#### ALAMEDA COUNTY

## **HEALTH CARE SERVICES**



DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 (510) 337-9335 (FAX)

StID 2084

May 28, 1999

Mr. John Blythe Cal Mat Co. P.O. Box 22800 8517 Panama Lane Bakersfield, CA 93390

Re: No Further Action at 501 El Charro Road, Pleasanton, CA

Dear Mr. Blythe:

This letter confirms the completion of site investigation and remedial action for the soil contaminated with waste oil at the parcel located south of Stanley Boulevard, north of Vineyard Avenue, and immediately west of Isabel Avenue in Pleasanton, CA.

A former maintenance shop and waste oil pit was formerly located on the western edge of the property. Subsurface investigations conducted at the vicinity of the former waste oil pit identified residual hydrocarbon-impacted soil to a depth of approximately 25' below grade surface (bgs). In July 1993 approximately 1,500 cubic yards of hydrocarbon-impacted soil were excavated and later used as asphalt. Confirmatory soil samples from the west sidewall of the excavation, at approximately 15'bgs, contained up to 1,200ppm oil and grease.

In November 1992 a groundwater monitoring well was installed approximately 20' north, northwest of the former waste oil pit. Groundwater was encountered at approximately 68'bgs. A groundwater sample was collected for laboratory analysis. The sample contained trace levels of benzene (0.4ppb) and xylenes (1ppb). The groundwater sample did not contain TPHd, TOG, TPHg, HVOCs, or SVOCs. It appears that groundwater was not significantly impacted by the former waste oil pit. Residual hydrocarbons in soil, limited to 15' to 25'bgs, should not pose a significant risk or threat to human health, groundwater, or surface water.

The native material at the site (predominantly sandy gravel and sandy, clayey gravel) will be mined in the future for use as construction aggregate. Mining operations will extend to a depth of at least 80'bgs. A site management plan was prepared for the site to address the residual hydrocarbon-impacted soil. When visibly stained soil is encountered in the vicinity of the former waste oil pit during mining operations, this material will be segregated for use as asphalt.

Based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the surface contamination by waste oil is required.

John Blythe

re: 501 El Charro Rd, Pleasanton

May 28, 1999 Page 2 of 2

If you have any further questions concerning this matter, please contact me at (510) 567-6762.

Sincerely,

eva chu

Hazardous Materials Specialist

c: Jeff Nelson
 Geomatrix
 2101 Webster Street, 12<sup>th</sup> Floor
 Oakland, CA 94612

StID 2084 - History

Cal Rock Plant 501 E El Charro Road Pleasanton, CA 94568

Portions of the site have been used for sandand gravel extraction since the 1930s. Prior to extraction, the land was used for agriculture. An abandoned maintenance shop was at the site and was subsequently razed.

A shallow waste pit was located southwest of the abandoned maintenance shop. The pit measured approximately 10' by 15' by 3' in depth. It is believed the pit was used to store retired maintenance equipment and used motor vehicle oil filters prior to their disposal.

In October 1992 a trench was excavated across the pit to a depth of approximately 15'. Soil samples were analyzed for TOG, TPHd, and BTEX. Analytical results suggested that soil contamination continued to a depth greater than 15 feet. Groundwater was not encountered in the excavation.

To further delineate the extent of soil contamination, four soil borings (B-1 through B-4) were drilled in and around the abandoned waste pit. The borings ranged in depth from 42' to 80'bgs. Monitoring wells were completed in borings B-3 (MW-1) and B-4 (MW-2). Soil and groundwater samples were analyzed for TOG, TPHg, TPHd, BTEX, metals (Cd, Cr, Pb, Ni, Zn), SVOCs, HVOCs, and PCBs. Soil samples at 13 to 15' bgs contained up to 840ppm TPHd, 6200ppm TOG. Significantly lower levels of hydrocarbons were in the samples collected from 22' (64ppm TPHd, 120ppm TOG). Groundwater (from MW-2) did not contain contaminants with the exception of 0.4ppb benzene, 0.7ppb toluene, 1ppb xylenes and 10ppb bis-(2-ethylhexyl) phthalate.

Considering the low levels on hydrocarbons at 22'bgs, excavation of the affected soil was recommended as the most appropriate remediation technology for the site. Overexcavation was performed (unknown quantity of soil was removed – no documentation provided to this Agency) and three soil samples were taken from the floor of the excavation and seven samples were taken from the sidewalls. The samples contained up to 1,200ppm TOG, the only analyte detected. Wells Miles the way a first time.

- was tclp analysis for TOG performed.
- were any additional monitoring wells installed
- groundwater at industrial asphalt goes east, northeast. if wells/hps are considered. do one NW and one NW of excavation.

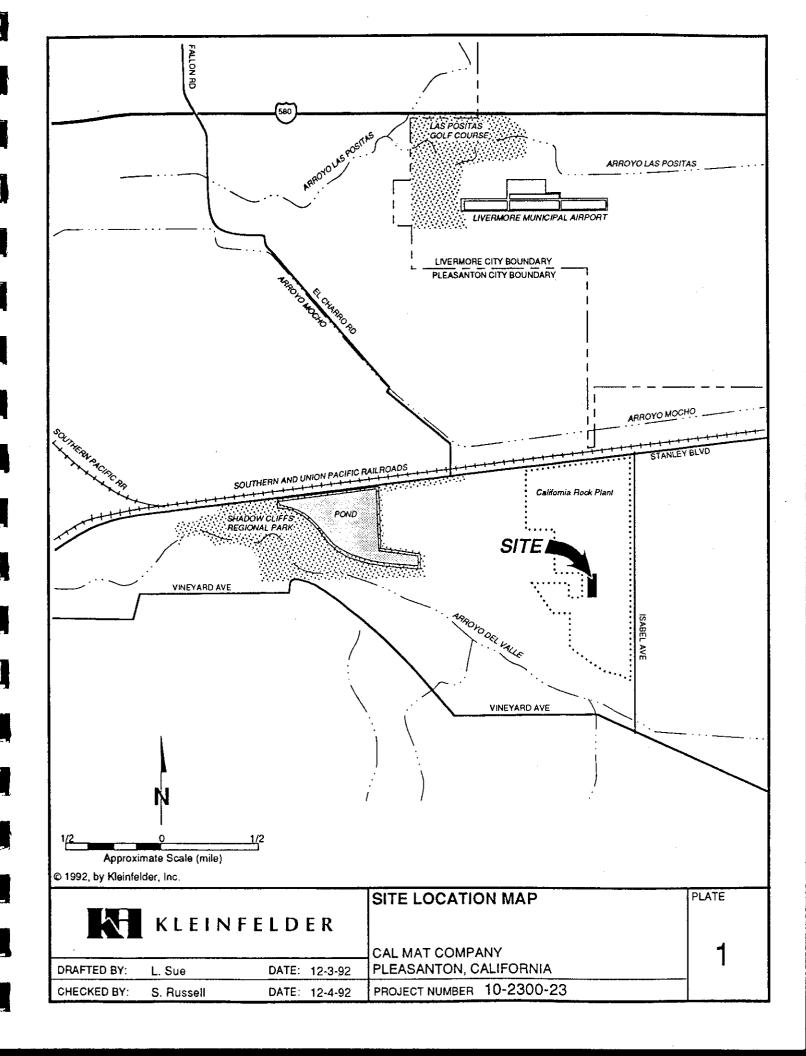
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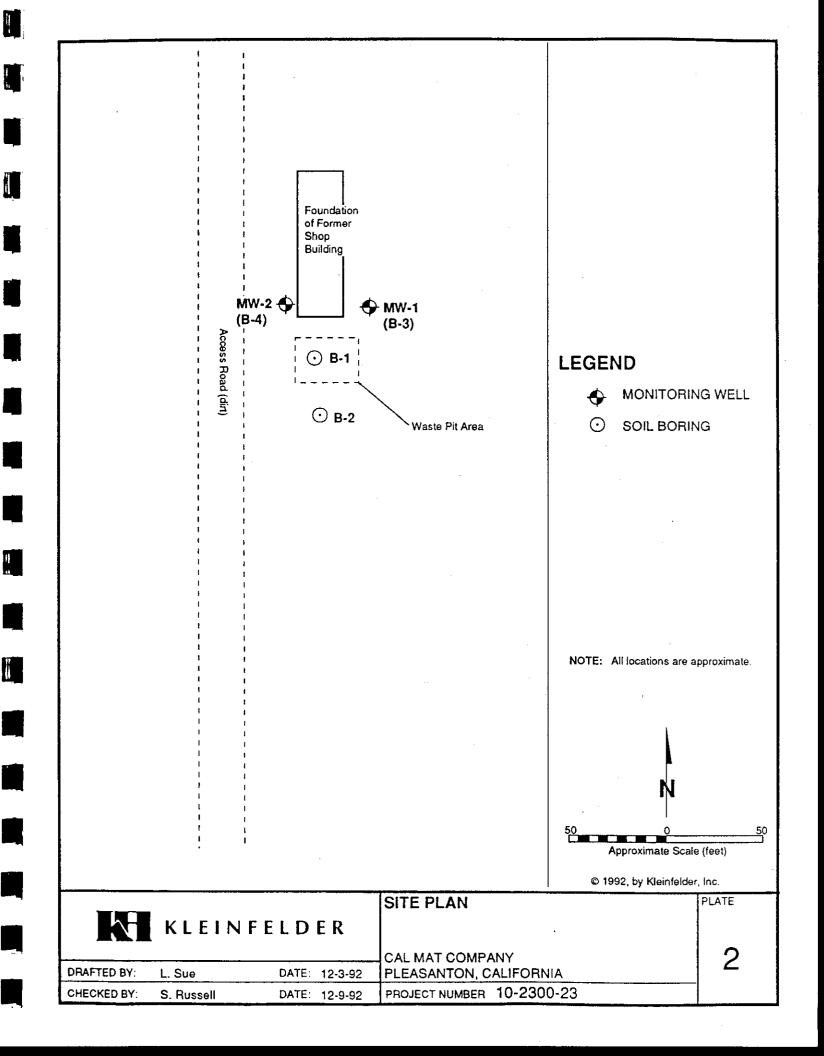
calrock1-3

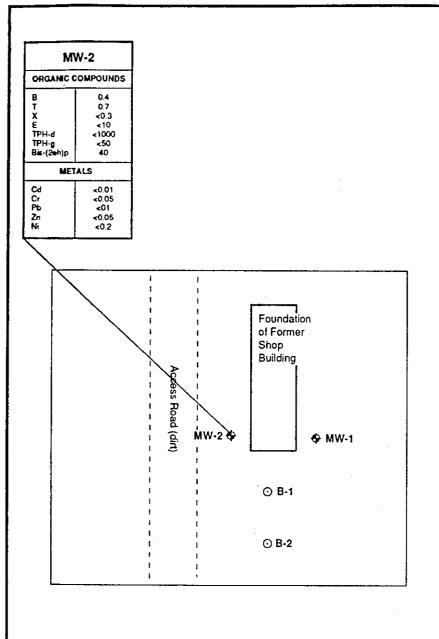
Adm Blythe

925/846-2852

ISSO -> ET Charro - 60 south ~ 1/2 mi (pass L.F.) ontil office (Jamieson), Meet there.







## **LEGEND**

- MONITORING WELL
- SOIL BORING

#### NOTES:

- 1. All locations are approximate
- All chemical concentrations are in μg/l, parts per billion (ppb).
- Samples were analyzed according to EPA Methods 8015 and 8020 for organic compounds, except for Bis-(2-ethylhexyl) phthalate which was analyzed according to EPA Method 8010, EPA Method 6010 was used in the analysis for metals.
- 4. Organic compound abbreviations:

B = Benzene

T = Toluene

X = Xylenes, total

E = Ethylbenzene

TPH-d = Total Petroleum Hydrocarbons, as Diesel

TPH-g = Total Petroleum Hydrocarbons, as Gasoline

Bis-(2eh)p = Bis-(2-ethylhexyl) phthalate

5. Metal abbreviations:

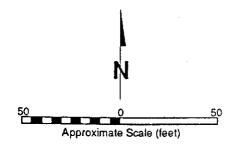
Cd = Cadmium

Cr = Chromium

Pb = Lead

Zn = Zinc

Ni = Nickel, total



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ANALYTICAL GROUND WATER SAMPLE RESULTS, ORGANIC COMPOUNDS AND METALS — NOVEMBER 1992

PLATE

L CAL MAT COMPANY
PLEASANTON, CALIFORNIA

DRAFTED BY: CHECKED BY:

S. Russell

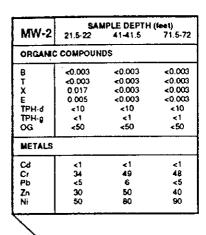
L. Sue

DATE: 12-3-92

DATE: 12-9-92 PRO

PROJECT NUMBER 10-2300-23

<u>ح</u>



|         | SAI     | APLE DEPTH | (feet)  |  |
|---------|---------|------------|---------|--|
| MW-1    | 21-21.5 | 35-35.5    | 41-41.5 |  |
| ORGANIC | COMPOUN | DS         |         |  |
| В       | 0.011   | <0.003     | <0.003  |  |
|         | <0.003  | < 0.003    | <0 003  |  |
| T<br>X  | 0.005   | < 0.003    | < 0.003 |  |
| E       | < 0.003 | < 0.003    | < 0.003 |  |
| TPH-d   | <10     | <10        | <10     |  |
| TPH-g   | <1      | <1         | <1      |  |
| og 🌂    | <50     | <50        | <50     |  |
| METALS  |         |            |         |  |
| Cd      | <1      | <1         | <1      |  |
| Cr      | 44      | 25         | 37      |  |
| Pb      | 5       | <5         | <5      |  |
| Zn      | 40      | 30         | 40      |  |
| Ni .    | 100     | 50         | 60      |  |

# Foundation of Former Shop Building MW-2 8 MW-1 ⊙ B-1 O.B-2

| <b>-</b> . | SAI       | WPLE DEPTH | (feet)  |
|------------|-----------|------------|---------|
| B-1        | 21.5-22   | 40.5-41    | 61.5-62 |
| ORGANI     | C COMPOUN | DS         | •       |
| B          | <0.003    | <0.003     | <0.003  |
| T          | <0.003    | < 0.003    | < 0.003 |
| X<br>E     | 0.010     | 0.041      | < 0.003 |
|            | < 0.003   | 0.011      | < 0.003 |
| TPH-d      | 64        | <10        | <10     |
| TPH-g      | <1        | <1         | <1      |
| OG         | 120       | <50        | <50     |
| METALS     |           |            |         |
| Cq         | <1        | <1         | 1       |
| Cr         | 35        | 47         | 39      |
| РЬ         | 6         | 6          | <5      |
| Žn         | 50        | 50         | 30      |
| Ni         | 50        | 80         | 60      |

| B-2                                      |   | MPLE DEPTH<br>31.5-32                                   |  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|--|
| ORGANIC COMPOUNDS                        |   |   |  |  |  |  |  |  |
| B<br>T<br>X<br>E<br>TPH-d<br>TPH-g<br>OG | <0.003<br><0.003<br><0.003<br><0.003<br>56<br><1<br><50 | <0.003<br><0.003<br>0.005<br><0.003<br><10<br><1<br><50 | <0.003<br><0.003<br><0.003<br><0.003<br><10<br><1<br><50 |  |  |  |  |  |
| METALS                                   |   |   |  |  |  |  |  |  |
| Cd<br>Cr<br>Pb<br>Zn<br>Ni               | <1<br>56<br><5<br>30<br>100                             | <1<br>38<br><5<br>40<br>50                              | <1<br>34<br><5<br>40<br>50                               |  |  |  |  |  |

#### **LEGEND**

MONITORING WELL

SOIL BORING 0

#### NOTES:

- 1. All locations are approximate
- 2. All chemical concentrations are in mg/kg, parts per million (ppm).
- 3. Samples were analyzed according to EPA Methods 8015 and 8020 for organic compounds, and EPA Method 6010 for metals.
- 4. Organic compound abbreviations:

B = Benzene

T = Toluene

X = Xylenes, total

E = Ethylbenzene

TPH-d = Total Petroleum Hydrocarbons,

as Diesel

TPH-g = Total Petroleum Hydrocarbons,

as Gasoline

OG = Oil and Grease

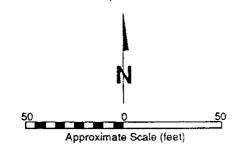
5. Metal abbreviations:

Cd = Cadmium

Cr = Chromium Pb = Lead

Zn = Zinc

Ni = Nickel, total



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ANALYTICAL SOIL SAMPLE RESULTS, ORGANIC COMPOUNDS AND METALS — NOVEMBER 1992

PLATE

CAL MAT COMPANY DATE: 12-3-92

PLEASANTON, CALIFORNIA

CHECKED BY:

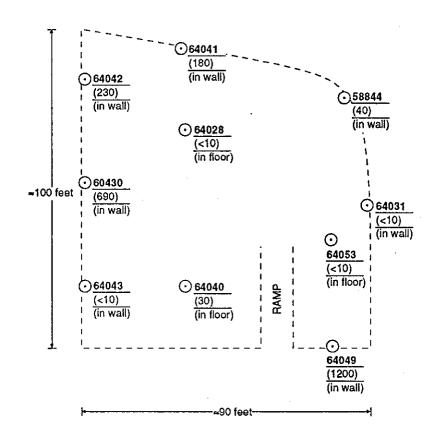
DRAFTED BY:

S. Russell

L. Sue

DATE: 12-9-92

PROJECT NUMBER 10-2300-23



### **LEGEND**

64049

SAMPLE NUMBER

(1200) (in wall) OIL AND GREASE CONCENTRATION (ppm)

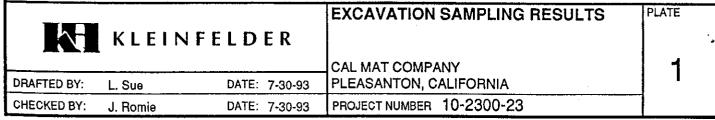
SAMPLE LOCATION

#### NOTES:

- 1. Concentrations area in mg/kg, parts per million (ppm).
- All samples were collected July 1, 1993, except for sample 58844 which was collected on June 17, 1993.

**NOT TO SCALE** 

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| Project<br>California Rock Pl | ant             | Boring<br>No. |
|-------------------------------|-----------------|---------------|
| Number<br>24-220193-C00       | ·               | B-1           |
| Total Depth                   | Sheet<br>2 of 4 |               |

| Depth (feet)           | Sample<br>Number | Sample Type | <b>Recovery (%)</b> | Blows/Foot | TIP (ppm)<br>reading/background | USCS | Description  | Remarks                                | Well<br>Construction |
|------------------------|------------------|-------------|---------------------|------------|---------------------------------|------|--|--|----------------------|
| 2 —<br>4 —<br>6 —      |                  |             |                     | NA         |                                 | SP   | Fill - SAND - dry, coarse grained, well  SAND - yellow brown (10YR5/8), dry, coarse grained, well graded                                   | Fill from stockpile adjacent to boring |                      |
| 8<br>10<br>12          |                  |             |                     |            |                                 |      |  |  |                      |
| 14 —<br>-<br>16 —<br>- |                  |             |                     |            | 5.0/1.2                         | GW   | SANDY GRAVEL - gray, damp, coarse sand, well graded, gravel clasts to 0.5 inch diameter, some broken clasts; estimate 70% gravel, 30% sand |  |                      |
| 20 —<br>22 —<br>22 —   | 60138            | 7           | 50                  |            | 8.2/3.                          | 5    |  |  |                      |
| 26 —                   |                  |             |                     |            |                                 |      |  |  |                      |

| Designated Purpose(s) of Log |  |
|------------------------------|--|
| Site Characterization        |  |

Note: Logs are to be used only for designated purpose(s).

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| Logged by   | Date:    | Plate |
|-------------|----------|-------|
| S. Russell  | 11-5-92  |       |
| Drafted by  | Date:    |       |
| L. Sue      | 11-13-92 |       |
| Reviewed by | Date:    |       |
| (           |          | . I . |



| Project             |        | Boring |
|---------------------|--------|--------|
| California Rock Pla | nt     | No.    |
| Number              |        |        |
| 24-220193-C00       |        | B-1    |
| Total Depth         | Sheet  |        |
| 62 ft foot          | 3 of 4 |        |

|              |                                       | ,           |              |            |                                 |       |   | ,                          |                      |
|--------------|---------------------------------------|-------------|--------------|------------|---------------------------------|-------|---|----------------------------|----------------------|
| Depth (feet) | Sample<br>Number                      | Sample Type | Recovery (%) | Blows/Foot | TiP (ppm)<br>reading/background | nscs  | Description   | Remarks                    | Well<br>Construction |
|              |                                       |             |              | NA         |                                 | GW    | SANDY GRAVEL - as above   |                            |                      |
| 32           | <b>5599</b> 3                         | _           | 50           |            | 3.8/2.6                         |       |   |                            |                      |
| 34 —         |                                       |             |              |            |                                 | GM    | SANDY CLAYEY GRAVEL - gray (5Y4/1) with   |                            |                      |
| -<br>36 —    |                                       |             |              |            | 2.1/1.4                         | GM    | dark yellowish brown (10YR3/4) pleces, coarse sand. well graded, fine to coarse gravel, well graded; estimate 50% gravel, 40% sand, 10% | Discolored zone at 36 feet |                      |
| `` _         |                                       |             |              |            |                                 |       | Clay  |                            |                      |
| 38 —         |                                       |             |              |            |                                 |       |   |                            |                      |
| 40           |                                       | 20000       |              |            |                                 |       |   |                            |                      |
| _            | 60117                                 | 1           | 100          |            | 1.4/1.4                         | ML    | CLAYEY SILT - yellowish brown (10YR5/6), moist, medium stiff to soft; estimate 60% silt,  |                            |                      |
| 42           |                                       |             |              |            |                                 |       | 40% day   |                            |                      |
| 44 —         |                                       |             |              |            |                                 |       |   |                            |                      |
| _            |                                       |             |              |            | 4.1/3.7                         |       |   |                            |                      |
| 46 —         |                                       |             |              |            |                                 |       |   |                            |                      |
|              |                                       |             |              |            |                                 |       |   |                            |                      |
| 48           |                                       |             |              |            |                                 | GM    | CLAYEY SANDY GRAVEL - damp, yellow  |                            |                      |
| 50           |                                       |             |              |            |                                 |       | brown, coarse sand, well graded, fine gravel,<br>well rounded; estimate 50% gravel, 40% sand,   |                            |                      |
| ] 30 —       |                                       |             |              |            |                                 |       | 10% day   |                            |                      |
| 52           | 55991                                 |             | 50           | 1          | 4.2/3.8                         |       |   |                            |                      |
| -            |                                       |             |              |            |                                 |       |   |                            |                      |
| 54 —         |                                       |             |              |            |                                 |       |   |                            |                      |
| -            |                                       |             |              |            |                                 |       |   |                            |                      |
| 56 —         |                                       |             |              |            |                                 |       |   |                            |                      |
| 58 —         |                                       |             |              |            |                                 |       | ,   |                            |                      |
|              |                                       |             |              |            |                                 |       | ,   | ·                          |                      |
| 60           |                                       |             |              |            |                                 |       |   |                            |                      |
|              | · · · · · · · · · · · · · · · · · · · |             | Ц.,          | <u> </u>   | 1                               | لسييا |   |                            | <u> </u>             |

Designated Purpose(s) of Log

Site Characterization

Note: Logs are to be used only for designated purpose(s).

| Logged by    | Date:    | Plate |
|--------------|----------|-------|
| S. Russell   | 11-5-92  | Fiate |
| Drafted by · | Date:    |       |
| L. Sue       | 11-13-92 |       |
| Reviewed by  | Date:    |       |
|              |          |       |



| Project     |            |       | Boring  | ١ |
|-------------|------------|-------|---------|---|
| California  | Rock Plant |       | No.     |   |
| Number      |            |       |         |   |
| 24-22019    | 3-C00      |       | <br>B-1 |   |
| Total Depth |            | Sheet |         |   |
|             |            |       |         |   |

| Depth (feet) | Sample<br>Number | Sample Type | Recovery (%) | Blows/Foot | TIP (ppm)<br>reading/background | nscs | Description                    | Remarks                    | Well |
|--------------|------------------|-------------|--------------|------------|---------------------------------|------|--------------------------------|----------------------------|------|
| -<br>62      | 55992            |             | 60           | NA         | 3 2/3.2                         | GM   | CLAYEY SANDY GRAVEL - 25 above |                            |      |
| -            |                  |             |              |            |                                 |      |                                | No first water encountered |      |
| 64 —         |                  |             |              |            |                                 |      |                                |                            |      |
| -<br>66      |                  |             |              |            |                                 |      |                                |                            |      |
| 00           |                  |             |              |            |                                 |      |                                |                            |      |
| 68 —         |                  |             |              |            |                                 |      |                                |                            |      |
| -            |                  |             |              |            |                                 |      |                                |                            |      |
| 70 —         |                  |             |              |            |                                 |      |                                |                            |      |
| 72           |                  |             |              |            |                                 | Ē    |                                |                            |      |
| _            |                  |             |              |            |                                 |      |                                |                            |      |
| 74           |                  |             |              |            |                                 |      |                                |                            |      |
| 76           |                  |             |              |            |                                 |      | ·                              |                            |      |
| _            |                  |             |              |            |                                 |      |                                |                            |      |
| 78           |                  |             |              |            |                                 |      |                                |                            |      |
| -            |                  | ;           |              |            |                                 |      |                                |                            |      |
| 80 —<br>—    |                  |             |              |            |                                 |      |                                |                            |      |
| 82           |                  |             |              |            |                                 |      |                                |                            |      |
| -            |                  |             |              |            |                                 |      |                                |                            |      |
| 84 —         |                  |             |              |            |                                 |      |                                |                            |      |
| 86 —         |                  |             |              |            |                                 |      |                                |                            |      |
| _            |                  |             |              |            |                                 |      |                                |                            |      |
| 88 —         |                  |             |              |            |                                 |      |                                |                            |      |
| 90 —         |                  |             |              |            |                                 |      |                                |                            |      |

| Designated Purpose(s) of Log |  |
|------------------------------|--|
| Site Characterization        |  |

| Note: Logs are to | be used only for designated | purpose(s). |
|-------------------|-----------------------------|-------------|

| Logged by   | Date:    | Plate  |
|-------------|----------|--------|
| S. Russell  | 11-5-92  | r iate |
| Drafted by  | Date:    |        |
| L. Sue      | 11-13-92 |        |
| Reviewed by | Date:    |        |



| Project<br>California Rock Plant |                 | Boring<br>No. |
|----------------------------------|-----------------|---------------|
| Number<br>24-220193-C00          |                 | B-2           |
| Total Depth<br>42.0 feet         | Sheet<br>2 of 3 | ر             |

| Sample Number S   |  |                  |   |              | 1          | _                               | Ē              |   | · · · · · · · · · · · · · · · · · · · |                      |
|---|--|------------------|---|--------------|------------|---------------------------------|----------------|---|---------------------------------------|----------------------|
| SW   GRAVELLY SAND - light brown (6.5YR6/4), dry, fine to medium sand, well graded, some gravel to 0.75-inch diameter, clasts appear to be trischly broken; estimate 50% gravel, 50% sand | Depth (feet)   | Sample<br>Number | _ | Recovery (%) | Blows/Foot | TIP (ppm)<br>reading/background |                |   | Remarks                               | Well<br>Construction |
| well graded, trace silt; estimate 40% gravel, 30% sand, 20% clay, 10% silt  | 4 — 6 — 8 — 10 — 12 — 14 — 16 — 20 — 22 — 24 — 26 — 28 — |                  |   |              | NA         | 3.3/0.9                         | SP<br>SW<br>GG | GRAVELLY SAND - light brown (6.5YR6/4), dry, fine to medium sand, well graded, some gravel to 0.75-inch diameter, clasts appear to be freshly broken; estimate 50% gravel, 50% sand  Color change to gray (2.5Y N4/)  SANDY GRAVEL with CLAY - gray (2.5Y N4/), damp, coarse sand, well graded, fine gravel, many clasts appear freshly broken; estimate 60% gravel, 30% sand, 10% clay  CLAYEY SANDY GRAVEL - yellow brown (10YR5/8), damp, moderatery stiff, well rounded to angular ravel to 2 inches esand, evel graded, trace slit; estimate 40% gravel, 30% well graded, trace slit; estimate 40% gravel, 30% |                                       |                      |

| и | Designated | - | <br> | <br> |
|---|------------|---|------|------|
|   |            |   |      |      |
|   |            |   |      |      |

Site Characterization

Note: Logs are to be used only for designated purpose(s). 
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| Logged by   | Date:    | Plate |
|-------------|----------|-------|
| S. Russell  | 11-5-92  | Fiate |
| Drafted by  | Date:    |       |
| L. Sue      | 11-12-92 |       |
| Reviewed by | Date:    |       |
|             |          |       |



| Project<br>California Rock Plan | nt .     | Boring<br>No. |
|---------------------------------|----------|---------------|
|                                 | <u> </u> |               |
| Number                          |          | I             |
| 24-220193-C00                   |          | B-2           |
| Total Depth                     | Sheet    |               |
| 40.0 foot                       | l a of a | 1             |

| Depth (feet)      | Sample<br>Number  | Sample Type | Recovery (%) | Blows/Foot | TIP (ppm)<br>reading/background | USCS | Description   | Remarks         | Well |
|-------------------|-------------------|-------------|--------------|------------|---------------------------------|------|---|-----------------|------|
| 32 —<br>34 —      | 55 <del>994</del> |             | 50           | NA         | 1.7/1.7                         | GC   | CLAYEY SANDY GRAVEL - 83 above  |                 |      |
| 36                |                   |             |              |            |                                 | ML   | CLAYEY SILT - yellow brown (10YR5/8), damp, moderately stiff to soft; estimate 80% silt, 20% clay | 11-8-92, 07:15. |      |
| 40 —<br>-<br>42 — | 48111             |             | 100          |            | 2.0/2.0                         |      | wet   | 111-6-92 💆      | ,    |
| 46                |                   |             |              |            |                                 |      |   |                 |      |
| 50 —<br>52 —      |                   |             |              |            |                                 |      |   |                 |      |
| 54<br>56          |                   |             |              |            |                                 |      |   |                 |      |
| 58 -<br>60 -      |                   |             |              |            |                                 |      |   |                 |      |

Designated Purpose(s) of Log

Site Characterization

Note: Logs are to be used only for designated purpose(s).

| Logged by   | Date:    | Plate |
|-------------|----------|-------|
| S. Russell  | 11-5-92  |       |
| Drafted by  | Date:    |       |
| L. Sue      | 11-12-92 |       |
| Reviewed by | Date:    |       |
| ( '         |          |       |



| Project<br>California Rock Plan |                 | Boring<br>No. |
|---------------------------------|-----------------|---------------|
| Number<br>24-220193-C00         |                 | B-3/          |
| Total Depth<br>42.0 feet        | Sheet<br>2 of 3 | MW-1          |

| Depth (feet)                        | Sample<br>Number        | Ѕатре Туре | <b>Recovery (%)</b> | Blows/Foot | TIP (ppm)<br>reading/background | uscs | Description   | Remarks                          | Well |
|-------------------------------------|-------------------------|------------|---------------------|------------|---------------------------------|------|---|----------------------------------|------|
| 2 — 4 — 6 — 8 — 10 — 12 — 14 — 16 — | <b>\$</b> 5 <b>9</b> 95 | 7          | 50                  | NA         | 0.3/0.3                         | ĠW   | SANDY GRAVEL - light brown (7.5YR6/4), dry, loose, medium to coarse sand, moderately graded, coarse gravel, moderately graded, many pieces freshly broken, gravel and sand well rounded to subangular; estimate 60% gravel, 40% sand  |                                  |      |
| 20 — 22 — 24 — 26 — 28 —            | 48108                   |            | 100                 |            | 112/<br>0.3<br>12.8/<br>0.8     |      | color change to gray brown (5Y5/2), damp  SANDY CLAYEY GRAVEL - clive (5Y4/4), moist, fine to coarse gravel, moderately graded, many angular clasts, fine to medium sand, moderately graded; estimate 50% gravel, 40% sand, 10% clay  gravel and sand become well graded at approximately 25 feet | Apparent top of contaminant zone |      |

| Des | ignated Purpose(s) of Log |  | • |  |  |
|-----|---------------------------|--|---|--|--|
|     | Site Characterization     |  |   |  |  |

Note: Logs are to be used only for designated purpose(s).

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|-------------|----------|-------|
| S. Russell  | 11-5-92  |       |
| Drafted by  | Date:    |       |
| L. Sue      | 11-12-92 |       |
| Reviewed by | Date:    |       |
| Meviewed by | Date:    |       |



| Project<br>California Rock Plant | Boring<br>No.   |      |
|----------------------------------|-----------------|------|
| Number<br>24-220193-C00          |                 | B-3/ |
| Total Depth                      | Sheet<br>3 of 3 | MW-1 |

| Depth (feet)      | Sample<br>Number | Sample Type | Recovery (%) | Blows/Foot | TIP (ppm)<br>reading/background | nscs | Description  | Remarks        | Well<br>Construction |
|-------------------|------------------|-------------|--------------|------------|---------------------------------|------|--|----------------|----------------------|
| 32 —              | <b>559</b> 96    |             | 75           | NA         | 3.0/0.0                         | GC   | SANDY CLAYEY GRAVEL - as above, very moist                                     |                |                      |
| 34 —              |                  |             |              | =          |                                 |      |  | 11-6-92, 10:00 |                      |
| 36 —<br>-         | 55964            |             | 100          |            | 2.6/1.2                         | ML   | CLAYEY SILT - clive (5Y4/4), moist to wet, soft;<br>estimate 80% silt, 20% day | _              |                      |
| 38 —              |                  |             |              |            |                                 |      |  |                |                      |
| 40                | 55997_           |             | 100          |            |                                 |      |  |                |                      |
| 42 —<br>-<br>44 — |                  |             |              |            |                                 |      |  |                | !                    |
| 46 —              |                  |             |              |            |                                 |      |  |                |                      |
| 48                | -<br>-<br>-      |             | i            |            |                                 |      |  |                |                      |
| 50 —              | -                |             |              |            |                                 |      |  |                |                      |
| 52<br>54          | -                |             |              |            |                                 |      |  |                |                      |
| 56 -              |                  |             |              | į          |                                 |      |  | ·              |                      |
| 58 -              | 1                |             |              |            |                                 |      |  |                |                      |
| 60 -              |                  |             |              |            |                                 |      | <u> </u>   |                |                      |

| Designated Purpose(s) of Log |  |
|------------------------------|--|
| Site Characterization        |  |
|                              |  |

|                     |                                      | _   |
|---------------------|--------------------------------------|-----|
| Note: Logs are to I | pe used only for designated purpose( | s). |

| Logged by   | Date:    | Plate |
|-------------|----------|-------|
| S. Russell  | 11-5-92  |       |
| Drafted by  | Date:    |       |
| L. Sue      | 11-12-92 | i     |
| Reviewed by | Date:    |       |
|             |          | 1     |



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|              |                  | _           |              |            | , ,                             |      |   |                             |      | _            |
|--------------|------------------|-------------|--------------|------------|---------------------------------|------|---|-----------------------------|------|--------------|
| Depth (feet) | Sample<br>Number | Sample Type | Rесоvегу (%) | Blows/Foot | TIP (ppm)<br>reading/background | uscs | Description   | Remarks                     | Well | Construction |
|              |                  | П           |              | NA         |                                 | GC   | CLAYEY SANDY GRAVEL - as above  |                             | •    |              |
| 32 —         |                  |             |              |            |                                 |      |   |                             |      |              |
| 34 —         |                  |             |              |            |                                 | ML   | CLAYEY SILT - olive brown (2.5Y4/2), damp;<br>estimate 80% silt, 20% day                  |                             |      |              |
| 36 —         | <b>5596</b> 3    |             | 100          |            | 26/0.0                          |      | color change to olive brown (2.5Y4/4), mottled (5Y4/4), damp to moist                     |                             |      |              |
| 30 —         |                  |             |              |            |                                 |      |   |                             |      |              |
| 38 —         |                  |             |              |            |                                 |      |   | 11-6-92, 15:00 💆            |      |              |
| 40 —         |                  |             |              |            |                                 |      | as above, wet   | Water coming out of cyclone |      | 2            |
| -            | 55962            | V           | 100          |            | 4.8/0.0                         |      |   |                             |      | <u> </u>     |
| 42           | 33302            | $\vdash$    | 100          |            |                                 |      |   | ·                           |      | •            |
| -            |                  |             | ŀ            |            |                                 |      |   |                             | ^.·  | 2            |
| 44           |                  |             |              |            |                                 | •    |   |                             |      | ^            |
| -<br>46      |                  |             |              |            |                                 |      | ·   |                             |      | ^            |
| 40 -         |                  |             |              |            |                                 |      |   |                             |      |              |
| 48 —         |                  |             |              |            |                                 |      |   | ,                           |      | 1            |
|              |                  |             |              |            |                                 |      |   |                             |      | 1            |
| 50 —         |                  |             |              |            |                                 | ĞM   | SILTY SANDY GRAVEL - light brown  | No sample recovery          |      |              |
| -            |                  | 1           |              |            |                                 |      | (7.5YR6/4), wet, coarse gravel, moderately graded, many freshly broken chunks, rounded to |                             |      | 2            |
| 52           |                  | r           | 1            |            |                                 |      | subangular, medium to coarse sand, well graded, rounded grains; estimate 60% gravel,      |                             |      |              |
| 54 —         |                  |             |              |            |                                 |      | 30% sand, 10% silt  |                             |      |              |
| -            |                  |             |              |            |                                 |      |   |                             |      |              |
| 56           | -                |             |              |            | 26/1.3                          | ,    |   |                             |      |              |
| -            | 1                |             |              |            |                                 |      |   |                             |      |              |
| 58           | 1                |             |              |            |                                 |      |   |                             |      |              |
| 60 —         | ]                |             |              |            |                                 |      | as above, wet   |                             |      |              |

| Designated Purpose(s) of Log |  |
|------------------------------|--|
| Site Characterization        |  |

| ٠, |       |          |                 |               |                 |
|----|-------|----------|-----------------|---------------|-----------------|
| ł  | Note: | Logs are | to be used only | y for designa | ted purpose(s). |

| Logged by   | Date:    | Plate  |
|-------------|----------|--------|
| S. Russell  | 11-5-92  | 1 1010 |
| Drafted by  | Date:    |        |
| L. Sue      | 11-12-92 |        |
| Reviewed by | Date:    |        |
|             |          |        |



| Project<br>California Rock Pla | nt     | Boring<br>No. |
|--------------------------------|--------|---------------|
| Number<br>24-220193-C00        |        | B-4/          |
| Total Depth                    | Sheet  | MW-2          |
| 82 0 feet                      | 2 of 4 |               |

| Depth (feet)  | Sample<br>Number | Sample Type | Recovery (%) | Blows/Foot | TIP (ppm)<br>reading/background | USCS | Description  | Remarks                          | Well |  |
|---|------------------|-------------|--------------|------------|---------------------------------|------|--|----------------------------------|------|--|
| 2 — 4 — 6 — 8 — 10 — 12 — 14 — 20 — 22 — 24 — 26 — 30 — 30 — 30 — 30 — 30 — 30 — 30 — 3 | 55998            |             | 50           |            | 90/0.0<br>10.0<br>0.6           | GG   | CLAYEY SANDY GRAVEL - gray (2.5YR N4/), damp color change to gray (2.5YR N4/), damp medium to coarse sand, well graded, coarse gravel, well graded, many clasts appear to be freshly broken; estimate 60% gravel, 30% sand, 10% clay | Apparent top of contaminant zone |      |  |

| Designated Purpose(s) of Log |  |
|------------------------------|--|
| Site Characterization        |  |

Note: Logs are to be used only for designated purpose(s).

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| Logged by    | Date:    | Plate |
|--------------|----------|-------|
| S. Russell   | 11-5-92  |       |
| Drafted by · | Date:    | [     |
| L. Sue       | 11-12-92 |       |
| Reviewed by  | Date:    |       |
| (            |          |       |



| Project           |        | Boring |
|-------------------|--------|--------|
| California Rock P | lant   | No.    |
| Number            |        |        |
| 24-220193-C00     |        | B-4/   |
| Total Depth       | Sheet  | MW-2   |
| R2 O feet         | 4 of 4 | 1      |

|                      |                  | <u> </u>    |              |            | 10                              |      |   |                            |                      |
|----------------------|------------------|-------------|--------------|------------|---------------------------------|------|---|----------------------------|----------------------|
| Depth (feet)         | Sample<br>Number | Sатрlе Туре | Recovery (%) | Blows/Foot | TIP (ppm)<br>reading/background | nscs | Description   | Remarks                    | Well<br>Construction |
| 62 —<br>64 —         | 55961            |             | 100          | NA         | 20/0.0                          | GM   | SILTY SANDY GRAVEL - light brown<br>(7.5YR6/4), wet, coarse gravel, moderately<br>graded, many freshly broken chunks, rounded to<br>subangular, medium to coarse sand, well<br>graded, rounded grains; estimate 60% gravel,<br>30% sand, 10% sitt | Water injected into casing |                      |
| 66 —<br>68 —         |                  |             |              |            | 1.5/0.0                         | ĞŴ   | SANDY GRAVEL - yellow brown (7.5YR5/8), wet, coarse gravel, well graded, rounded to subangular clasts, coarse sand, well graded, trace silt; estimate 70% gravel, 30% sand  | 11-7-92, 09:12             |                      |
| <br>70<br><br>72     | 45278            |             | 100          |            | 62/0.0                          | SP   | SAND - light olive brown (2.5Y5/6), wet, medium to fine, rounded to subangular grains, poorly graded  |                            |                      |
| 74 —<br>76 —         |                  |             |              |            |                                 | GW   | SANDY GRAVEL - as above   |                            |                      |
| 78 —<br>78 —<br>80 — |                  |             |              |            |                                 |      |   | Hard drilling              |                      |
| 82 —<br>84 —         | 48090            | /           | 70           |            | 0.0/0.0                         |      |   |                            |                      |
| 86 —                 |                  |             |              |            |                                 |      |   |                            |                      |
| 88 —<br>-<br>90 —    |                  |             |              |            |                                 |      |   |                            |                      |

| Designated Purpose(s) of Log                       |          |
|--|----------|
| Site Characterization                              |          |
| Note: Logs are to be used only for designated purp | pose(s). |

| Logged by    | Date:    | Plate |
|--------------|----------|-------|
| S. Russell   | 11-5-92  |       |
| Drafted by . | Date:    |       |
| L. Sue       | 11-12-92 |       |
| Reviewed by  | Date:    |       |
| (            |          | i     |