

BEACON

An Ultramar Company

525 WEST THIRD STREET • HANFORD, CA 93230 • (209) 582-0241

December 5, 1988

Mr. Hugh Murphy
HAYWARD FIRE PREVENTION BUREAU
22300 Foothill Blvd.
Hayward, CA 94541

Dear Mr. Murphy:

Re: Beacon Station No. 546
29705 Mission Blvd.
Hayward, CA 94544

Enclosed are the Soil Sampling and Analysis Report for the above referenced location.

Please feel free to contact me if you should have any questions.

Very truly yours,

BEACON OIL COMPANY



Steven O. Epperson
Corporate Environmental Director

SOE/jsm
Enclosure

0136i/S:0137i



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

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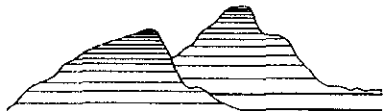
LETTER REPORT
SOIL SAMPLING AND ANALYSIS

at

Beacon Station No. 546
29705 Mission Boulevard
Hayward, California

AGS Job No. 18008-4

Nov 1988



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43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

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November 18, 1988
AGS 18008-4

Mr. Steve Epperson
Beacon Oil Company
525 West Third Street
Hanford, California 93230

Subject: Letter Report No. 18008-4, Soil Sampling and Analysis
at Beacon Station No. 546, 29705 Mission Boulevard,
Hayward, California.

Mr. Epperson:

This report summarizes the results of previous work performed at Beacon Station No. 546 in Hayward, California, in conjunction with removal of underground storage tanks and installation of ground-water monitoring wells. The results of additional work performed by Applied GeoSystems at the site to evaluate excavated soil containing diesel contamination are also included. The location of the site is shown on the Site Vicinity Map (Plate P-1).

In April 1988, Applied GeoSystems was present at the site for the removal of one diesel and two gasoline underground storage tanks and one waste-oil tank (AGS Report No. 18008-1, dated August 4, 1988). Laboratory analyses of soil samples collected from directly beneath the tanks indicated that hydrocarbon contamination was present in the soil. The soil in the tank pit was excavated to approximately 25 feet below the ground surface, which removed most of the soil with elevated levels of hydrocarbons.

Beacon Oil Company requested that Applied GeoSystems install monitoring wells at the site to evaluate if the hydrocarbon contamination had impacted the ground water. In June 1988, three ground-water monitoring wells were installed at the site. Analysis of ground-water samples from the wells indicated that the ground water beneath the site has been impacted by

hydrocarbon contamination (AGS Report No. 18008-3, dated August 25, 1988).

On August 5, 1988, a geologist from Applied GeoSystems was present at the site to collect composite samples from stockpiled soil that had been excavated from the area of the former diesel storage tank. The purpose of this evaluation was to analyze the samples for total extractable hydrocarbons and assess the suitability of this soil for disposal.

Before the samples were collected, 6 to 8 inches of soil were removed from the stockpiled soil. A hand-held percussion sampler was then used to drive a clean brass sleeve into the soil. The samples were immediately sealed with aluminum foil, plastic caps, and airtight tape, labeled, and placed in iced storage for transport to Applied GeoSystems' state-certified laboratory in Fremont, California for analysis. Two composite samples were taken, comprising soil samples from four locations each. The locations of the samples are shown on Plate P-2. The completed Chain of Custody Record, which accompanied the samples to the laboratory, is attached to this letter report.

The composite samples were analyzed for total extractable hydrocarbons by modified Environmental Protection Agency Method 8015. Analysis of the two samples indicated hydrocarbon contamination at nondetectable levels for the method of analysis used. The results of the analyses are presented on Table 1, and the Analysis Reports are attached to this letter report.

As reported in Applied GeoSystems' Report No. 18008-1, analytical results of soil samples S-15-T3E and S-15-T3W taken from beneath the ends of the diesel storage tank indicated total extractable hydrocarbons at 2,750 parts per million (ppm) and nondetectable levels for the method of analysis used, respectively. Analysis of the composite samples taken on August 5, 1988, indicated nondetectable levels of hydrocarbons for the method of analysis used. It is our opinion that the one result of 2,750 ppm represents a localized hydrocarbon concentration and is not representative of contamination levels in the remaining soil piles. We recommend that the soil be disposed of in a Class III landfill or used as backfill at the site.

We recommend that copies of this report be submitted to Mr. Hugh Murphy of the Hayward Fire Prevention Bureau, 22300 Foothill Boulevard, Hayward, California 94541 and Ms. Lisa McCann of the

Environmental Investigation
Beacon Station No. 546, Hayward, California

November 18, 1988
AGS 18008-4

California Regional Water Quality Control Board, San Francisco
Bay Region, 1111 Jackson Street, Room 6040, Oakland, California
94607.

Sincerely,
Applied GeoSystems

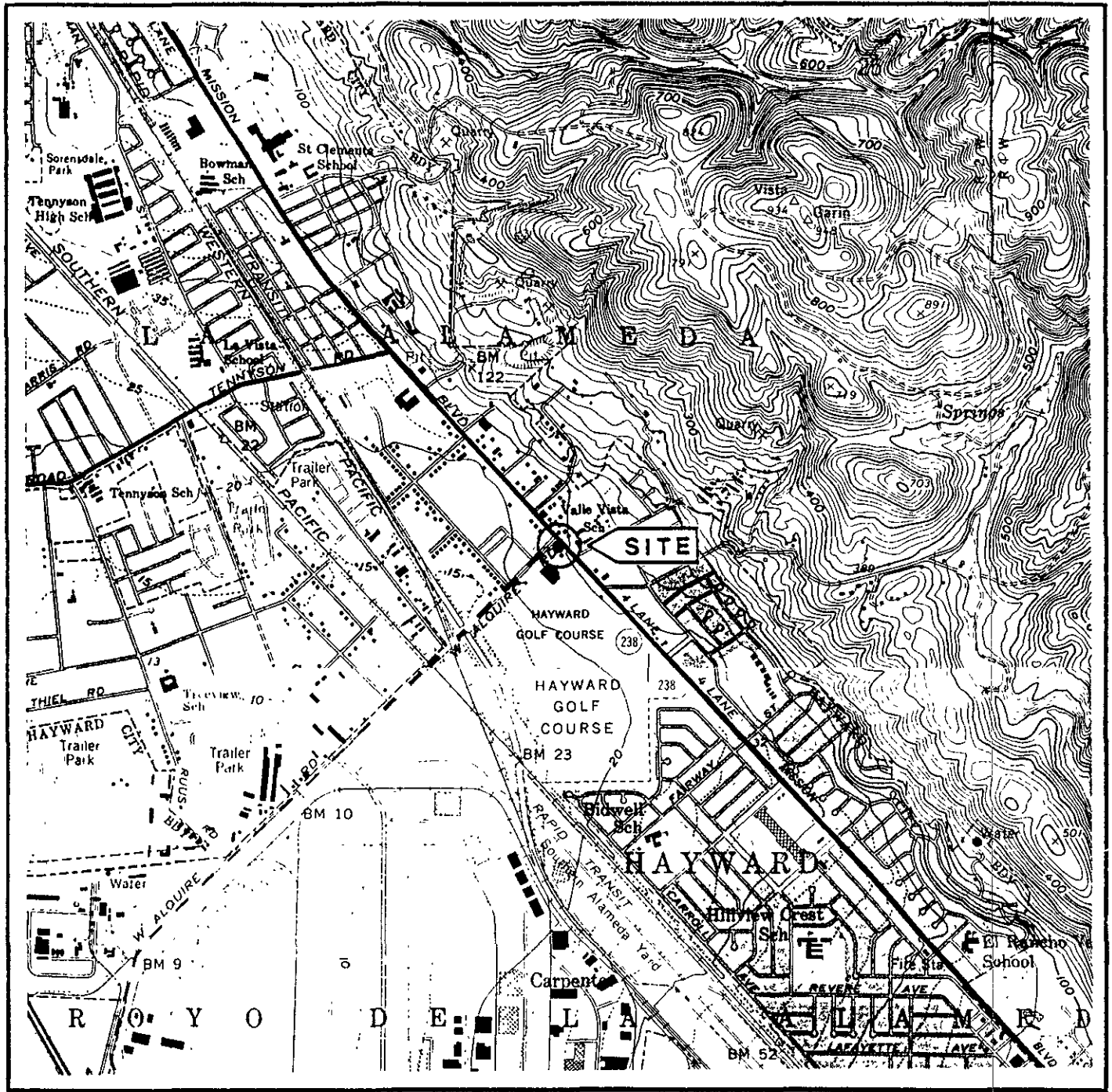
T. O'Brien

Tim J. O'Brien
Project Geologist

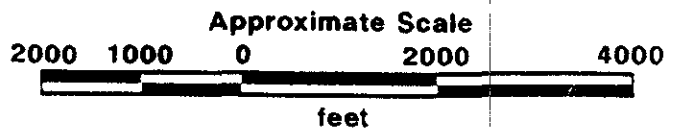
Gillian S. Holmes

Gillian S. Holmes
G.E. 2023

Enclosures: Site Vicinity Map, Plate P-1
Composite Soil Samples, Plate P-2
Results of Laboratory Analyses of Composite Samples,
Table 1
Chain of Custody Record
Analysis Reports (2 pages)



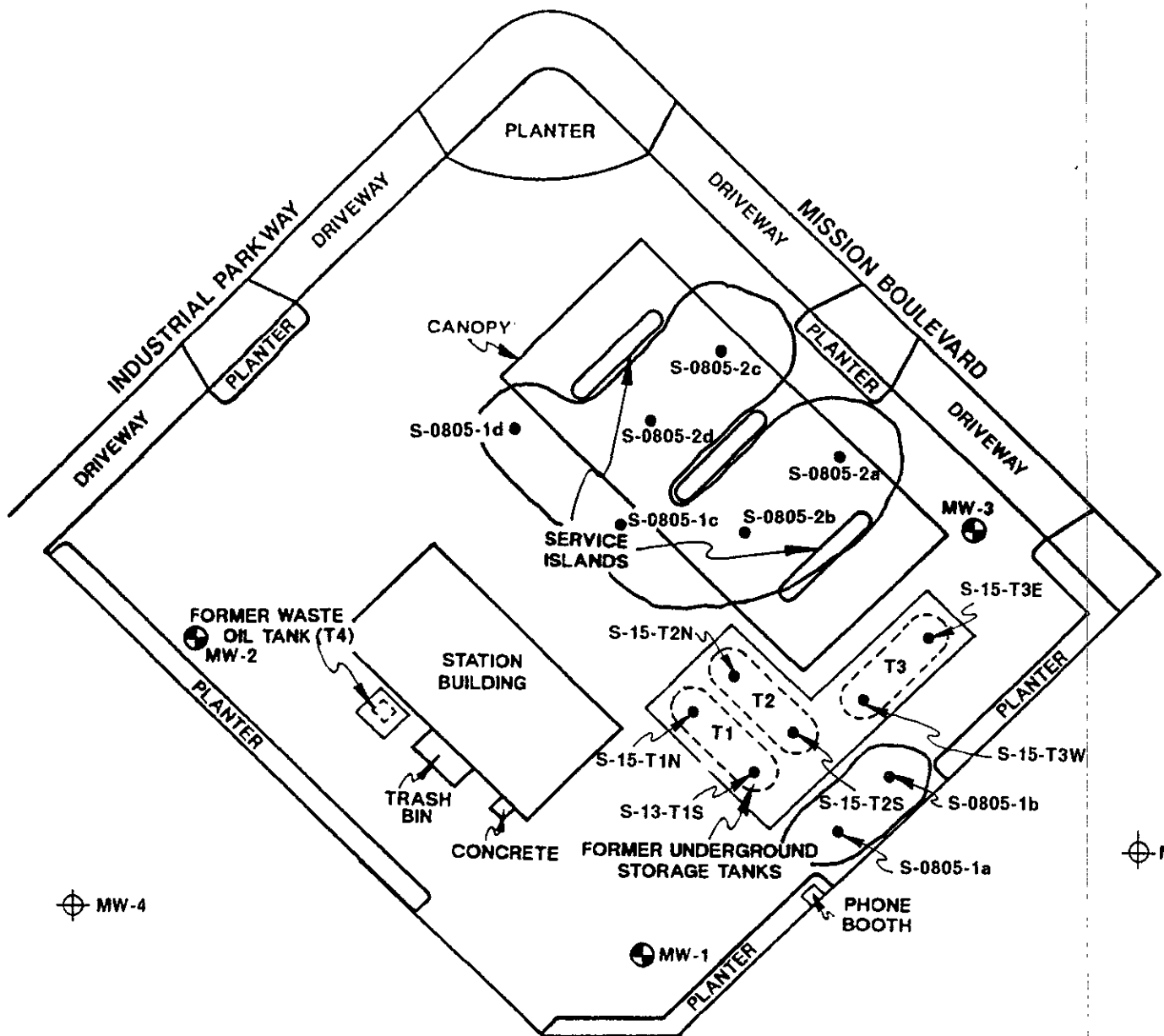
Source: U.S. Geological Survey
 7.5-Minute Quadrangle
 Hayward, California
 Newark, California
 Photorevised 1980



PROJECT NO. 18008-4

SITE VICINITY MAP
 Beacon Station No. 546
 29705 Mission Boulevard
 Hayward, California

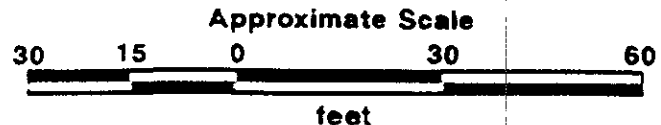
PLATE
P - 1



- S-0805-2d ● = Soil sample location
- = Soil pile location
- MW-6 ⊕ = Proposed off-site location
- MW-3 ⊕ = Monitoring well location



MW-5 ⊕



Source: Measured by tape and compass



PROJECT NO. 18008-4

GENERALIZED SITE PLAN
Beacon Station No. 546
29705 Mission Boulevard
Hayward, California

PLATE
P - 2

TABLE 1
RESULTS OF LABORATORY ANALYSES
OF COMPOSITE SOIL SAMPLES
Beacon Station No. 546
29705 Mission Boulevard
Hayward, California
(August 5, 1988)

Sample Number	Total Extractable Hydrocarbons
S0805-1(ABCD)	<5
S0805-2(ABCD)	<5

Results in milligrams per kilogram (mg/kg), or parts per million

< = below detection limit for method of analysis used

Sample designation:

S-0805-1(ABCD)



Sample location

Sample number

Sample collection date

Soil sample



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ANALYSIS REPORT

0212lab.frm

Report Prepared for:
Applied GeoSystems
43255 Mission Boulevard
Fremont, CA 94539
Attention: Gary D. Barker

Date Received: 8-05-88
Laboratory Number: 08014S01
Project: 018008-3
Sample: S0805-1(ABCD)
Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline	ND		5		08-08-88	NR
TPH as Gasoline						
TEH as Diesel						
Benzene						
Toluene						
Ethylbenzene						
Total Xylenes						

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TPH--Total petroleum hydrocarbons (low-to-medium boiling points) are measured by extraction according to EPA Method 5030 followed by analysis by a modified EPA Method 8015 which uses a GC equipped with an FID. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Tia Tran, Laboratory Supervisor

8-10-88

Date Reported



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

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ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Boulevard
Fremont, CA 94539
Attention: Gary D. Barker

0212lab.frm
Date Received: 8-05-88
Laboratory Number: 08014S02
Project: 018008-3
Sample: S0805-2 (ABCD)
Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline	ND		5		08-08-88	NR
TPH as Gasoline						
TEH as Diesel						
Benzene						
Toluene						
Ethylbenzene						
Total Xylenes						

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

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Tia Tran, Laboratory Supervisor

8-10-88

Date Reported