 3: GROUNDWATER MONITORING WELL INSTALLATION/DEVELOPMENT

Groundwater monitoring wells will be constructed of 2-inch-diameter blank polyvinylchloride (PVC) casing and 0.020-inch-slot PVC well screen. The well screen will be installed from approximately 5 feet BGS to 20 feet BGS. A sand filter pack will be placed within the annulus of each well from the bottom of the boring to approximately one foot above the top of the well screen. The annulus will be sealed with approximately two foot of bentonite on top of the sand, and a neat cement/bentonite

grout to the surface. Well construction specifications will be adjusted according to field conditions, if required. Each well head will be protected by a locking cap and a traffic-rated, watertight street box set in concrete (Figure 3).

Prior to groundwater monitoring and sampling, the monitoring wells will be developed by surging and bailing to remove fines from the well and sand pack. The wells will be developed until well water is visibly clear.

Top of casing (TOC) and horizontal position of the wells will be professionally surveyed relative to an established local bench mark.

TASK 4: REPORT PREPARATION

Groundwater Technology will prepare a report summarizing the data collected under the scope of work detailed above. The report will document the methods and results of the work, summarize laboratory analytical results, and include appropriate maps.

Please contact our West Sacramento office at 916-372-4700 if you have questions or comments about this work plan.

Sincerely,
Groundwater Technology, Inc.
Submitted by:

JASON M. FEDOTA
Staff Geologist
Project Manager

Groundwater Technology, Inc.
Approved by:

E. K. SIMONIS, R.G.
Senior Environmental Geologist

Attachments
1. Figures

SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE
SAN LEANDRO, CALIFORNIA
7.5 MINUTE SERIES
1959, PHOTREVISED 1980

SITE LOCATION

SCALE 1:24,000

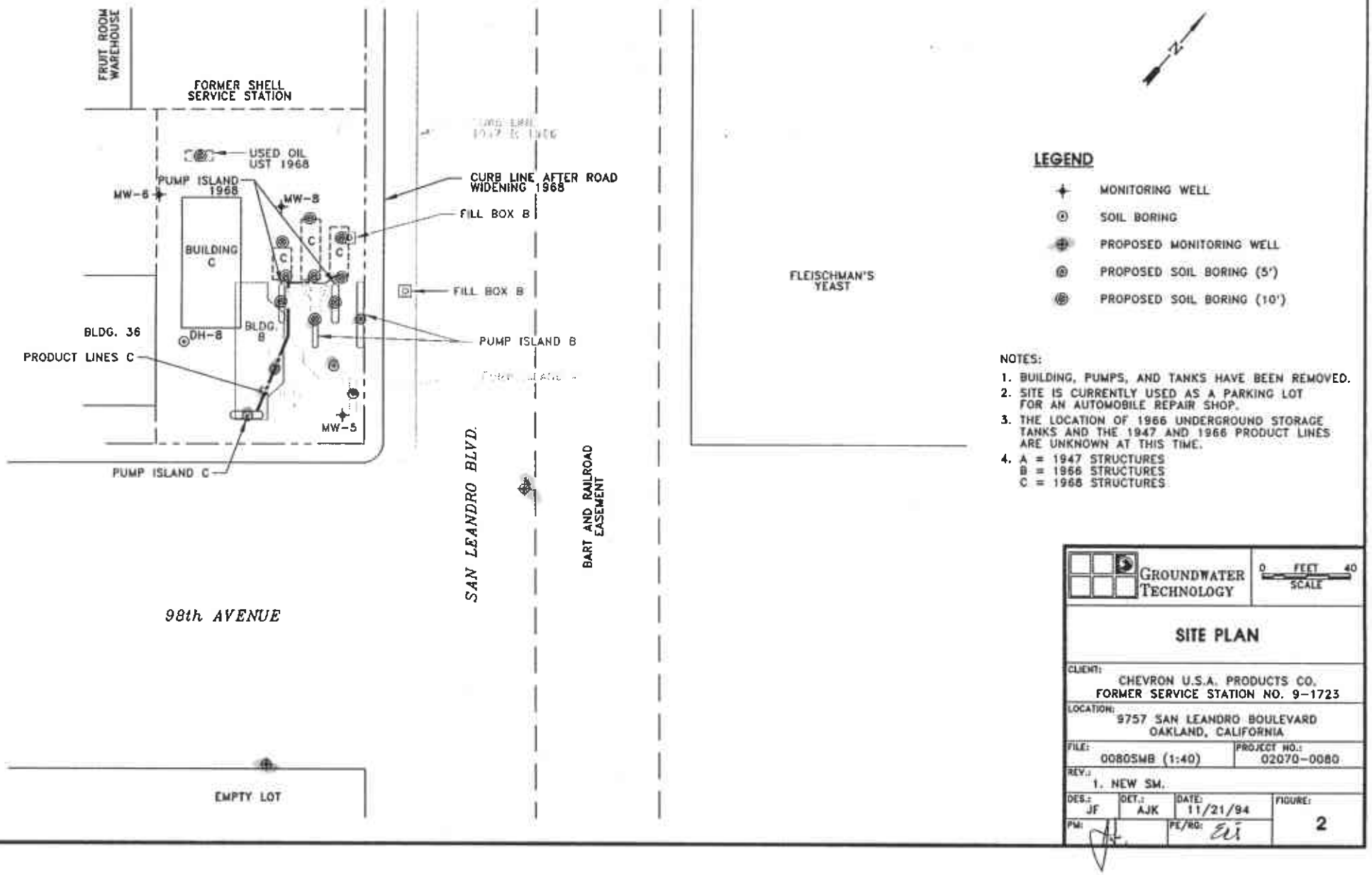
0 2,000 4,000

SCALE FEET

GROUNDWATER TECHNOLOGY

SITE LOCATION MAP

CLIENT: CHEVRON U.S.A. PRODUCTS CO. FORMER SERVICE STATION NO. 9-1723	FILE: 0080SL (1:1)	PROJECT NO.: 02070-0080	PM	PE/RG	
LOCATION: 9757 SAN LEANDRO BOULEVARD OAKLAND, CALIFORNIA	REV.			FIGURE: 1	
	DES. JF	DET. AJK	DATE: 11/21/94		


FRUIT ROOM WAREHOUSE
FORMER SHELL SERVICE STATION
USED OIL UST 1968
PUMP ISLAND 1968
MW-6
MW-8
BUILDING C
CURB LINE AFTER ROAD WIDENING 1968
FILL BOX B
FILL BOX B
PUMP ISLAND B
BLDG. 36
PRODUCT LINES C
DH-8
BLDG. B
MW-5
PUMP ISLAND C
98th AVENUE
SAN LEANDRO BLVD.
BART AND RAILROAD EASEMENT
FLEISCHMAN'S YEAST
EMPTY LOT
N
LEGEND
MONITORING WELL
SOIL BORING
PROPOSED MONITORING WELL
PROPOSED SOIL BORING (5')
PROPOSED SOIL BORING (10')
NOTES:
1. BUILDING, PUMPS, AND TANKS HAVE BEEN REMOVED.
2. SITE IS CURRENTLY USED AS A PARKING LOT FOR AN AUTOMOBILE REPAIR SHOP.
3. THE LOCATION OF 1966 UNDERGROUND STORAGE TANKS AND THE 1947 AND 1966 PRODUCT LINES ARE UNKNOWN AT THIS TIME.
4. A = 1947 STRUCTURES
B = 1966 STRUCTURES
C = 1968 STRUCTURES
GROUNDWATER TECHNOLOGY
0 FEET 40
SCALE
SITE PLAN
CLIENT:
CHEVRON U.S.A. PRODUCTS CO.
FORMER SERVICE STATION NO. 9-1723
LOCATION:
9757 SAN LEANDRO BOULEVARD
OAKLAND, CALIFORNIA
FILE:
0080SMB (1:40)
PROJECT NO.:
02070-0080
REV.:
1. NEW SM.
DES.:
JF
DET.:
AJK
DATE:
11/21/94
FIGURE:
2
PM:
PE/RG:

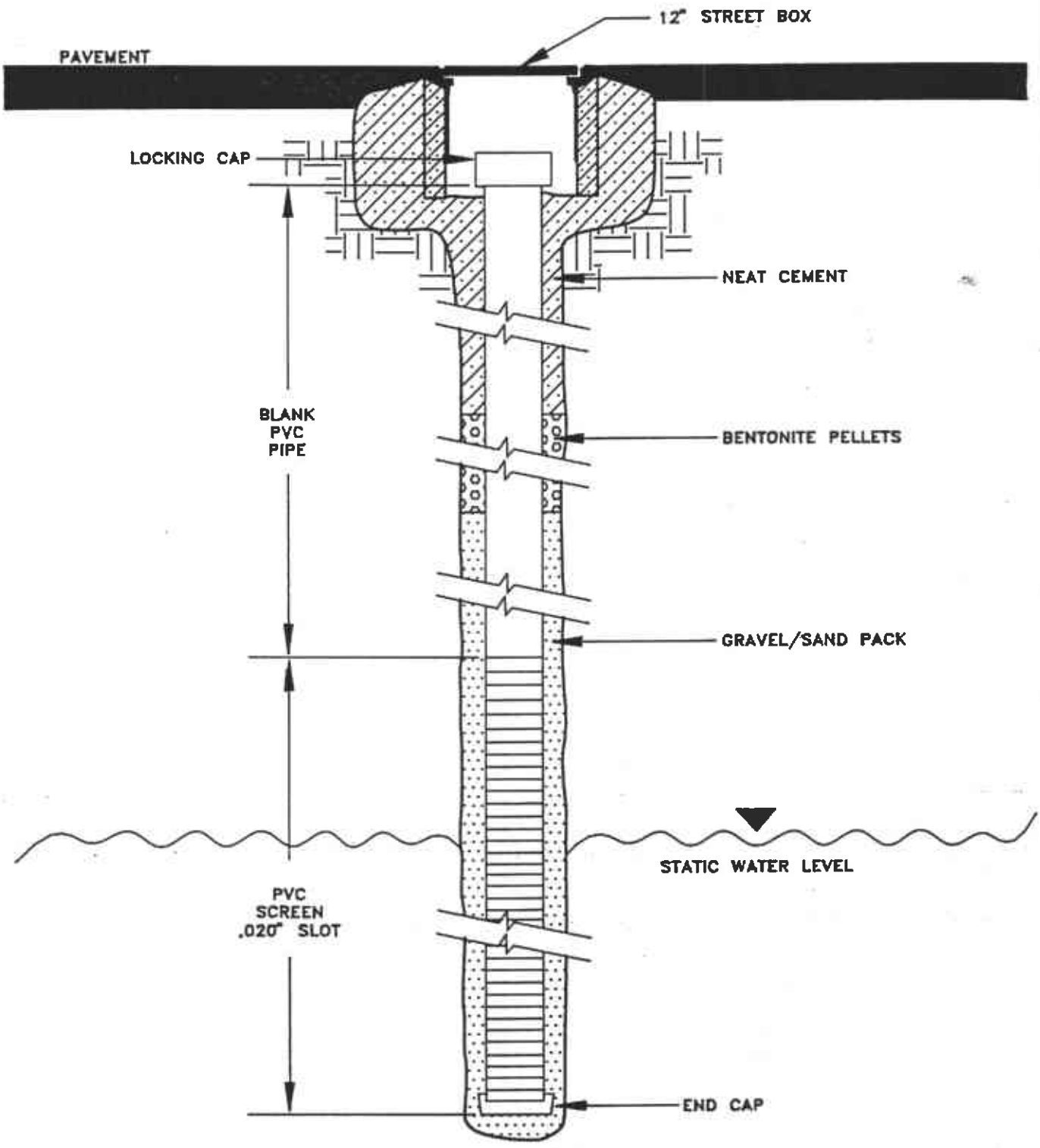


FIGURE 3
TYPICAL DETAIL
MONITORING WELL CONSTRUCTION

NOT TO SCALE

GROUNDWATER TECHNOLOGY, INC.