

Shell Oil Company



EAST BAY
MARKETING DISTRICT

P.O. Box 4023
Concord, CA 94524
(415) 676-1414

March 7, 1989

3/9/89
ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS

Mr. Rafat Shahid
County of Alameda
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Dear Mr. Shahid:

SUBJECT: SHELL SITE
2800 TELEGRAPH
OAKLAND, CA 94609

Enclosed please find a copy of final soil sampling and backfilling of tank hole excavation.

All stockpiled soils have been tested and disposed of in accordance with environmental regulations.

Shell is in the process of performing an off site assessment and we will keep you advised of the status of this work.

If you have any questions, please call me at (415) 676-1414, Ext. 128.

Very truly yours,

A handwritten signature in black ink that reads "R. G. Newsome".

R. G. Newsome
Sr. District Engineer

Attachment

cc + Attach: San Francisco Water Quality Control Board
Environmental Files
Environmental Engineer



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

KEI-J88-1207.R2

February 23, 1989

Shell Oil Company
P.O. Box 4023
Concord, CA 94520

Attention: Mr. Ray Newsome

RE: Soil Sampling Report
Former Shell Service Station
Northeast Corner of Telegraph & 28th
Oakland, California

Dear Mr. Newsome:

This report summarizes the soil sampling performed by Kaprealian Engineering, Inc. (KEI) at the referenced site. All work was performed in compliance with the guidelines established by the Regional Water Quality Control Board (RWQCB), and the Alameda County Health Agency.

The scope of the work performed by KEI consisted of the following:

Coordination with regulatory agencies.

Collection of samples of native soil from the sidewalls of the storage tank pit.

Collection of stockpiled soil samples.

Delivery of soil samples, including proper Chain of Custody documentation, to a certified analytical laboratory.

Technical review and preparation of this report.

SITE DESCRIPTION AND BACKGROUND

The subject site was used as a gasoline station and is being abandoned. Site vicinity and site descriptions are shown on the attached sketch. KEI has learned that the site has been under investigation by other consultants. Both monitoring wells and borings have been installed and, in a report by Woodland-Clyde for Gettler-Ryan, both soil and ground water contamination were documented at the site.

FIELD ACTIVITIES

KEI's initial field work was conducted on December 7, 1988. Four underground storage tanks were removed from the site. The tanks consisted of three 10,000 gallon fuel storage tanks and one 500 gallon waste oil tank. The tanks were made of fiberglass and no apparent holes or cracks were observed.

Since water was encountered in the fuel tank pit at a depth of 9.5 feet, eight soil samples were collected from the sidewalls of the fuel tank pit approximately six inches above the water table. Laboratory analyses indicated that the concentration of total petroleum hydrocarbons as gasoline ranged from 71 to 2800 ppm for these original samples (refer to KEI-J88-1207.R1 dated December 16, 1988).

In order to define the lateral extent of soil contamination, KEI returned to the site on January 19, 1989. Six additional soil samples (designated as A-2A, B-1A, B-2A, C-1A, C-2A and D-2A) were collected from the fuel tank pit sidewalls approximately six inches above the water table. The undisturbed samples were collected from bulk material excavated by backhoe. The samples were placed in clean, 2" diameter brass tubes, sealed with aluminum foil, plastic caps and tape, and stored in a cooled ice chest for delivery to a state certified laboratory. Sample point locations are as shown on the Site plan, Figure 1, attached.

The tank pit sidewalls were subsequently excavated from grade to ground water over the additional area indicated on Figure 1. The excavated soil was stockpiled on site for further sampling.

On January 26, 1989, KEI ~~returned to the site~~ and collected soil samples from approximately 500 cubic yards of stockpiled soil to determine proper disposal of the stockpiles. Ten composite samples, designated as Comp A through J inclusive, were taken. Each composite sample consisted of four individual grab samples taken at various locations and depths ranging from one to two feet. The samples were collected in 2" by 4" clean, brass tubes, which were then handled as described above. Sample point locations are as indicated on the Site Plan, Figure 2, attached.

After receiving and reviewing the analytical results for the ten stockpile composite samples described above, KEI recommended that the material represented by composite samples Comp B, Comp D, Comp E, Comp F, Comp H and Comp J be aerated and resampled prior to disposal. On February 14 and 16, 1989, soil samples were collected from approximately 300 cubic yards of aerated and stockpiled soil. Six composite ~~site~~ samples, labeled Comp 1 through

Comp 6 inclusive, were taken. Each composite sample again consisted of four individual grab samples taken at various locations and depths ranging from one to two feet. These samples were collected and handled as described above. Sample point locations are shown on the attached Site Plan, Figure 3.

ANALYTICAL RESULTS

All samples were analyzed by Sequoia Analytical Laboratory of Redwood City, California, and were accompanied by properly executed Chain of Custody documentation. The samples from both the fuel tank pit sidewalls and the stockpiles were analyzed for total petroleum hydrocarbon (TPH) as gasoline using EPA method 5030 in conjunction with modified 8015, and benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA methods 5030 and 8020.

Soil sample analyses from the fuel tank pit indicate that the TPH concentration for the six sidewall samples ranged from 4.3 to 140 ppm. The sidewall sample analytical results are summarized in Table 1. Laboratory analyses of the composite soil samples indicated TPH levels less than 30 ppm for Comp A, Comp C, Comp G, Comp I, and Comps 1 through 6 inclusive. The composite sample analytical results are summarized in Table 2 attached. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISCUSSION

The tank pit excavation has been backfilled and compacted using clean, imported fill from ground water to 5½ feet below grade. The soil from Comp A, Comp C, Comp G, Comp I and Comps 1 through 6 inclusive, was used to backfill the excavation from a depth of 5½ feet to grade.

A copy of this report should be sent to the Alameda County Health Agency, and to the RWQCB, San Francisco Bay Region.

LIMITATIONS

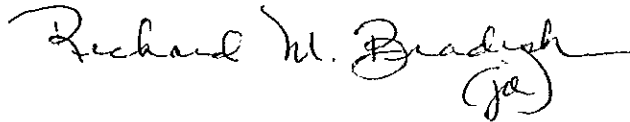
The results of this study are based on the data obtained from the field and laboratory investigations. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

KEI-J88-1207.R2
February 23, 1989
Page 4

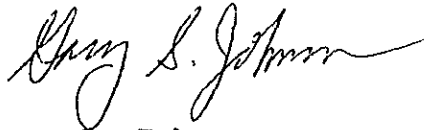
Should you have any questions regarding this report, please feel free to call me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Richard M. Bradish
Staff Engineer



Gary S. Johnson
Registered Geologist

License No. 4315
Exp. Date 6/30/90



Mardo Kaprealian
President

Attachments: Table 1
Site Plan - Figure 1
 - Figure 2
 - Figure 3
Laboratory Analyses
Chain of Custody documentation

KEI-J88-1207.R2
February 23, 1989

TABLE 1

SUMMARY OF LABORATORY ANALYSES
Sidewall Samples

(Results in ppm)

| <u>Sample #</u> | <u>Depth (feet)</u> | <u>TPH as Gasoline</u> | <u>Benzene</u> | <u>Toluene</u> | <u>Xylenes</u> | <u>Ethyl- benzene</u> |
|-----------------|-------------------------|----------------------------|----------------|----------------|----------------|---------------------------|
| A-2A | 9 | 7.6 | 1.3 | 0.42 | 1.3 | 0.35 |
| B-1A | 9 | 4.3 | 0.063 | <0.1 | 0.31 | 0.17 |
| B-2A | 9 | 140 | 0.084 | 0.27 | 5.1 | 0.98 |
| C-1A | 9 | 130 | 1.5 | 7.0 | 20 | 3.5 |
| C-2A | 9 | 48 | 0.89 | 1.2 | 5.8 | 1.4 |
| D-2A | 9 | 130 | 0.64 | 0.62 | 8.0 | 3.11 |

KEI-J88-1207.R2
February 23, 1989

TABLE 2

SUMMARY OF LABORATORY ANALYSES
Stockpile Samples

(Results in ppm)

| <u>Date</u> | <u>Sample</u> | <u>Gasoline</u> | <u>Benzene</u> | <u>Toluene</u> | <u>Xylenes</u> | <u>Ethyl- benzene</u> |
|--------------------|--|-------------------------|----------------------|----------------------|------------------------------|---------------------------|
| 1/26/89 | Comp A✓ | 7.2 | ND | ND | 0.77 | ND |
| " | Comp B | 230 | ND | 0.97 | 30 | 3.4 |
| " | Comp C✓ | 11 | ND | ND | 0.74 | ND |
| " | Comp D | 210 | ND | ND | 10 | 1.1 |
| " | Comp E | 49 | 0.059 | 0.32 | 5.2 | 0.42 |
| " | Comp F | 420 | 0.24 | 16 | 93 | 15 |
| " | Comp G✓ | 18 | ND | 0.2 | 1.8 | 0.29 |
| " | Comp H | 32 | 0.24 | 0.97 | 6.0 | 1.0 |
| " | Comp I✓ | 29 | 0.49 | 2.1 | 6.1 | 1.1 |
| " | Comp J | 130 | 0.26 | 2.2 | 13 | 2.3 |
| 2/14/89 | Comp 1 } Comp 2 } | 7.2 29 | ND ND | ND ND | 0.17 0.66 | ND ND |
| 2/16/89 | Comp 3 } Comp 4 } Comp 5 } Comp 6 } | 2.5 4.1 11 5.0 | ND ND ND ND | ND ND ND ND | 0.15 0.11 0.37 0.11 | ND ND ND ND |
| Detection Limit | | 1.0 | 0.05 | 0.1 | 0.1 | 0.1 |

ND = Non-detectable.

* used to backfill



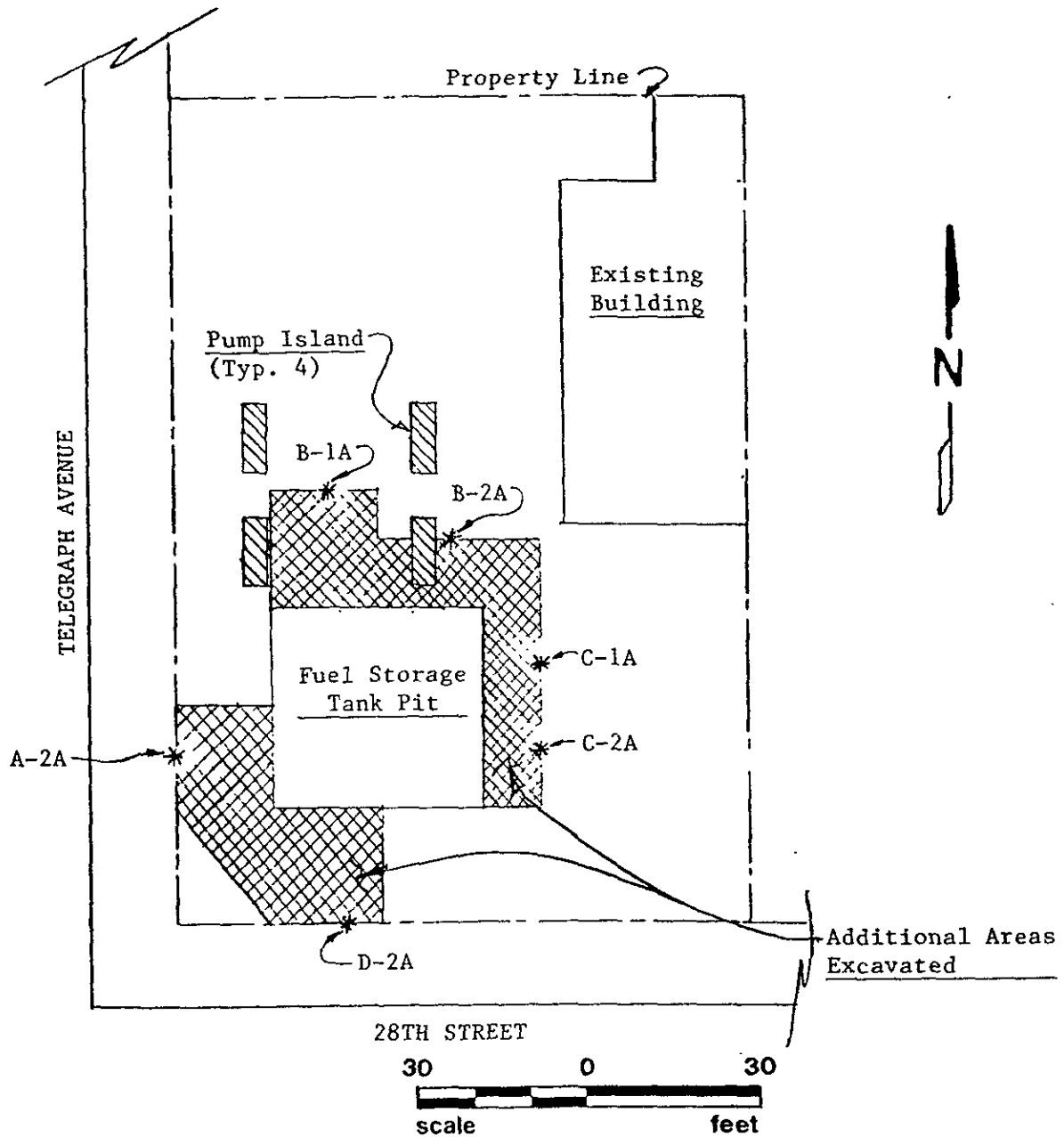
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915



Site Plan
Figure 1

* Soil Sample Location

Former Shell Service Station
Northeast Corner of
Telegraph & 28th
Oakland, California



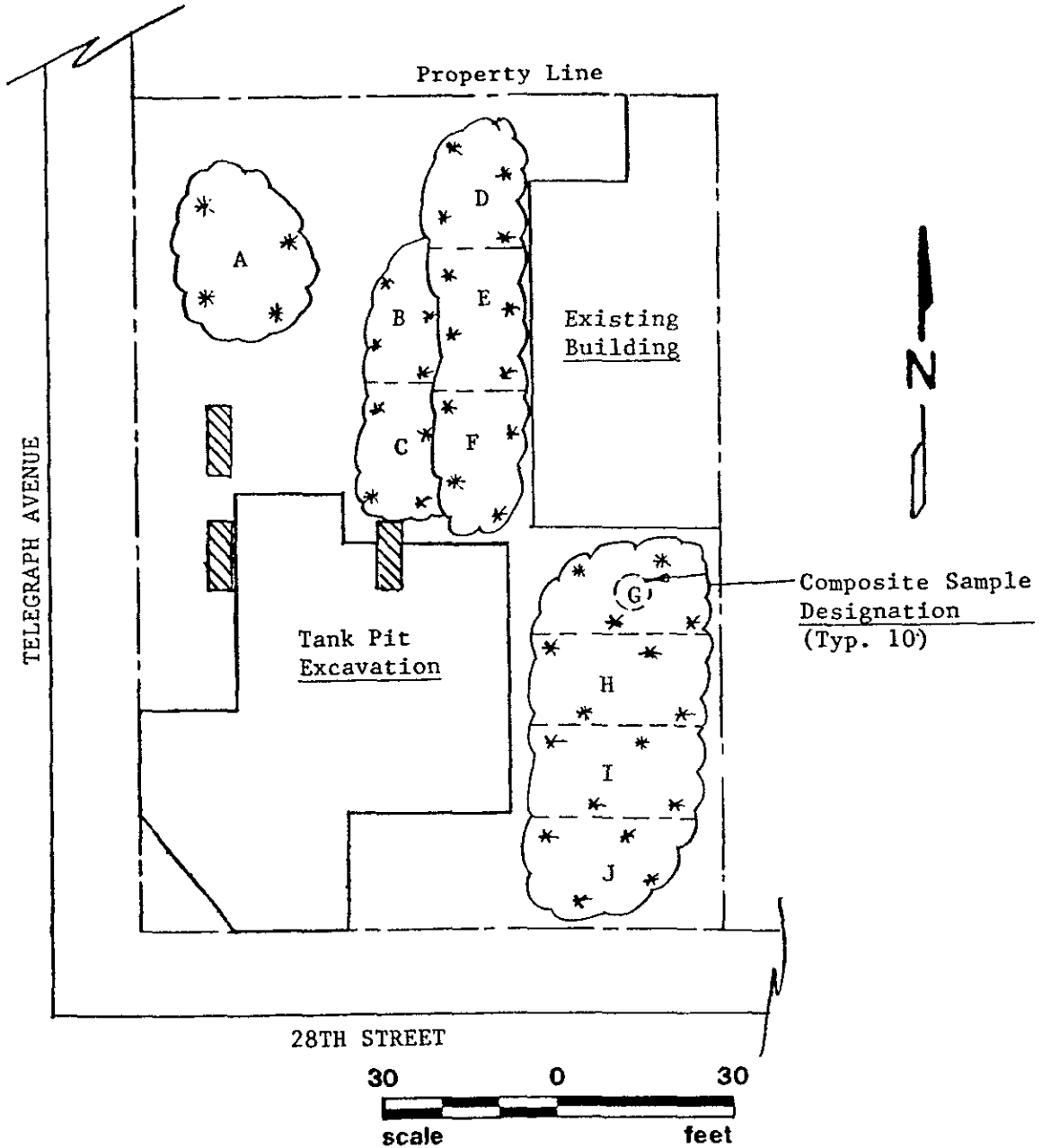
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SITE PLAN
Figure 2

* Sample Point Location

Former Shell Service Station
Northeast Corner of
Telegraph & 28th
Oakland, California



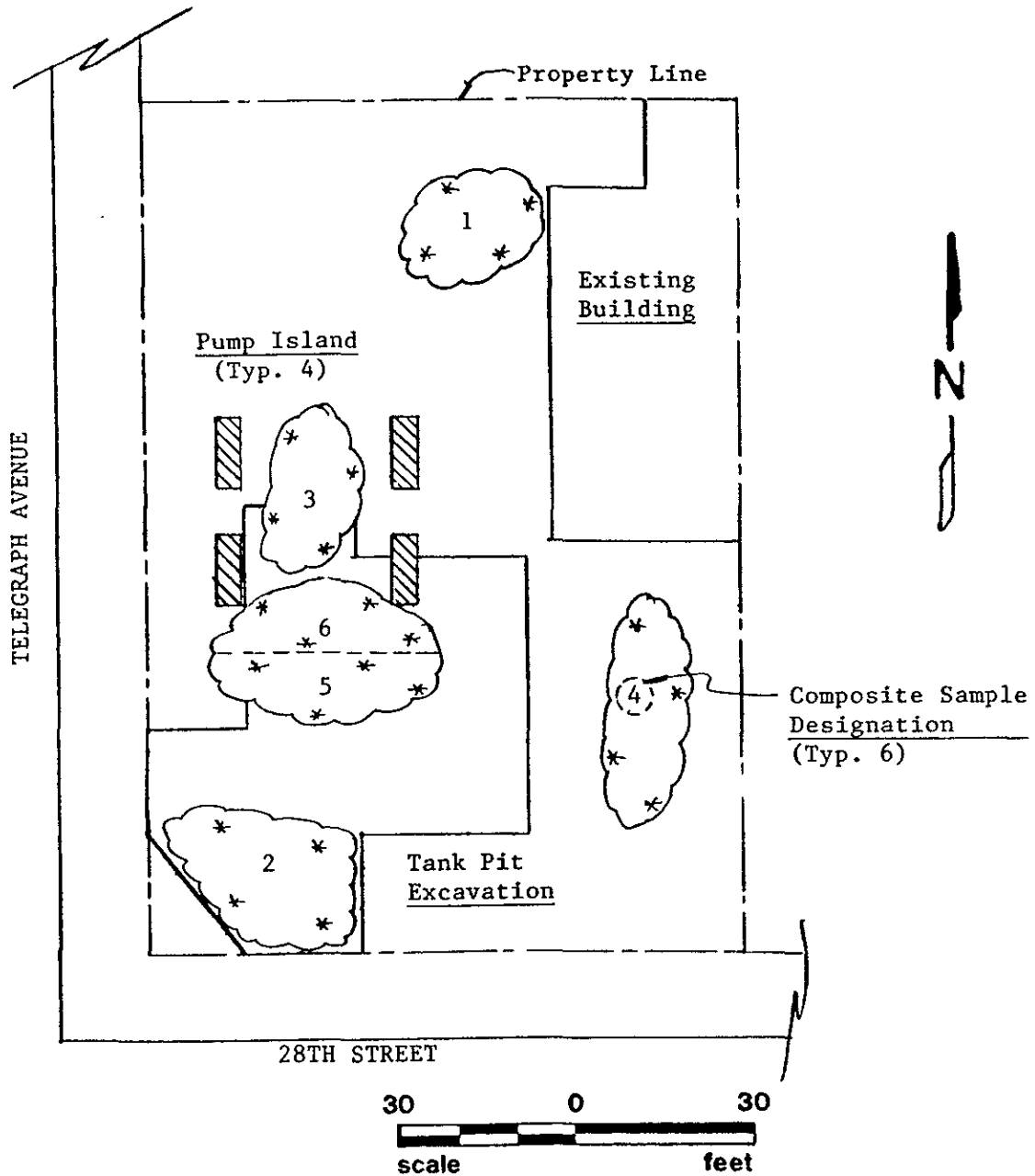
KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915



SITE PLAN
Figure 3

* Sample Point Location

Former Shell Service Station
Northeast Corner of
Telegraph & 28th
Oakland, California



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

| | | |
|-----------------------------------|---|------------------------|
| Kapreallan Engineering, Inc. | Client Project ID: Shell, Oakland, 28th/Telegraph | Sampled: Jan 19, 1989 |
| P.O. Box 913 | Matrix Descript: Soil | Received: Jan 20, 1989 |
| Benicia, CA 94510 | Analysis Method: EPA 5030 or 3810/8015/8020 | Analyzed: Jan 23, 1989 |
| Attention: Mardo Kapreallan, P.E. | First Sample #: 901-1753 | Reported: Jan 23, 1989 |

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

| Sample Number | Sample Description | Low/Medium B.P. Hydrocarbons | | | Ethyl Benzene mg/kg (ppm) | Xylenes mg/kg (ppm) |
|---------------|--------------------|------------------------------|---------------------|---------------------|---------------------------|---------------------|
| | | mg/kg (ppm) | Benzene mg/kg (ppm) | Toluene mg/kg (ppm) | | |
| 901-1753 | A-2A | 7.6 | 1.3 | 0.42 | 0.35 | 1.3 |
| 901-1754 | B-1A | 4.3 | 0.063 | N.D. | 0.17 | 0.31 |
| 901-1755 | B-2A | 140 | 0.084 | 0.27 | 0.98 | 5.1 |
| 901-1756 | C-1A | 130 | 1.5 | 7.0 | 3.5 | 20 |
| 901-1757 | C-2A | 48 | 0.89 | 1.2 | 1.4 | 5.8 |
| 901-1758 | D-2A | 130 | 0.64 | 0.62 | 3.11 | 8.0 |

| | | | | | |
|--------------------------|------------|-------------|------------|------------|------------|
| Detection Limits: | 1.0 | 0.05 | 0.1 | 0.1 | 0.1 |
|--------------------------|------------|-------------|------------|------------|------------|

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

For Arthur G. Burton
Laboratory Director



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

CHAIN OF CUSTODY

SAMPLER: R.M. Bradish (signature) DATE/TIME OF COLLECTION: 1-19-89 TURN AROUND TIME: 24 HR

SAMPLE DESCRIPTION AND PROJECT NUMBER:

Shell - Oakland
28th of Telegraph

| SAMPLE # | ANALYSES | GRAB OR COMP. | NUMBER OF CONTAINERS | SOIL/WATER |
|----------|--------------|---------------|----------------------|------------|
| A-2A | TPH-G & BTEX | G | 1 | S |
| B-1A | " " | G | 1 | S |
| B-2A | " " | G | 1 | S |
| C-1A | " " | G | 1 | S |
| C-2A | " " | G | 1 | S |
| D-2A | " " | G | 1 | S |
| | | | | |
| | | | | |

| RELINQUISHED BY* | TIME/DATE | RECEIVED BY* | TIME/DATE |
|------------------------|--------------------------------|----------------------|----------------------|
| 1. <u>R.M. Bradish</u> | <u>1-20-89</u> <u>9:22</u> | <u>Tom McLean</u> | <u>9:22 1/20/89</u> |
| 2. <u>Tom McLean</u> | <u>1-20-89</u> <u>10:25</u> | <u>Deuck Newcomb</u> | <u>12:30 1/20/89</u> |
| 3. | | | |
| 4. | | | |

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____

55



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

| | | |
|-----------------------------------|---|------------------------|
| Kapreallan Engineering, Inc. | Client Project ID: Shell, Oakland, 28th/Telegraph | Sampled: Jan 26, 1989 |
| P.O. Box 913 | Matrix Descript: Soil | Received: Jan 27, 1989 |
| Benicia, CA 94510 | Analysis Method: EPA 5030 or 3810/8015/8020 | Analyzed: Jan 29, 1989 |
| Attention: Mardo Kapreallan, P.E. | First Sample #: 901-2807 | Reported: Jan 31, 1989 |

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

| Sample Number | Sample Description | Low/Medium B.P. Hydrocarbons mg/kg (ppm) | Benzene mg/kg (ppm) | Toluene mg/kg (ppm) | Ethyl Benzene mg/kg (ppm) | Xylenes mg/kg (ppm) |
|---------------|--------------------|--|---------------------|---------------------|---------------------------|---------------------|
| 901-2807 | Composite A | 7.2 | N.D. | N.D. | N.D. | 0.77 |
| 901-2808 | Composite B | 230 | N.D. | 0.97 | 3.4 | 30 |
| 901-2809 | Composite C | 11 | N.D. | N.D. | N.D. | 0.74 |
| 901-2810 | Composite D | 210 | N.D. | N.D. | 1.1 | 10 |
| 901-2811 | Composite E | 49 | 0.059 | 0.32 | 0.42 | 5.2 |
| 901-2812 | Composite F | 420 | 0.24 | 16 | 15 | 93 |
| 901-2813 | Composite G | 18 | N.D. | 0.2 | 0.29 | 1.8 |
| 901-2814 | Composite H | 32 | 0.24 | 0.97 | 1.0 | 6.0 |
| 901-2815 | Composite I | 29 | 0.49 | 2.1 | 1.1 | 6.1 |
| 901-2816 | Composite J | 130 | 0.26 | 2.2 | 2.3 | 13 |

| | | | | | |
|--------------------------|------------|-------------|------------|------------|------------|
| Detection Limits: | 1.0 | 0.05 | 0.1 | 0.1 | 0.1 |
|--------------------------|------------|-------------|------------|------------|------------|

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

c7-14

CHAIN OF CUSTODY

SAMPLER: P. M. Bradish DATE/TIME OF COLLECTION: 1-26-89 TURN AROUND TIME: 24 Hr
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: Unocal - Oakland
20th & Telegraph

| SAMPLE # | ANALYSES | GRAB OR COMP. | NUMBER OF CONTAINERS | SOIL/WATER |
|----------|--------------|---------------|----------------------|------------|
| Comp A | TPH-G & BTXE | C | 2 | S |
| " B | " " | C | 2 | S |
| " C | " " | C | 2 | S |
| " D | " " | C | 2 | S |
| " E | " " | C | 2 | S |
| " F | " " | C | 2 | S |
| " G | " " | C | 2 | S |
| " H | " " | C | 2 | S |

| RELINQUISHED BY* | TIME/DATE | RECEIVED BY* | TIME/DATE |
|-------------------------|-------------------------------|----------------------|---------------------------------|
| 1. <u>P. M. Bradish</u> | <u>1-27-89</u> <u>0900</u> | <u>Tim McLean</u> | <u>1/27/89</u> <u>900 AM</u> |
| 2. <u>Tim McLean</u> | <u>1/27/89</u> <u>1130</u> | <u>Denise Howard</u> | <u>1/27/89</u> <u>1130</u> |
| 3. | | | |
| 4. | | | |

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

CHAIN OF CUSTODY

SAMPLER: R.M. Bradish DATE/TIME OF COLLECTION: 1-26-89 TURN AROUND TIME: 24HR
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER:

Unusual - Oakland
28th & Telegraph

| <u>SAMPLE #</u> | <u>ANALYSES</u> | <u>GRAB OR COMP.</u> | <u>NUMBER OF CONTAINERS</u> | <u>SOIL/ WATER</u> |
|-----------------|-------------------------|----------------------|-----------------------------|--------------------|
| <u>Comp I</u> | <u>TPH-G & BTXE</u> | <u>C</u> | <u>2</u> | <u>S</u> |
| <u>" J</u> | <u>" "</u> | <u>C</u> | <u>2</u> | <u>S</u> |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| <u>RELINQUISHED BY*</u> | <u>TIME/DATE</u> | <u>RECEIVED BY*</u> | <u>TIME/DATE</u> |
|-------------------------|--------------------------------|-------------------------|---------------------------------|
| <u>R.M. Bradish</u> | <u>1-27-89</u> <u>0900</u> | <u>Tom McPain</u> | <u>1/27/89</u> <u>900 AM</u> |
| <u>Tom McPain</u> | <u>1/27/89</u> <u>11:45</u> | <u>Demetrius Howard</u> | <u>1/27/89</u> <u>11:30</u> |
| <u>3.</u> | | | |
| <u>4.</u> | | | |

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

| | | |
|-----------------------------------|---|------------------------|
| Kapreallan Engineering, Inc. | Client Project ID: Shell, Oakland, 28th/Telegraph | Sampled: Feb 14, 1989 |
| P.O. Box 913 | Matrix Descript: Soil | Received: Feb 14, 1989 |
| Benicia, CA 94510 | Analysis Method: EPA 5030 or 3810/8015/8020 | Analyzed: Feb 15, 1989 |
| Attention: Mardo Kapreallan, P.E. | First Sample #: 902-1366 | Reported: Feb 16, 1989 |

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

| Sample Number | Sample Description | Low/Medium B.P. Hydrocarbons mg/kg (ppm) | Benzene mg/kg (ppm) | Toluene mg/kg (ppm) | Ethyl Benzene mg/kg (ppm) | Xylenes mg/kg (ppm) |
|---------------|--------------------|--|---------------------------|---------------------------|---------------------------------|---------------------------|
| 902-1366 | Composite 1 | 7.2 | N.D. | N.D. | N.D. | 0.17 |
| 902-1367 | 2 | 29 | N.D. | N.D. | N.D. | 0.66 |

Detection Limits:

1.0

0.05

0.1

0.1

0.1

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

CHAIN OF CUSTODY

SAMPLER: R.M. Bradish DATE/TIME OF COLLECTION: 2-14-89 TURN AROUND TIME: 24 HR
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: Shell - Oakland
28th & Telegraph

| SAMPLE # | ANALYSES | GRAB OR COMP. | NUMBER OF CONTAINERS | SOIL/WATER |
|----------|--------------|---------------|----------------------|------------|
| Comp 1 | TPH-G & BTEX | C | 2 | S |
| " 2 | " " | C | 2 | S |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| RELINQUISHED BY* | TIME/DATE | RECEIVED BY* | TIME/DATE |
|------------------------|---|----------------------------|----------------------------------|
| 1. <u>R.M. Bradish</u> | <u>2-14-89</u> <u>1600</u> | <u>Paul Yji</u> (Priority) | <u>2-14-89</u> <u>4:00 PM</u> |
| 2. <u>Paul Yji</u> | <u>Priority 2-14-89</u> <u>4:30 PM</u> | <u>Derek Newcomb</u> | <u>2/14/89</u> <u>4:50 PM</u> |
| 3. | | | |
| 4. | | | |

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

| | | |
|-----------------------------------|---|------------------------|
| Kaprealian Engineering, Inc. | Client Project ID: Shell, Oakland, 28th/Telegraph | Sampled: Feb 16, 1989 |
| P.O. Box 913 | Matrix Descript: Soil | Received: Feb 16, 1989 |
| Benicia, CA 94510 | Analysis Method: EPA 5030 or 3810/8015/8020 | Analyzed: Feb 17, 1989 |
| Attention: Mardo Kaprealian, P.E. | First Sample #: 902-1624 | Reported: Feb 17, 1989 |

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

| Sample Number | Sample Description <i>Composite</i> | Low/Medium B.P. Hydrocarbons mg/kg (ppm) | Benzene mg/kg (ppm) | Toluene mg/kg (ppm) | Ethyl Benzene mg/kg (ppm) | Xylenes mg/kg (ppm) |
|---------------|--|---|---------------------------|---------------------------|------------------------------------|---------------------------|
| 902-1624 | 3 | 2.5 | N.D. | N.D. | N.D. | 0.15 |
| 902-1625 | 4 | 4.1 | N.D. | N.D. | N.D. | 0.11 |
| 902-1626 | 5 | 11 | N.D. | N.D. | N.D. | 0.37 |
| 902-1627 | 6 | 5.0 | N.D. | N.D. | N.D. | 0.11 |

| | | | | | |
|-------------------|-----|------|-----|-----|-----|
| Detection Limits: | 1.0 | 0.05 | 0.1 | 0.1 | 0.1 |
|-------------------|-----|------|-----|-----|-----|

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director



KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P. O. BOX 913

BENICIA, CA 94510

(415) 676-9100 (707) 746-6915

CHAIN OF CUSTODY

SAMPLER: [Signature] DATE/TIME OF COLLECTION: 2/16/89 TURN AROUND TIME: 24 hours
 (signature)

SAMPLE DESCRIPTION AND PROJECT NUMBER: SHELL - Oakland
28th & Telegraph

| <u>SAMPLE #</u> | <u>ANALYSES</u> | <u>GRAB OR COMP.</u> | <u>NUMBER OF CONTAINERS</u> | <u>SOIL/WATER</u> |
|-----------------|-----------------|----------------------|-----------------------------|-------------------|
| Comp 3 | TPNH + BTXSE | C | 4 | S |
| Comp 4 | TPNH + BTXSE | C | 4 | S |
| Comp 5 | TPNH + BTXSE | C | 4 | S |
| Comp 6 | TPNH + BTXSE | C | 4 | S |
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| <u>RELINQUISHED BY*</u> | <u>TIME/DATE</u> | <u>RECEIVED BY*</u> | <u>TIME/DATE</u> |
|--------------------------|------------------------|---------------------|----------------------|
| <u>[Signature] (KEI)</u> | <u>11:30am 2-16-89</u> | <u>Tom McJain</u> | <u>11:30 2/16/89</u> |
| <u>Tom McJain</u> | <u>1:55 2-16-89</u> | <u>[Signature]</u> | <u>1:55 2/16/89</u> |
| 3. | | | |
| 4. | | | |

* STATE AFFILIATION NEXT TO SIGNATURE

REMARKS: _____