



Chevron U.S.A. Inc.

2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

91 AUG 28 PM 12:30

Marketing Department

August 22, 1991

Mr. Scott Seery
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Station # 9-5607
5269 Crow Canyon Road, Castro Valley, CA

Dear Mr. Seery:

Enclosed is a report dated July 26, 1991 which describes groundwater monitoring by Chevron's consultant, Alton Geoscience (Alton), on June 18, 1991 at the site referenced above.

Chevron's consultant, Geraghty & Miller, has received the necessary permit and has scheduled the trenching which will allow for well C-9 to be connected to the groundwater extraction and treatment system. This work has been set up for September 4 and 5, 1991.

If you have any questions or comments, you may contact me at (415) 842-8658.

Sincerely,

Clint B. Rogers
Environmental Engineer

Enclosure

cc: Lester Feldman, San Francisco Bay RWQCB
Kevin Hinckley, 5269 Crow Canyon Road, Castro Valley, CA 94546
Paul Hehn, Geraghty and Miller, Richmond, CA

July 26, 1991

Mr. Clint Rogers
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

310-321

Subject: Quarterly Ground Water Monitoring Report
Chevron Station No. 9-5607
5269 Crow Canyon Road
Castro Valley, California

Dear Mr. Rogers:

In accordance with our agreement, Alton Geoscience transmits this Quarterly Ground Water Monitoring and Sampling Report for Chevron Station No. 9-5607, located at 5269 Crow Canyon Road, Castro Valley, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells were performed on June 18, 1991, in accordance with the requirements and procedures of the California Regional Water Quality Control Board (RWQCB) and local regulatory agencies.

FIELD PROCEDURES

Prior to purging and sampling the wells, the depth to ground water in each well was measured from the top of casing to the nearest 0.01 foot using an electronic interface probe. Ground water samples were also collected at this time and checked for the presence of liquid-phase hydrocarbons or sheen.

Ground water analytical samples were collected after more than 3 casing volumes of ground water were purged from each well. Each sample was collected using a clean bailer (dedicated for each well), and then transferred into the appropriate clean sample containers for delivery to a California-certified laboratory following proper preservation and chain of custody procedures. Purged ground water was stored onsite in DOT-approved, 55-gallon drums until properly disposed of offsite.

Mr. Clint Rogers
July 26, 1991
Page 2

310-321

SAMPLING AND ANALYTICAL RESULTS

The results of the monitoring and laboratory analyses of the ground water samples for this quarter, as well as the results of previous monitoring and sampling events, are summarized in Table 1. Based on the previous wellhead elevation survey data and depth to water measurements collected during this monitoring event, ground water elevations and the general ground water flow direction at this site are presented in Figure 2.

No liquid-phase hydrocarbons or sheen were observed in any of the ground water samples. The water sampling survey forms presenting the results of the field activities and observations, as well as the official laboratory reports and chain of custody records are included in Appendix A.

Please call if you have any questions concerning this report.

Sincerely,

ALTON GEOSCIENCE



Stephan Rosen
Supervising Geologist



Al Sevilla, R.C.E. 26392
Regional Manager

Enclosures

WP51.95607.CM

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|-------|------|------|------|------|-----|
| C-1 | 03/26/85 | 283.46 | 22.83 | --- | 260.63 | --- | --- | --- | --- | --- | NA |
| C-1 | 07/03/86 | 283.46 | 23.58 | --- | 259.88 | --- | --- | --- | --- | --- | NA |
| C-1 | 03/26/87 | 283.46 | 20.50 | --- | 262.96 | --- | --- | --- | --- | --- | NA |
| C-1 | 03/28/88 | 283.46 | 26.00 | --- | 257.46 | --- | --- | --- | --- | --- | NA |
| C-1 | 03/10/89 | 283.46 | 15.86 | --- | 267.60 | --- | --- | --- | --- | --- | NA |
| C-1 | 04/03/89 | 283.46 | 16.85 | --- | 266.61 | --- | --- | --- | --- | --- | NA |
| C-1 | 05/08/89 | 283.46 | 22.68 | --- | 260.78 | --- | --- | --- | --- | --- | NA |
| C-1 | 06/05/89 | 283.46 | 24.66 | --- | 258.80 | --- | --- | --- | --- | --- | NA |
| C-1 | 07/12/90 | 283.46 | 25.56 | --- | 257.90 | --- | --- | --- | --- | --- | NA |
| C-1 | 08/10/90 | 283.46 | 25.89 | --- | 257.57 | --- | --- | --- | --- | --- | NA |
| C-1 | 09/13/89 | 283.46 | 26.55 | --- | 256.91 | 22000 | 3600 | 1100 | 1000 | 3500 | NA |
| C-1 | 10/04/89 | 283.46 | 25.24 | --- | 258.22 | --- | --- | --- | --- | --- | NA |
| C-1 | 11/03/89 | 283.46 | 25.03 | --- | 258.43 | --- | --- | --- | --- | --- | NA |
| C-1 | 12/04/89 | 283.46 | 26.37 | --- | 257.09 | 13000 | 2000 | 550 | 610 | 1600 | NA |
| C-1 | 03/07/90 | 283.46 | 22.48 | --- | 260.98 | --- | --- | --- | --- | --- | NA |
| C-1 | 03/09/90 | 283.46 | --- | --- | 283.46 | --- | --- | --- | --- | --- | NA |
| C-1 | 06/12/90 | 283.46 | 24.35 | --- | 259.11 | 21000 | 3500 | 1400 | 840 | 4000 | SAL |
| C-1 | 09/20/90 | 283.46 | 26.27 | 0.00 | 257.19 | 23000 | 2100 | 1200 | 860 | 5000 | SAL |
| C-1 | 12/20/90 | 283.46 | 22.59 | 0.00 | 260.87 | 8200 | 760 | 410 | 260 | 1100 | SAL |
| C-1** | 03/27/91 | 283.46 | 19.08 | 0.00 | 264.38 | --- | --- | --- | --- | --- | NA |
| C-1 | 06/18/91 | 283.46 | 27.11 | 0.00 | 256.35 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|-------|-----|-----|-----|-----|-----|
| C-2 | 03/26/85 | 284.37 | --- | --- | 284.37 | --- | --- | --- | --- | --- | NA |
| C-2 | 07/03/86 | 284.37 | 19.69 | --- | 264.68 | --- | --- | --- | --- | --- | NA |
| C-2 | 03/26/87 | 284.37 | 15.45 | --- | 268.92 | --- | --- | --- | --- | --- | NA |
| C-2 | 03/28/88 | 284.37 | 20.92 | --- | 263.45 | --- | --- | --- | --- | --- | NA |
| C-2 | 03/10/89 | 284.37 | 12.80 | --- | 271.57 | --- | --- | --- | --- | --- | NA |
| C-2 | 04/03/89 | 284.37 | 14.26 | --- | 270.11 | --- | --- | --- | --- | --- | NA |
| C-2 | 05/08/89 | 284.37 | 18.42 | --- | 265.95 | --- | --- | --- | --- | --- | NA |
| C-2 | 06/05/89 | 284.37 | 20.09 | --- | 264.28 | --- | --- | --- | --- | --- | NA |
| C-2 | 07/12/90 | 284.37 | 20.79 | --- | 263.58 | --- | --- | --- | --- | --- | NA |
| C-2 | 08/10/90 | 284.37 | 21.40 | --- | 262.97 | --- | --- | --- | --- | --- | NA |
| C-2 | 09/13/89 | 284.37 | 21.86 | --- | 262.51 | 320 | 62 | 4 | 10 | 14 | NA |
| C-2 | 10/04/89 | 284.37 | 19.89 | --- | 264.48 | --- | --- | --- | --- | --- | NA |
| C-2 | 11/03/89 | 284.37 | 20.76 | --- | 263.61 | --- | --- | --- | --- | --- | NA |
| C-2 | 12/04/89 | 284.37 | 20.82 | --- | 263.55 | 1000 | 240 | 37 | 66 | 130 | NA |
| C-2 | 03/07/90 | 284.37 | 17.83 | --- | 266.54 | --- | --- | --- | --- | --- | NA |
| C-2 | 03/09/90 | 284.37 | 17.83 | --- | 266.54 | 390 | 280 | 35 | 27 | 50 | SAL |
| C-2 | 06/12/90 | 284.37 | 19.89 | --- | 264.48 | 700 | 260 | 34 | 28 | 55 | SAL |
| C-2** | 09/20/90 | 284.37 | 21.97 | 0.00 | 262.40 | --- | --- | --- | --- | --- | NA |
| C-2** | 12/20/90 | 284.37 | 17.73 | 0.00 | 266.64 | --- | --- | --- | --- | --- | NA |
| C-2** | 03/27/91 | 284.37 | 15.10 | 0.00 | 269.27 | --- | --- | --- | --- | --- | NA |
| C-2 | 06/18/91 | 284.37 | 22.68 | 0.00 | 261.69 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|--------|------|------|------|-------|-----|
| C-3 | 03/26/85 | 285.98 | --- | --- | 285.98 | --- | --- | --- | --- | --- | NA |
| C-3 | 07/03/86 | 285.98 | 26.04 | --- | 259.94 | --- | --- | --- | --- | --- | NA |
| C-3 | 03/26/87 | 285.98 | 25.64 | --- | 260.34 | --- | --- | --- | --- | --- | NA |
| C-3 | 03/28/88 | 285.98 | 28.82 | --- | 257.16 | --- | --- | --- | --- | --- | NA |
| C-3 | 03/10/89 | 285.98 | 22.78 | --- | 263.20 | --- | --- | --- | --- | --- | NA |
| C-3 | 04/03/89 | 285.98 | 22.71 | --- | 263.27 | --- | --- | --- | --- | --- | NA |
| C-3 | 05/08/89 | 285.98 | 25.95 | --- | 260.03 | --- | --- | --- | --- | --- | NA |
| C-3 | 06/05/89 | 285.98 | 27.62 | --- | 258.36 | --- | --- | --- | --- | --- | NA |
| C-3 | 07/12/90 | 285.98 | 28.29 | --- | 257.69 | --- | --- | --- | --- | --- | NA |
| C-3 | 08/10/90 | 285.98 | 28.46 | --- | 257.52 | --- | --- | --- | --- | --- | NA |
| C-3 | 09/13/89 | 285.98 | 29.33 | --- | 256.65 | 60000 | 1400 | 6800 | 2300 | 10000 | NA |
| C-3 | 10/04/89 | 285.98 | 28.97 | --- | 257.01 | --- | --- | --- | --- | --- | NA |
| C-3 | 11/03/89 | 285.98 | 28.72 | --- | 257.26 | --- | --- | --- | --- | --- | NA |
| C-3 | 12/04/89 | 285.98 | 29.01 | --- | 256.97 | 56000 | 1300 | 3300 | 1400 | 2700 | NA |
| C-3 | 03/07/90 | 285.98 | 27.69 | --- | 258.29 | --- | --- | --- | --- | --- | NA |
| C-3 | 03/09/90 | 285.98 | 27.69 | --- | 258.29 | 42000 | 1100 | 5700 | 1600 | 7900 | SAL |
| C-3 | 06/12/90 | 285.98 | 28.09 | --- | 257.89 | 160000 | 1400 | 7100 | 3400 | 16000 | SAL |
| C-3 | 09/24/90 | 285.98 | 29.18 | 0.00 | 256.80 | 53000 | 850 | 7700 | 2000 | 10000 | SAL |
| C-3 | 12/20/90 | 285.98 | 28.27 | 0.00 | 257.71 | 520 | 1200 | 5400 | 5400 | 33000 | SAL |
| C-3 | 03/27/91 | 285.98 | 24.80 | 0.00 | 261.18 | 92000 | 1300 | 3100 | 1200 | 11000 | SAL |
| C-3 | 06/18/91 | 285.98 | 30.84 | 0.00 | 255.14 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|-------|-------|------|------|-------|-----|
| C-4 | 03/26/85 | 273.01 | 15.14 | --- | 257.87 | --- | --- | --- | --- | --- | NA |
| C-4 | 07/03/86 | 273.01 | 15.37 | --- | 257.64 | --- | --- | --- | --- | --- | NA |
| C-4 | 03/26/87 | 273.01 | --- | --- | 273.01 | --- | --- | --- | --- | --- | NA |
| C-4 | 03/28/88 | 273.01 | 18.04 | --- | 254.97 | --- | --- | --- | --- | --- | NA |
| C-4 | 03/10/89 | 273.01 | --- | --- | 273.01 | --- | --- | --- | --- | --- | NA |
| C-4 | 04/03/89 | 273.01 | 13.34 | --- | 259.67 | --- | --- | --- | --- | --- | NA |
| C-4 | 05/08/89 | 273.01 | 15.60 | --- | 257.41 | --- | --- | --- | --- | --- | NA |
| C-4 | 06/05/89 | 273.01 | 16.51 | --- | 256.50 | --- | --- | --- | --- | --- | NA |
| C-4 | 07/12/90 | 273.01 | 16.99 | --- | 256.02 | --- | --- | --- | --- | --- | NA |
| C-4 | 08/10/90 | 273.01 | 17.27 | --- | 255.74 | --- | --- | --- | --- | --- | NA |
| C-4 | 09/13/89 | 273.01 | 18.16 | --- | 254.85 | 57000 | 21000 | 3100 | 3200 | 11000 | NA |
| C-4 | 10/04/89 | 273.01 | 18.24 | --- | 254.77 | --- | --- | --- | --- | --- | NA |
| C-4 | 11/03/89 | 273.01 | 18.17 | --- | 254.84 | --- | --- | --- | --- | --- | NA |
| C-4 | 12/04/89 | 273.01 | 18.45 | --- | 254.56 | 48000 | 17000 | 2200 | 2800 | 9800 | NA |
| C-4 | 03/07/90 | 273.01 | 17.20 | --- | 255.81 | --- | --- | --- | --- | --- | NA |
| C-4 | 03/09/90 | 273.01 | 17.20 | --- | 255.81 | 43000 | 20000 | 2300 | 2800 | 11000 | SAL |
| C-4 | 06/12/90 | 273.01 | 16.66 | --- | 256.35 | 82000 | 21000 | 2400 | 4000 | 16000 | SAL |
| C-4** | 09/24/90 | 273.01 | 18.11 | 0.00 | 254.90 | --- | --- | --- | --- | --- | NA |
| C-4*** | 12/20/90 | --- | --- | --- | --- | --- | --- | --- | --- | --- | NA |
| C-4*** | 03/27/91 | --- | --- | --- | --- | --- | --- | --- | --- | --- | NA |
| C-4*** | 06/18/91 | --- | --- | --- | --- | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|-------|--------|--------|--------|--------|-----|
| C-5 | 03/26/85 | 287.95 | 25.33 | --- | 262.62 | --- | --- | --- | --- | --- | NA |
| C-5 | 07/03/86 | 287.95 | 26.41 | --- | 261.54 | --- | --- | --- | --- | --- | NA |
| C-5 | 03/26/87 | 287.95 | 24.96 | --- | 262.99 | --- | --- | --- | --- | --- | NA |
| C-5 | 03/28/88 | 287.95 | 29.80 | --- | 258.15 | --- | --- | --- | --- | --- | NA |
| C-5 | 03/10/89 | 287.95 | 25.89 | --- | 262.06 | --- | --- | --- | --- | --- | NA |
| C-5 | 04/03/89 | 287.95 | 24.38 | --- | 263.57 | --- | --- | --- | --- | --- | NA |
| C-5 | 05/08/89 | 287.95 | 27.80 | --- | 260.15 | --- | --- | --- | --- | --- | NA |
| C-5 | 06/05/89 | 287.95 | 29.42 | --- | 258.53 | --- | --- | --- | --- | --- | NA |
| C-5 | 07/12/90 | 287.95 | 29.86 | --- | 258.09 | --- | --- | --- | --- | --- | NA |
| C-5 | 08/10/90 | 287.95 | 29.77 | --- | 258.18 | --- | --- | --- | --- | --- | NA |
| C-5 | 09/13/89 | 287.95 | 30.95 | --- | 257.00 | 310 | ND | ND | ND | ND | NA |
| C-5 | 10/04/89 | 287.95 | 31.48 | --- | 256.47 | --- | --- | --- | --- | --- | NA |
| C-5 | 11/03/89 | 287.95 | 31.32 | --- | 256.63 | --- | --- | --- | --- | --- | NA |
| C-5 | 12/04/89 | 287.95 | 31.70 | --- | 256.25 | ND | ND | ND | ND | 1 | NA |
| C-5 | 03/07/90 | 287.95 | 30.28 | --- | 257.67 | --- | --- | --- | --- | --- | NA |
| C-5 | 03/09/90 | 287.95 | 30.28 | --- | 257.67 | ND | ND | ND | ND | ND | SAL |
| C-5 | 06/12/90 | 287.95 | 30.48 | --- | 257.47 | 90 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-5 | 09/24/90 | 287.95 | 31.78 | 0.00 | 256.17 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-5 | 12/20/90 | 287.95 | 33.29 | 0.00 | 254.66 | 170 | ND<0.5 | ND<0.5 | 1.0 | 0.7 | SAL |
| C-5** | 03/27/91 | 287.95 | 27.98 | 0.00 | 259.97 | --- | --- | --- | --- | --- | NA |
| C-5 | 06/18/91 | 287.95 | 32.52 | 0.00 | 255.43 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|--------|-------|------|------|-------|-----|
| C-6 | 03/26/85 | --- | 16.74 | --- | --- | --- | --- | --- | --- | --- | NA |
| C-6 | 07/03/86 | 275.28 | 17.46 | --- | 257.82 | --- | --- | --- | --- | --- | NA |
| C-6 | 03/26/87 | 275.28 | 18.37 | --- | 256.91 | --- | --- | --- | --- | --- | NA |
| C-6 | 03/28/88 | 275.28 | 29.84 | --- | 245.44 | --- | --- | --- | --- | --- | NA |
| C-6 | 03/10/89 | 275.28 | 14.44 | --- | 260.84 | --- | --- | --- | --- | --- | NA |
| C-6 | 04/03/89 | 275.28 | 14.44 | --- | 260.84 | --- | --- | --- | --- | --- | NA |
| C-6 | 05/08/89 | 275.28 | 17.16 | --- | 258.12 | --- | --- | --- | --- | --- | NA |
| C-6 | 06/05/89 | 275.28 | 18.51 | --- | 256.77 | --- | --- | --- | --- | --- | NA |
| C-6 | 07/12/90 | 275.28 | 18.71 | --- | 256.57 | --- | --- | --- | --- | --- | NA |
| C-6 | 08/10/90 | 275.28 | 19.32 | --- | 255.96 | --- | --- | --- | --- | --- | NA |
| C-6 | 09/13/89 | 275.28 | 19.95 | --- | 255.33 | 47 | 5600 | 3000 | 2400 | 10000 | NA |
| C-6 | 10/04/89 | 275.28 | 19.87 | --- | 255.41 | --- | --- | --- | --- | --- | NA |
| C-6 | 11/03/89 | 275.28 | 19.35 | --- | 255.93 | --- | --- | --- | --- | --- | NA |
| C-6 | 12/04/89 | 275.28 | 19.59 | --- | 255.69 | 40000 | 8100 | 1800 | 1700 | 7500 | NA |
| C-6 | 03/07/90 | 275.28 | 18.39 | --- | 256.89 | --- | --- | --- | --- | --- | NA |
| C-6 | 03/09/90 | 275.28 | 18.39 | --- | 256.89 | 73000 | 23000 | 5900 | 3400 | 17000 | SAL |
| C-6 | 06/12/90 | 275.28 | 18.87 | --- | 256.41 | 85000 | 19000 | 6500 | 3400 | 16000 | SAL |
| C-6 | 09/24/90 | 275.28 | 19.99 | 0.00 | 255.29 | 72000 | 15000 | 3200 | 2600 | 11000 | SAL |
| C-6 | 12/20/90 | 275.28 | 21.57 | 0.00 | 253.71 | 100000 | 11000 | 4200 | 3400 | 16000 | SAL |
| C-6 | 03/27/91 | 275.28 | 16.32 | 0.00 | 258.96 | 100000 | 11000 | 4400 | 2300 | 11000 | SAL |
| C-6 | 06/18/91 | 275.28 | 23.33 | 0.00 | 251.95 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|-------|------------------------|-------|--------|-----|-----|-----|-----|
| C-7 | 03/26/85 | --- | 9.61 | --- | --- | --- | --- | --- | --- | --- | NA |
| C-7 | 07/03/86 | 270.70 | 10.74 | --- | 259.96 | --- | --- | --- | --- | --- | NA |
| C-7 | 03/26/87 | 270.70 | 10.08 | --- | 260.62 | --- | --- | --- | --- | --- | NA |
| C-7 | 03/28/88 | 270.70 | 13.79 | --- | 256.91 | --- | --- | --- | --- | --- | NA |
| C-7 | 03/10/89 | 270.70 | 10.42 | --- | 260.28 | --- | --- | --- | --- | --- | NA |
| C-7 | 04/03/89 | 270.70 | 9.14 | --- | 261.56 | --- | --- | --- | --- | --- | NA |
| C-7 | 05/08/89 | 270.70 | 11.91 | --- | 258.79 | --- | --- | --- | --- | --- | NA |
| C-7 | 06/05/89 | 270.70 | 11.54 | --- | 259.16 | --- | --- | --- | --- | --- | NA |
| C-7 | 07/12/90 | 270.70 | 13.45 | --- | 257.25 | --- | --- | --- | --- | --- | NA |
| C-7 | 08/10/90 | 270.70 | 13.37 | --- | 257.33 | --- | --- | --- | --- | --- | NA |
| C-7 | 09/13/89 | 270.70 | 14.60 | --- | 256.10 | 410 | 1.3 | ND | 10 | ND | NA |
| C-7 | 10/04/89 | 270.70 | 15.17 | --- | 255.53 | --- | --- | --- | --- | --- | NA |
| C-7 | 11/03/89 | 270.70 | 15.28 | --- | 255.42 | --- | --- | --- | --- | --- | NA |
| C-7 | 12/04/89 | 270.70 | 15.70 | --- | 255.00 | 1000 | 1 | ND | 5 | ND | NA |
| C-7 | 03/07/90 | 270.70 | 14.22 | --- | 256.48 | --- | --- | --- | --- | --- | NA |
| C-7 | 03/09/90 | 270.70 | 14.22 | --- | 256.48 | 590 | 2.8 | 2.4 | 3.5 | 2.0 | SAL |
| C-7 | 06/12/90 | 270.70 | 14.18 | --- | 256.52 | 1200 | ND<7 | 5.0 | 8.2 | 3.2 | SAL |
| C-7 | 09/24/90 | 270.70 | 15.44 | SHEEN | 255.26 | 400 | 1.4 | 1.9 | 1.4 | 2.2 | SAL |
| C-7D | 09/24/90 | 270.70 | 15.44 | SHEEN | 255.26 | 580 | ND<0.5 | 2.4 | 1.4 | 1.5 | SAL |
| C-7 | 12/20/90 | 270.70 | 17.08 | 0.00 | 253.62 | 2300 | ND<0.5 | 6.5 | 4.7 | 9.3 | SAL |
| C-7 | 03/27/91 | 270.70 | 12.65 | 0.00 | 258.05 | 980 | ND<0.5 | 2.4 | 9.1 | 3.0 | SAL |
| C-7 | 06/18/91 | 270.70 | 16.44 | 0.00 | 254.26 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|-------|-----|--------|-----|-----|-----|
| C-8 | 03/26/85 | --- | 8.68 | --- | --- | --- | --- | --- | --- | --- | NA |
| C-8 | 07/03/86 | 288.40 | 13.89 | --- | 274.51 | --- | --- | --- | --- | --- | NA |
| C-8 | 03/26/87 | 288.40 | 6.01 | --- | 282.39 | --- | --- | --- | --- | --- | NA |
| C-8 | 03/28/88 | 288.40 | 10.66 | --- | 277.74 | --- | --- | --- | --- | --- | NA |
| C-8 | 03/10/89 | 288.40 | 6.61 | --- | 281.79 | --- | --- | --- | --- | --- | NA |
| C-8 | 04/03/89 | 288.40 | 6.46 | --- | 281.94 | --- | --- | --- | --- | --- | NA |
| C-8 | 05/08/89 | 288.40 | 8.97 | --- | 279.43 | --- | --- | --- | --- | --- | NA |
| C-8 | 06/05/89 | 288.40 | 10.88 | --- | 277.52 | --- | --- | --- | --- | --- | NA |
| C-8 | 07/12/90 | 288.40 | 12.15 | --- | 276.25 | --- | --- | --- | --- | --- | NA |
| C-8 | 08/10/90 | 288.40 | 12.46 | --- | 275.94 | --- | --- | --- | --- | --- | NA |
| C-8 | 09/13/89 | 288.40 | 12.78 | --- | 275.62 | ND | ND | ND | ND | ND | NA |
| C-8 | 10/04/89 | 288.40 | 12.51 | --- | 275.89 | --- | --- | --- | --- | --- | NA |
| C-8 | 11/03/89 | 288.40 | 14.63 | --- | 273.77 | --- | --- | --- | --- | --- | NA |
| C-8 | 12/04/89 | 288.40 | 9.59 | --- | 278.81 | 64 | 0.6 | 0.6 | ND | 1 | NA |
| C-8 | 03/07/90 | 288.40 | 8.80 | --- | 279.60 | --- | --- | --- | --- | --- | NA |
| C-8 | 03/09/90 | 288.40 | 8.80 | --- | 279.60 | ND | ND | ND | ND | ND | NA |
| C-8 | 06/12/90 | 288.40 | 8.94 | --- | 279.46 | 120 | 2.5 | 1.2 | 1.0 | 1.4 | SAL |
| C-8 | 09/24/90 | 288.40 | 13.54 | 0.00 | 274.86 | --- | --- | --- | --- | --- | NA |
| C-8 | 12/20/90 | 288.40 | 9.33 | 0.00 | 279.07 | --- | --- | --- | --- | --- | NA |
| C-8 | 03/27/91 | 288.40 | 6.10 | 0.00 | 282.30 | 54 | 0.7 | ND<0.5 | 0.7 | 1.9 | SAL |
| C-8 | 06/18/91 | 288.40 | 11.96 | 0.00 | 276.44 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|--------|-------|------|------|------|-----|
| C-9 | 07/03/86 | 268.46 | 13.89 | --- | 254.57 | --- | --- | --- | --- | --- | NA |
| C-9 | 03/26/87 | 268.46 | 13.74 | --- | 254.72 | --- | --- | --- | --- | --- | NA |
| C-9 | 03/28/88 | 268.46 | 14.99 | --- | 253.47 | --- | --- | --- | --- | --- | NA |
| C-9 | 03/10/89 | 268.46 | 13.39 | --- | 255.07 | --- | --- | --- | --- | --- | NA |
| C-9 | 04/03/89 | 268.46 | 12.84 | --- | 255.62 | --- | --- | --- | --- | --- | NA |
| C-9 | 05/08/89 | 268.46 | 14.38 | --- | 254.08 | --- | --- | --- | --- | --- | NA |
| C-9 | 06/05/89 | 268.46 | 15.36 | --- | 253.10 | --- | --- | --- | --- | --- | NA |
| C-9 | 07/12/90 | 268.46 | 15.65 | --- | 252.81 | --- | --- | --- | --- | --- | NA |
| C-9 | 08/10/90 | 268.46 | 15.80 | --- | 252.66 | --- | --- | --- | --- | --- | NA |
| C-9 | 09/13/89 | 268.46 | 16.53 | --- | 251.93 | 42000 | 14000 | 1100 | 2800 | 4200 | NA |
| C-9 | 10/04/89 | 268.46 | 16.52 | --- | 251.94 | --- | --- | --- | --- | --- | NA |
| C-9 | 11/03/89 | 268.46 | 16.51 | --- | 251.95 | --- | --- | --- | --- | --- | NA |
| C-9 | 12/04/89 | 268.46 | 16.79 | --- | 251.67 | 36000 | 11000 | 670 | 2500 | 3800 | NA |
| C-9 | 03/07/90 | 268.46 | 16.22 | --- | 252.24 | --- | --- | --- | --- | --- | NA |
| C-9 | 03/09/90 | 268.46 | 16.22 | --- | 252.24 | 28000 | 12000 | 940 | 3000 | 4700 | NA |
| C-9 | 06/12/90 | 268.40 | 14.88 | --- | 253.52 | 39000 | 11000 | 1600 | 2300 | 4800 | SAL |
| C-9 | 09/24/90 | 268.40 | 16.30 | 0.00 | 252.10 | 120000 | 13000 | 1600 | 3700 | 6800 | SAL |
| C-9 | 12/20/90 | 268.40 | 17.23 | 0.00 | 251.17 | 51000 | 9300 | 560 | 2800 | 3300 | SAL |
| C-9D | 12/20/90 | 268.40 | 17.23 | 0.00 | 251.17 | 44000 | 12000 | 580 | 2800 | 3500 | SAL |
| C-9 | 03/27/91 | 268.40 | 13.78 | 0.00 | 254.62 | 56000 | 3400 | 5000 | 1600 | 5600 | SAL |
| C-9 | 06/18/91 | 268.40 | 18.64 | 0.00 | 249.76 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|------------------------------|------------------|----------------|------|------------------------|-------|--------|--------|--------|--------|-----|
| C-10A | 03/07/90 | 264.84 | 20.21 | --- | 244.63 | --- | --- | --- | --- | --- | NA |
| C-10A | 03/09/90 | 264.84 | --- | --- | 264.84 | ND<50 | 1.6 | 0.7 | 0.8 | 3.5 | SAL |
| C-10A | 06/12/90 | 264.84 | 19.70 | --- | 245.14 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10 | 09/24/90 | 264.84 | 19.54 | 0.00 | 245.30 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10 | 12/20/90 | 264.84 | 19.84 | 0.00 | 245.00 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10 | 03/27/91 | 264.84 | 18.01 | 0.00 | 246.83 | --- | --- | --- | --- | --- | NA |
| C-10 | 06/18/91 | 264.84 | 20.16 | 0.00 | 244.68 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10B | 03/07/90 | 264.85 | 21.44 | --- | 243.41 | --- | --- | --- | --- | --- | NA |
| C-10B | 06/12/90 | 264.85 | 19.94 | --- | 244.91 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10B | 09/24/90 | 264.85 | 19.77 | 0.00 | 245.08 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10B | 12/20/90 | 264.85 | 20.00 | 0.00 | 244.85 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-10B** | 03/27/91 | 264.85 | 18.23 | 0.00 | 246.62 | --- | --- | --- | --- | --- | NA |
| C-10B | 06/18/91 | 264.85 | 20.44 | 0.00 | 244.41 | --- | --- | --- | --- | --- | NA |
| C-11 | 03/07/90 | 265.30 | 22.74 | --- | 242.56 | --- | --- | --- | --- | --- | NA |
| C-11 | 03/09/90 | 265.30 | --- | --- | 265.30 | ND<50 | 1.2 | 0.7 | ND | 1.4 | SAL |
| C-11 | 06/12/90 | 265.30 | 21.98 | --- | 243.32 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-11 | 09/24/90 | 265.30 | 21.88 | 0.00 | 243.42 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-11 | 12/20/90 | 265.30 | 23.18 | 0.00 | 242.12 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-11 | 03/27/91 | 265.30 | 21.52 | 0.00 | 243.78 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 1.5 | SAL |
| C-11 | 06/18/91 | 265.30 | 21.90 | 0.00 | 243.40 | --- | --- | --- | --- | --- | NA |
| C-12 | 03/07/90 | 269.66 | 14.92 | --- | 254.74 | --- | --- | --- | --- | --- | NA |
| C-12 | 03/09/90 | 269.66 | --- | --- | 269.66 | 1400 | 230 | 140 | 33 | 180 | SAL |
| C-12 | 06/12/90 | 269.66 | 14.79 | --- | 254.87 | 720 | 190 | 71 | 18 | 73 | SAL |
| C-12 | 09/24/90 | 269.66 | 15.72 | 0.00 | 253.94 | ND<50 | 1.1 | ND<0.5 | ND<0.5 | 0.6 | SAL |
| C-12 | 12/20/90 | 269.66 | 15.26 | 0.00 | 254.40 | 810 | 210 | 26 | 8.2 | 23 | SAL |
| C-12 | 03/27/91 | 269.66 | 12.11 | 0.00 | 257.55 | 2900 | 350 | 220 | 52 | 210 | SAL |
| C-12 | 06/18/91 | 269.66 | 16.38 | 0.00 | 253.28 | --- | --- | --- | --- | --- | NA |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|---------------------------------|------------------|----------------|------|------------------------|-------|--------|--------|--------|--------|-----|
| C-13 | 03/07/90 | 284.32 | 11.18 | --- | 273.14 | --- | --- | --- | --- | --- | NA |
| C-13 | 03/09/90 | 284.32 | --- | --- | 284.32 | ND<50 | 15 | 3.7 | 1.0 | 6.2 | SAL |
| C-13 | 06/12/90 | 284.32 | 10.70 | --- | 273.62 | ND<50 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-13 | 09/24/90 | 284.32 | 11.60 | 0.00 | 272.72 | ND<50 | 2.4 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-13 | 12/20/90 | 284.32 | 10.16 | 0.00 | 274.16 | ND<50 | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-13** | 03/27/91 | 284.32 | 7.64 | 0.00 | 276.68 | --- | --- | --- | --- | --- | NA |
| C-13 | 06/18/91 | 284.32 | 11.32 | 0.00 | 273.00 | --- | --- | --- | --- | --- | NA |
| C-14 | 03/07/90 | 270.74 | 15.18 | --- | 255.56 | --- | --- | --- | --- | --- | NA |
| C-14 | 03/09/90 | 270.74 | --- | --- | 270.74 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-14 | 06/12/90 | 270.74 | 13.42 | --- | 257.32 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-14 | 09/24/90 | 270.74 | 12.84 | 0.00 | 257.90 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-14 | 12/20/90 | 270.74 | 16.72 | 0.00 | 254.02 | ND<50 | 1.7 | 0.7 | ND<0.5 | 0.7 | SAL |
| C-14 | 03/27/91 | 270.74 | 8.00 | 0.00 | 262.74 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 1.3 | SAL |
| C-14 | 06/18/91 | 270.74 | 15.21 | 0.00 | 255.53 | --- | --- | --- | --- | --- | NA |
| C-15 | 03/07/90 | 246.15 | 11.10 | --- | 235.05 | --- | --- | --- | --- | --- | NA |
| C-15 | 03/09/90 | 246.15 | --- | --- | 246.15 | 410 | ND<0.5 | 1.4 | 0.5 | 0.6 | SAL |
| C-15 | 06/12/90 | 246.15 | 10.78 | --- | 235.37 | 420 | 11 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-15 | 09/24/90 | 246.15 | 10.93 | 0.00 | 235.22 | 430 | ND<0.5 | 1.5 | ND<0.5 | ND<0.5 | SAL |
| C-15 | 12/20/90 | 246.15 | 11.08 | 0.00 | 235.07 | 300 | 1.3 | 1.1 | 0.6 | 1.5 | SAL |
| C-15 | 03/27/91 | 246.15 | 8.50 | 0.00 | 237.65 | 520 | 4.6 | 1.1 | ND<0.5 | 1.0 | SAL |
| C-15 | 06/18/91 | 246.15 | 10.83 | 0.00 | 235.32 | 290 | ND<0.5 | 1.1 | ND<0.5 | ND<0.5 | SAL |
| C-15D | 06/18/91 | 246.15 | 10.83 | 0.00 | 235.32 | 320 | ND<0.5 | 1.3 | ND<0.5 | ND<0.5 | SAL |
| C-16 | 03/07/90 | 246.69 | 18.50 | --- | 228.19 | --- | --- | --- | --- | --- | NA |
| C-16 | 03/09/90 | 246.69 | --- | --- | 246.69 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-16 | 06/12/90 | 246.69 | 11.42 | --- | 235.27 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-16 | 09/24/90 | 246.69 | 11.39 | 0.00 | 235.30 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| C-16 | 12/20/90 | 246.69 | 11.57 | 0.00 | 235.12 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 0.7 | SAL |
| C-16 | 03/27/91 | 246.69 | 8.76 | 0.00 | 237.93 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 1.3 | SAL |
| C-16D | 03/27/91 | 246.69 | 8.76 | 0.00 | 237.93 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 1.2 | SAL |
| C-16 | 06/18/91 | 246.69 | 11.18 | 0.00 | 235.51 | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |

Table 1
 Summary of Results of Ground Water Sampling
 Chevron Service Station # 9-5607
 5269 Crow Canyon Road, Castro Valley, California

Concentrations in parts per billion (ppb)

| WELL ID | DATE OF SAMPLING/ MONITORING | CASING ELEVATION | DEPTH TO WATER | L-PH | GROUND WATER ELEVATION | TPH-G | B | T | E | X | LAB |
|---------|------------------------------|------------------|----------------|------|------------------------|-------|--------|--------|--------|--------|-----|
| RW | 12/04/89 | --- | --- | --- | --- | 62000 | 29000 | 1700 | 1800 | 8800 | NA |
| RW | 03/07/90 | 274.52 | 18.50 | --- | 256.02 | --- | --- | --- | --- | --- | NA |
| RW | 06/12/90 | 274.52 | 18.49 | --- | 256.03 | 31000 | 15000 | 2000 | 560 | 3100 | SAL |
| RW | 09/24/90 | 274.52 | NA | NA | NA | --- | --- | --- | --- | --- | NA |
| RW | 12/20/90 | 274.52 | NA | NA | NA | ND<50 | 0.5 | ND<0.5 | ND<0.5 | 1.2 | SAL |
| RW | 03/27/91 | 274.52 | NA | NA | NA | --- | --- | --- | --- | --- | NA |
| RW | 06/18/91 | 274.52 | NA | NA | NA | --- | --- | --- | --- | --- | NA |
| TB | 09/24/90 | NA | NA | NA | NA | 200 | 1.9 | 14 | 4.4 | 32 | SAL |
| TB | 12/20/90 | NA | NA | NA | NA | ND<50 | 0.5 | ND<0.5 | ND<0.5 | 1.2 | SAL |
| TB | 03/27/91 | NA | NA | NA | NA | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| TB | 06/18/91 | NA | NA | NA | NA | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| RINSATE | 09/24/90 | NA | NA | NA | NA | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| RINSATE | 12/20/90 | NA | NA | NA | NA | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | 0.9 | SAL |
| RINSATE | 03/27/91 | NA | NA | NA | NA | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | SAL |
| RINSATE | 06/18/91 | NA | NA | NA | NA | ND<50 | ND<0.5 | 0.6 | ND<0.5 | 0.9 | SAL |

EXPLANATION OF ABBREVIATIONS:

TPH-G :Total Petroleum Hydrocarbons as Gasoline (EPA method 8015 modified)
 B :Benzene (EPA method 8020 or 8240)
 T :Toluene (EPA method 8020 or 8240)
 E :Ethylbenzene (EPA method 8020 or 8240)
 X :Xylenes (EPA method 8020 or 8240)
 --- :Not Analyzed/Not Measured
 NA :Not Applicable/Not Available

ND :Not Detected
 TB :Trip Blank
 D :Duplicate
 SAL :Superior Analytical Laboratory
 * :Not sampled due to insufficient water in well.
 ** :Well sampled annually.
 *** :Well could not be located.
 **** :Typical gasoline chromatographic pattern not present.

Note: Top of casing and Ground Water Elevations are expressed as feet above mean sea level (NGVD-1929).

L2cm

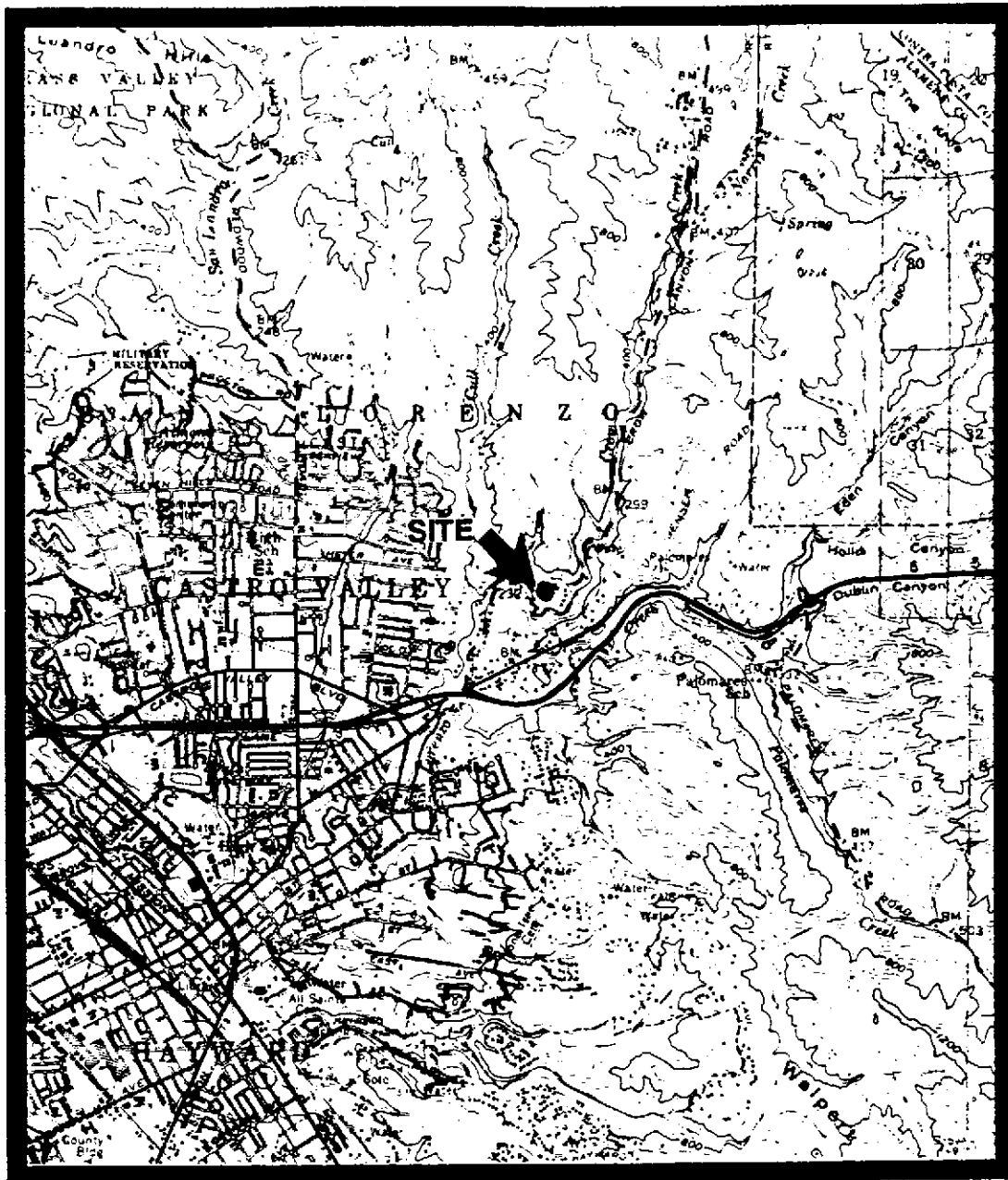


FIGURE 1. SITE VICINITY MAP

**CHEVRON U.S.A.
 CHEVRON SERVICE STATION NO. 9-5607
 5269 CROW CANYON ROAD
 CASTRO VALLEY, CALIFORNIA**



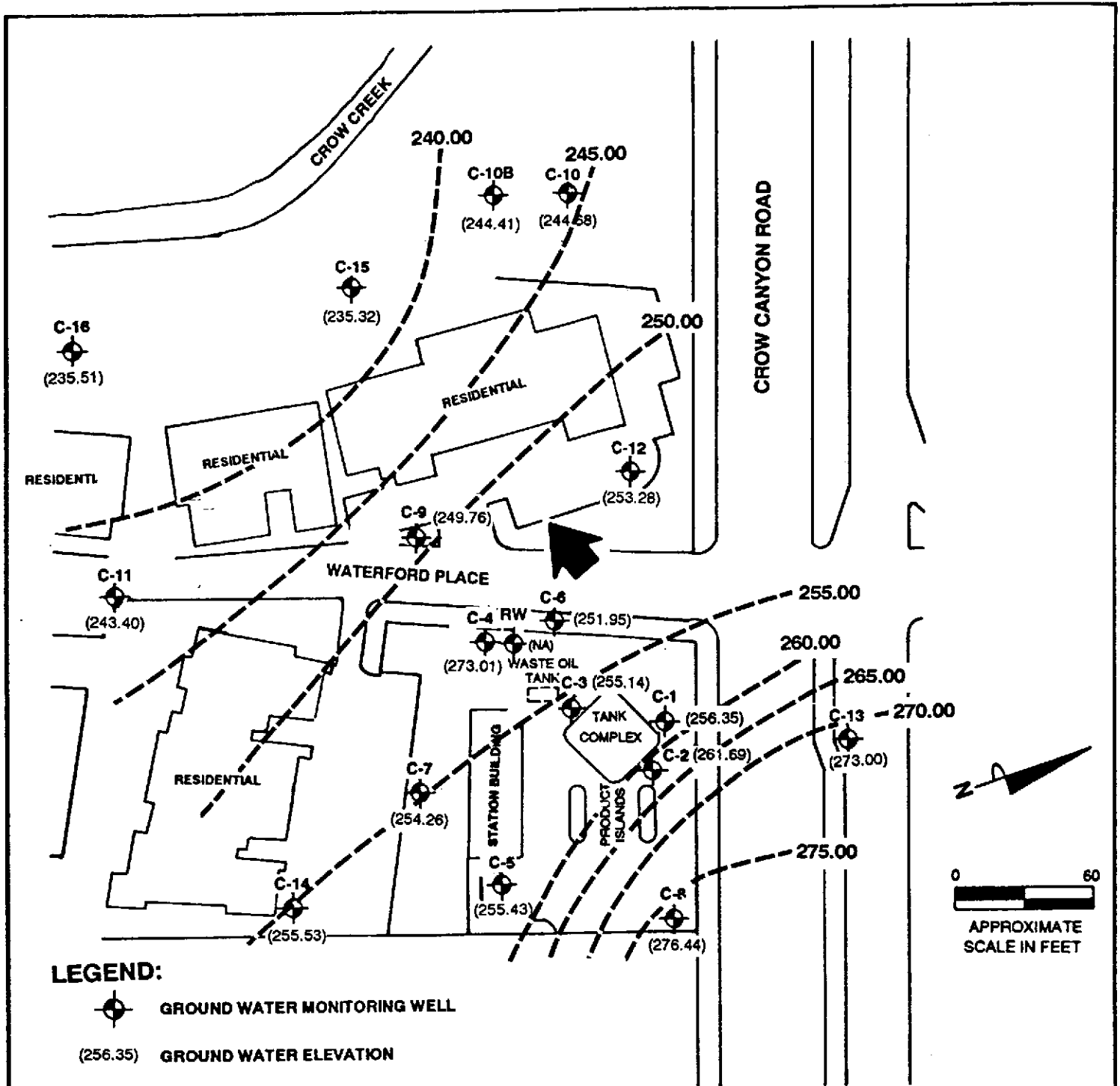
SCALE IN MILES

PROJECT NO. 310-321

**SOURCE: USGS 15 MINUTE SERIES
 HAYWARD QUADRANGLE**



ALTON GEOSCIENCE
 1000 Burnett Ave., Ste. 140
 Concord, CA 94520



LEGEND:



GROUND WATER MONITORING WELL

(256.35)

GROUND WATER ELEVATION

(FEET ABOVE MEAN SEA LEVEL (NGVD-1929))

--- GROUND WATER ELEVATION CONTOUR



GENERAL DIRECTION OF GROUND WATER FLOW

NOTE:

1. CONTOUR LINES ARE INTERPRETIVE BASED ON FLUID LEVELS IN MONITORING WELLS MEASURED ON 6/18/91.
2. GROUND WATER ELEVATION DATA FOR C-4 AND C-5 WERE NOT USED IN THE CONTOUR MAP. DATA APPEARS TO BE ANOMALOUS.

FIGURE 2. GROUND WATER ELEVATION CONTOUR MAP

Chevron Service Station No. 9-5607
 5269 Crow Canyon Road
 Castro Valley, California



ALTON GEOSCIENCE
 1000 Burnett Ave. Ste. 140
 Concord, California

APPENDIX A
FIELD SAMPLE FORMS,
OFFICIAL LABORATORY RESULTS, AND
CHAIN OF CUSTODY FORMS

ALTON GEOSCIENCE, INC.
Water Sampling Field Survey

WELL # C-10 PROJECT# 310-321 LOCATION Castro Valley DATE 6/18/91
 SAMPLING TEAM Lamy SAMPLING METHOD: BAILER PUMP
 DECONTAMINATION METHOD: TRIPLE RINSE W/^{Alconox}~~TOP~~ AND DEIONISED WATER
 STEAM CLEAN

WELL DATA:

DEPTH TO WATER 20.16 ft
 TOTAL DEPTH 22.75 ft
 HT. WATER COL 2.69 ft

| CONVERSION | |
|-------------|--------------|
| diam | gal/ft |
| 2 in | X0.16 |
| <u>3 in</u> | <u>X0.36</u> |
| 4 in | X0.65 |
| 6 in | X1.44 |

Volume of Water Column .97 gal
 Volumes to Purge X 3 Vol
 Total Volume to Purge 2.91 gal

Begin 1209

CHEMICAL DATA:

| T (F) | SC/umhos | pH | Time | Comments | Volume (gal) |
|-------|----------|------|------|----------|--------------|
| | X100 | | | | |
| 64.3 | 16.71 | 7.42 | 1211 | Lt Brown | .50 |
| 59.8 | 14.68 | 7.31 | 1214 | " | 1.00 |
| 59.4 | 12.92 | 7.41 | 1216 | " | 1.50 |
| 58.0 | 12.36 | 7.34 | 1218 | " | 2.00 |
| 60.2 | 12.14 | 7.41 | 1225 | " | 2.50 |
| | | | | | |
| | | | | | |

Sampled 1240 ACTUAL VOLUME PURGED 3.00/gal

COMMENTS: meter X100 Slow Producer!

ALTON GEOSCIENCE, INC.
Water Sampling Field Survey

WELL # C-16 PROJECT# 310-321 LOCATION Castro Valley DATE 6/18/91

SAMPLING TEAM Lamy SAMPLING METHOD: BAILER PUMP

DECONTAMINATION METHOD: TRIPLE RINSE W/^{Alconox}TSP AND DEIONIZED WATER
STEAM CLEAN

WELL DATA:

DEPTH TO WATER 11.17 ft

TOTAL DEPTH 30.97 ft

HT. WATER COL 19.79 ft

| CONVERSION | |
|------------|--------|
| diam | gal/ft |
| 2 in | X0.16 |
| 3 in | X0.36 |
| 4 in | X0.63 |
| 6 in | X1.44 |

Volume of Water Column 7.12 gal

Volumes to Purge X 3 Vol

Total Volume to Purge 21.36 gal

Begin 1249

CHEMICAL DATA:

| T (F) | SC/unhos | pH | Time | Comments | Volume (gal) |
|-------|----------|------|------|----------|--------------|
| | X100 | | | | |
| 58.1 | 9.87 | 8.47 | 1251 | Clear | 4 |
| 56.1 | 9.63 | 8.16 | 1256 | " | 8 |
| 55.6 | 9.53 | 7.98 | 1302 | " | 12 |
| 55.1 | 9.53 | 7.87 | 1307 | " | 16 |
| 56.7 | 9.40 | 8.03 | 1315 | LT Brown | 20 |
| | | | | | |
| | | | | | |

Sampled 1330

ACTUAL VOLUME PURGED 21.50/gal

COMMENTS: *meter X100 Slow Producer!*

SUPERIOR ANALYTICAL LABORATORIES, INC.

825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

DOHS #319

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 83404
 CLIENT: Alton Geoscience
 CLIENT JOB NO.: 310-321

DATE RECEIVED: 06/21/91
 DATE REPORTED: 06/30/91

Page 1 of 2

| Lab Number | Customer Sample Identification | Date Sampled | Date Analyzed |
|------------|--------------------------------|--------------|---------------|
| 83404- 1 | 0691101 | 06/18/91 | 06/28/91 |
| 83404- 2 | 0691151 | 06/18/91 | 06/28/91 |
| 83404- 3 | 0691161 | 06/18/91 | 06/28/91 |
| 83404- 4 | 0691153 | 06/18/91 | 06/28/91 |
| 83404- 5 | 0691002 | 06/18/91 | 06/28/91 |
| 83404- 6 | 0691004 | 06/18/91 | 06/28/91 |

| Laboratory Number: | 83404 1 | 83404 2 | 83404 3 | 83404 4 | 83404 5 |
|--------------------|------------|------------|------------|------------|------------|
|--------------------|------------|------------|------------|------------|------------|

| ANALYTE LIST | Amounts/Quantitation Limits (ug/L) | | | | |
|---------------------|------------------------------------|--------|--------|--------|--------|
| OIL AND GREASE: | NA | NA | NA | NA | NA |
| TPH/GASOLINE RANGE: | ND<50 | 290 | ND<50 | 320 | ND<50 |
| TPH/DIESEL RANGE: | NA | NA | NA | NA | NA |
| BENZENE: | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| TOLUENE: | ND<0.5 | 1.1 | ND<0.5 | 1.3 | ND<0.5 |
| ETHYL BENZENE: | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| XYLENES: | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

| Laboratory Number: | 83404 6 |
|--------------------|------------|
|--------------------|------------|

| ANALYTE LIST | Amounts/Quantitation Limits (ug/L) |
|---------------------|------------------------------------|
| OIL AND GREASE: | NA |
| TPH/GASOLINE RANGE: | ND<50 |
| TPH/DIESEL RANGE: | NA |
| BENZENE: | ND<0.5 |
| TOLUENE: | 0.8 |
| ETHYL BENZENE: | ND<0.5 |
| XYLENES: | 0.9 |

OUTSTANDING QUALITY AND SERVICE

SUPERIOR ANALYTICAL LABORATORIES, INC.

825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512

DOHS #319

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
 QA/QC INFORMATION
 SET: 83104

NA = ANALYSIS NOT REQUESTED
 ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
 ug/l = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
 Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
 Minimum Quantitation Limit for Diesel in Water: 50ug/l
 Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
 Minimum Quantitation Limit for Gasoline in Water: 50ug/l
 Standard Reference: 03/28/91

SW-846 Method 8020/BTXE
 Minimum Quantitation Limit in Water: 0.5ug/l
 Standard Reference: 01/18/91

| ANALYTE | REFERENCE | SPIKE LEVEL | MS/MSD RECOVERY | RPD | CONTROL LIMIT |
|---------------|-----------|-------------|-----------------|-----|---------------|
| Oil & Grease | NA | NA | NA | NA | NA |
| Diesel | NA | NA | NA | NA | NA |
| Gasoline | 03/28/91 | 200 ng | 91/85 | 7 | 70-130 |
| Benzene | 01/18/91 | 200 ng | 93/88 | 6 | 70-130 |
| Toluene | 01/18/91 | 200 ng | 88/85 | 4 | 70-130 |
| Ethyl Benzene | 01/18/91 | 200 ng | 91/87 | 4 | 70-130 |
| Total Xylene | 01/18/91 | 200 ng | 99/95 | 4 | 70-130 |

Richard Srna, Ph.D.

Richard Srna (for)
 Laboratory Director

OUTSTANDING QUALITY AND SERVICE

85404

Chain-of-Custody-Record

Chevron U.S.A. Inc.
 P.O. BOX 5004
 San Ramon, CA 94583
 FAX (415)842-9591

Chevron Facility Number 9-5607
 Facility Address 5269 Crow Canyon Rd., Castro Valley
 Consultant Project Number 310-321
 Consultant Name Alton Geoscience
 Address 400 Burnett Ave., Concord
 Project Contact (Name) Stephan Loren
 (Phone) 682-582 (Fax Number) 682-8921

Chevron Contact (Name) Nancy Ukolich
 (Phone) (415) 842-9581
 Laboratory Name Superior
 Laboratory Release Number 2542150
 Sample Collected by (Name) Lamy
 Collection Date 6/18/91
 Signature [Signature]

| Sample Number | Number of Containers | Matrix | | Time | Sample Preservation | Lead (Yes or No) | Analysis To Be Performed | | | | | | | | | | Remarks | | | |
|---------------|----------------------|----------|---------|------|---------------------|------------------|--------------------------|---------------|------|----------|---------------|--------------|-----------------------------|-------------------|-----------------------|-----------------------|---------|---------------------------|-----------------|-------------------------------------|
| | | S = Soil | A = Air | | | | W = Water | C = Chertwood | Type | 0 = Grab | C = Composite | D = Discrete | BTX + TPH GAS (8020 + 8015) | TPH Diesel (8018) | Oil and Grease (8526) | Chlorinated HC (8010) | | Non Chlorinated HC (8020) | Total Lead (AA) | Mercury Cd,Cr,Pb,Zn,Hl (ICAP or AA) |
| 0691101 | 3 | W | G | 1240 | HCL pres. | yes | X | | | | | | | | | | | | | Please Run TPH-G + BTXE in Series!! |
| 0691151 | | | | 1355 | | | | | | | | | | | | | | | | |
| 0691161 | ↓ | | | 1330 | | | | | | | | | | | | | | | | |
| 0691153 | 2 | | | 1355 | | | | | | | | | | | | | | | | |
| 0691002 | 1 | | | 1238 | | | | | | | | | | | | | | | | |
| 0691004 | 1 | ✓ | ✓ | 1239 | ✓ | ✓ | ✓ | | | | | | | | | | | | | |

| | | | | | | |
|---|------------------------------|-----------------------------|--|--------------|---|---|
| Relinquished By (Signature) <u>[Signature]</u> | Organization <u>Alton</u> | Date/Time <u>6/21/91</u> | Received By (Signature) | Organization | Date/Time | Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. <u>5 Days</u> 10 Days As Contracted |
| Relinquished By (Signature) | Organization | Date/Time | Received By (Signature) | Organization | Date/Time | |
| Relinquished By (Signature) | Organization | Date/Time | Received For Laboratory By (Signature) <u>[Signature]</u> | | Date/Time <u>1030</u> <u>6/21/91</u> | |

SUPERIOR LABS
 07/01/91 14:04
 415 229 1526
 COC-1.DWG/11 90/HCH