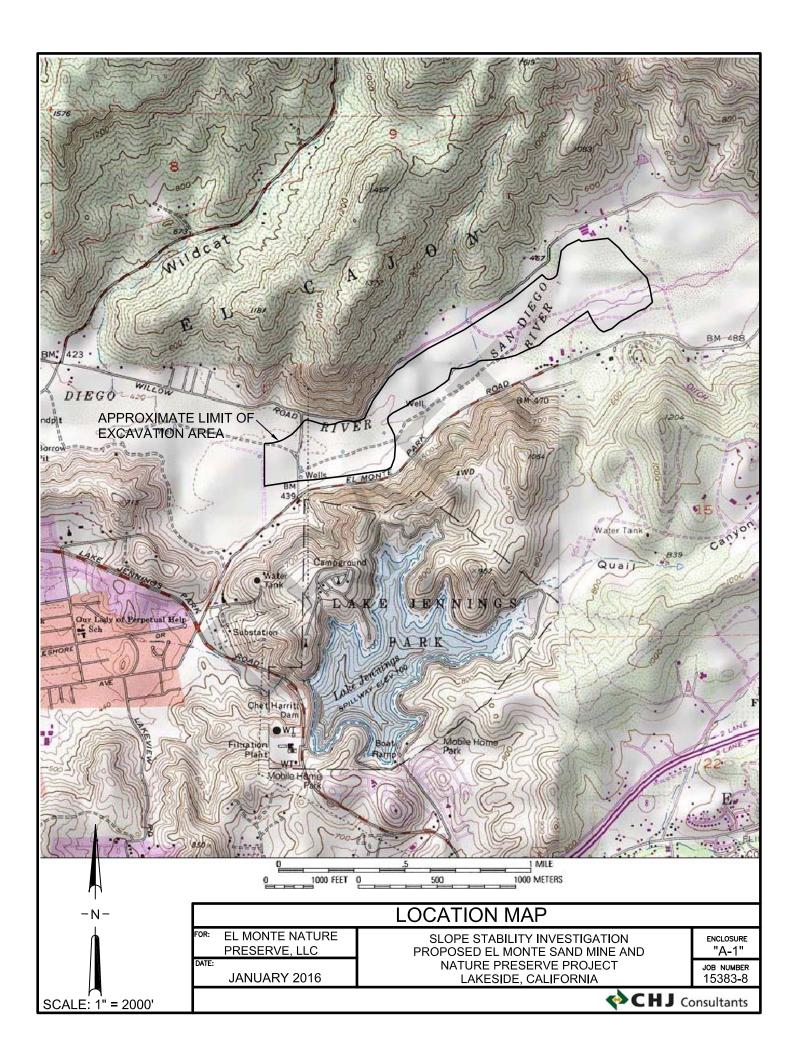
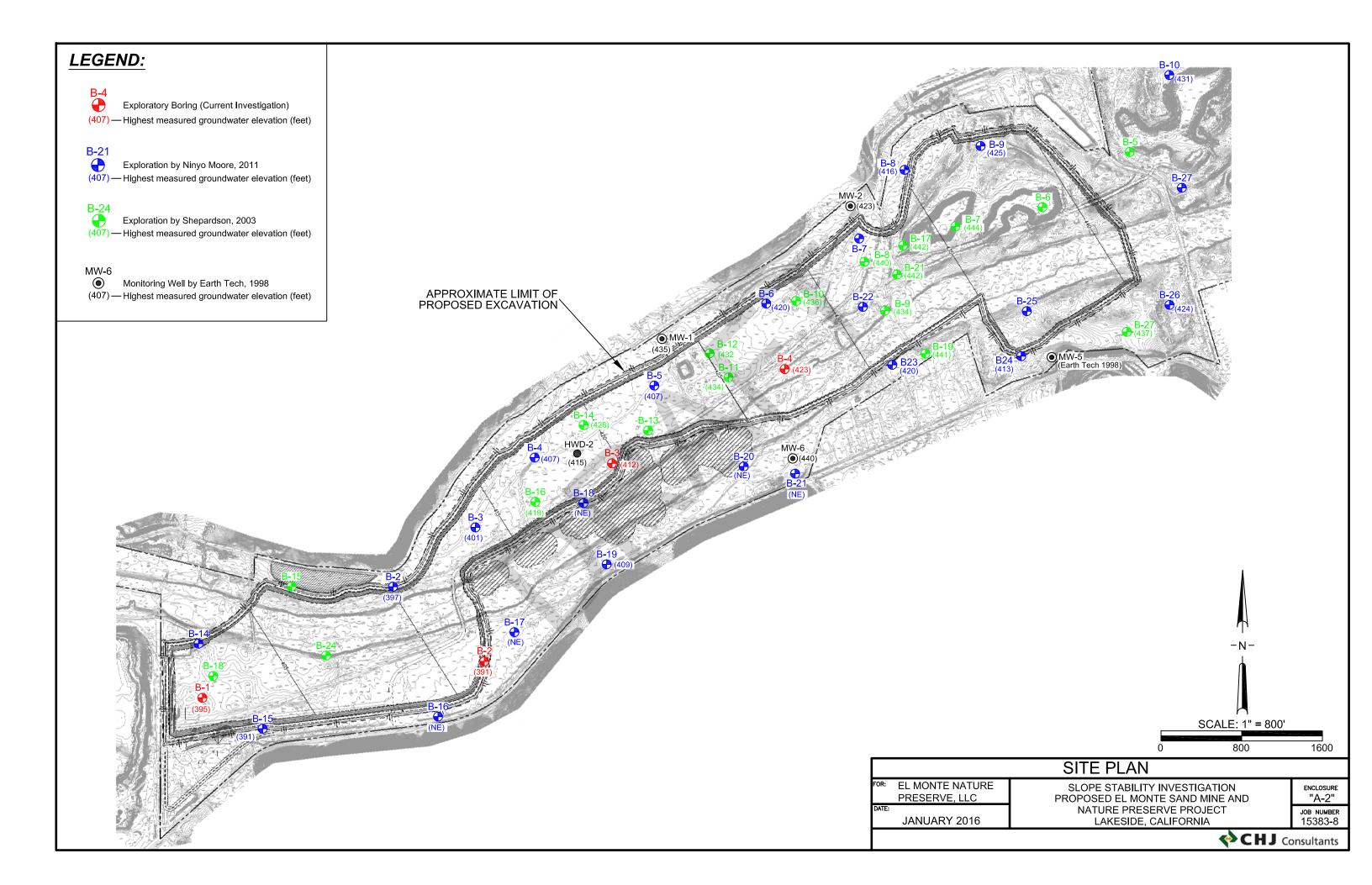
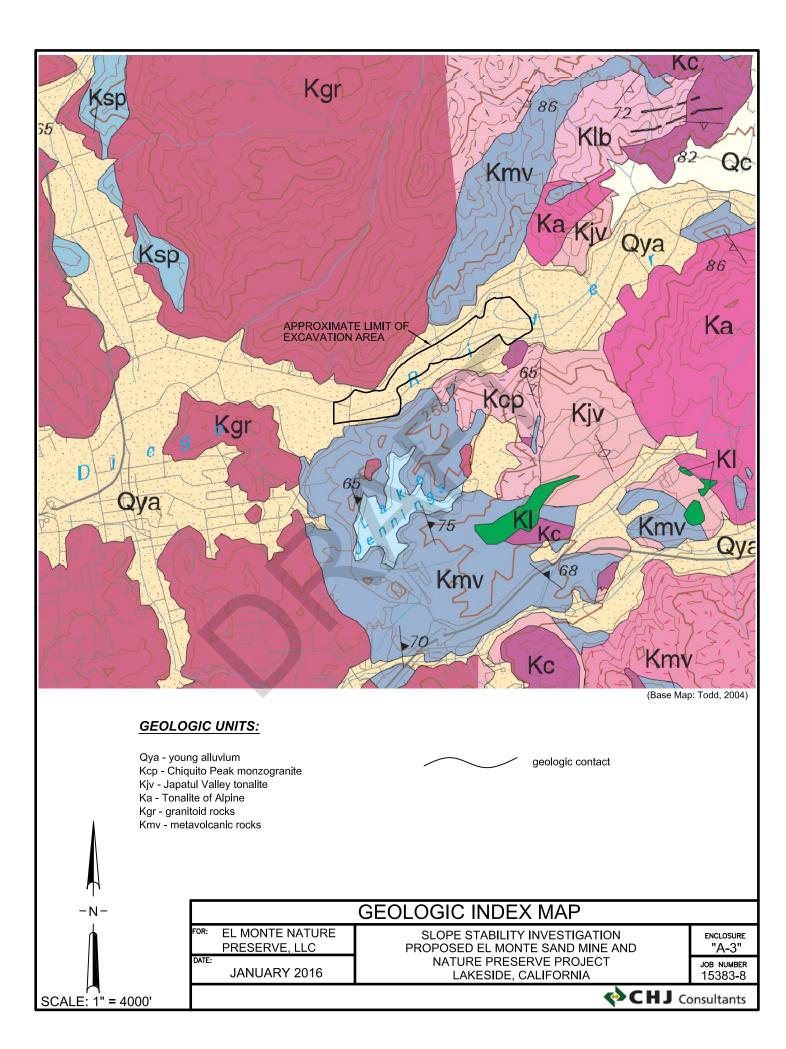
## APPENDIX A

# MAPS AND CROSS SECTIONS





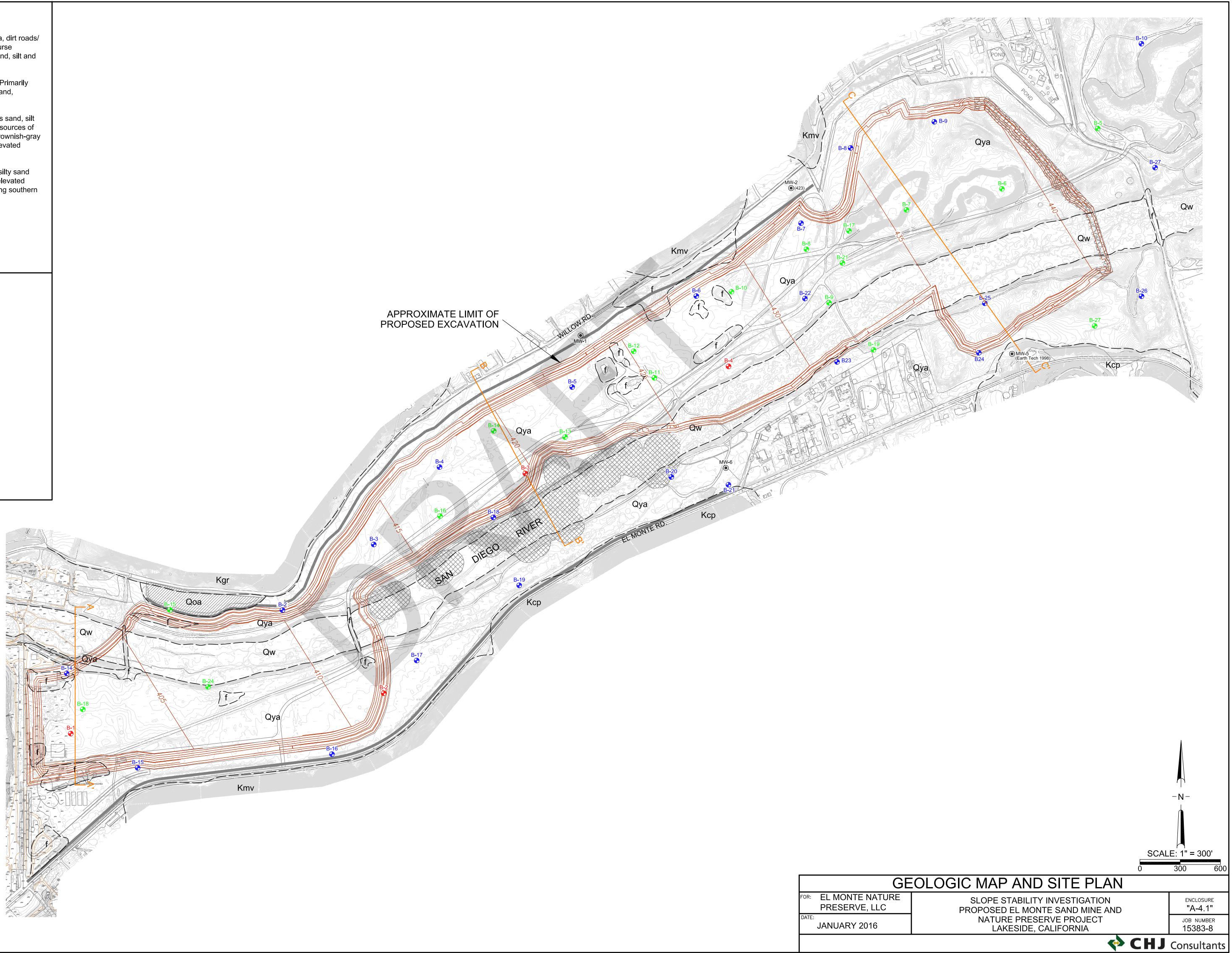


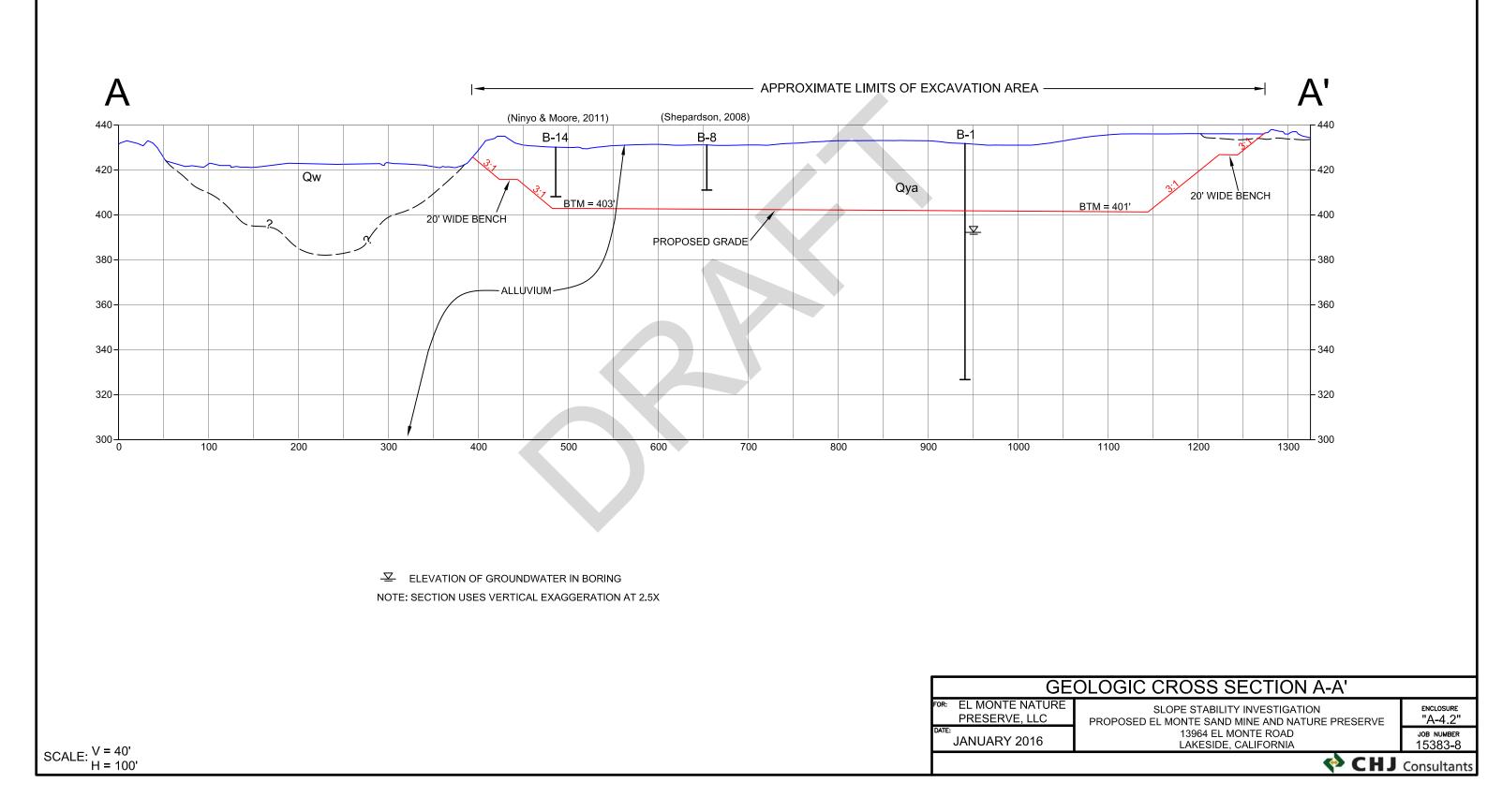
# **GEOLOGIC UNITS:**

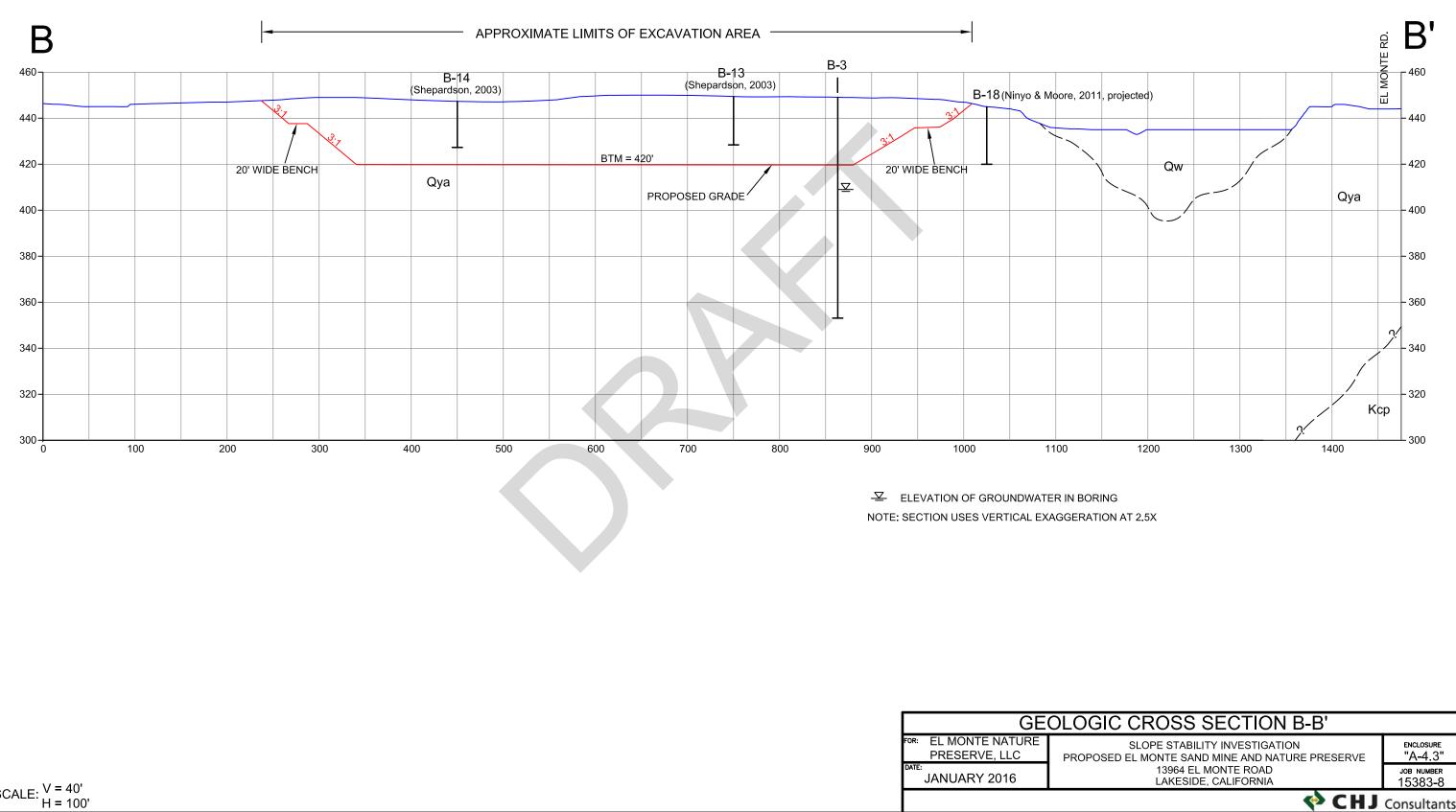
- f fill Fill associated with prior site use as a borrow area, dirt roads/ tracks, pond/river channel embankments, and golf course development derived from local materials including sand, silt and gravel from young alluvium and topsoil.
- Qw active wash deposits of San Diego River Channel. Primarily medium-to coarse-grained sand with fine-grained sand, silt and gravel. Poorly consolidated.
- Qya young alluvium of San Diego River Valley. Includes sand, silt and gravel derived from granitic and metavolcanic sources of adjacent highlands. Surface locally mantled with brownish-gray micaceous sandy silt. Forms geomorphic bench elevated relative to river channel sediments.
- Qoa older alluvium of isolated terrace. Reddish-brown silty sand with gravel and cobbles forming terrace remnant elevated above Qya surface. Locally with fill and debris along southern margin.
- Kmv metavolcanic bedrock
- Kgr granitic bedrock
- Kcp Chiquito Peak monzogranite

# LEGEND:

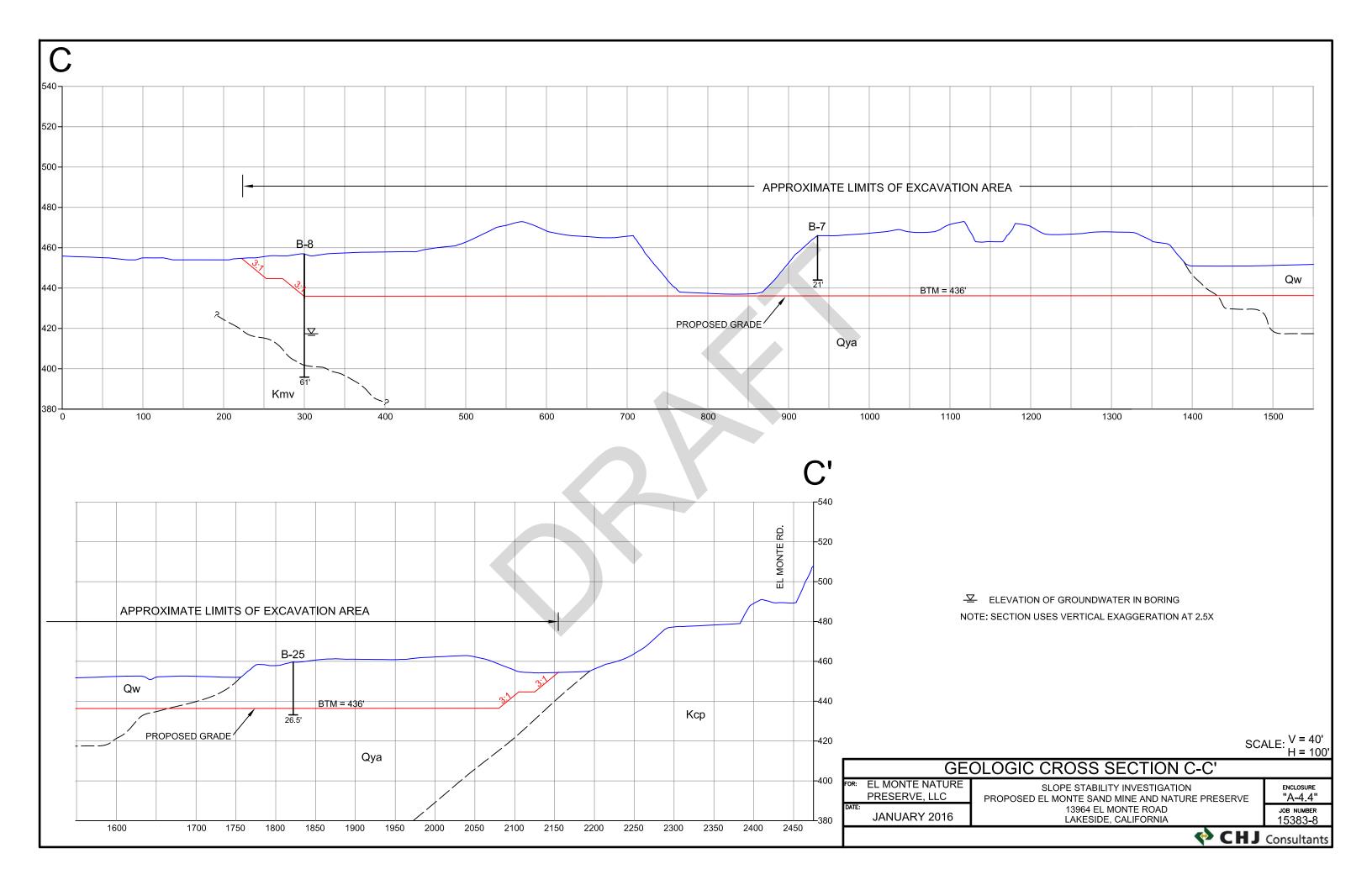
| B-4   | Exploratory Boring (Current Investigation) |
|-------|--|
| B-21  | Exploration by Ninyo Moore, 2011           |
| B-24  | Exploration by Shepardson, 2003            |
| MW-6  | Monitoring Well by Earth Tech, 1998        |
| /~~_/ | Geologic Contact                           |
| C C'  | Geologic Cross Section                     |
|       | Excavation Area Boundary                   |







| SCALE: V = 40' |
|----------------|
| H = 100'       |



| ſ | Los Angeles   |    |
|---|---|----|
|   |   |    |
|   | C Orange San Jacinto M 5  |    |
|   | Sage Anza   |    |
|   | San Juan Capistrán Temecula   |    |
|   | Z Fallbrook   |    |
|   | ☐ Oceanside<br>☐ Carls a Escondido  |    |
|   | Carisba Locontato   |    |
|   | SITE SITE   |    |
|   | Z San Diego   |    |
|   |   |    |
|   |   |    |
|   |   |    |
| C |   |    |
|   |   |    |
|   |   |    |
|   |   |    |
|   |   |    |
|   | N<br>Seismicity 1932-2012 (Magnitude 4.0+) 100 kilometer radius   |    |
|   | PI SoftWare 2000 Seismicity 1952-2012 (Magintude 4.04) Too knometer faulus  |    |
|   | SITE LOCATION: 32.8723 LAT116.8863 LONG.  |    |
|   | MINIMUM LOCATION QUALITY: C 0 50 100 KILOMETERS   |    |
|   | TOTAL # OF EVENTS ON PLOT: 1373   |    |
|   | TOTAL # OF EVENTS WITHIN SEARCH RADIUS: 310   |    |
|   | MAGNITUDE DISTRIBUTION OF SEARCH RADIUS EVENTS:   |    |
|   | 5.0-5.9: 22<br>6.0-6.9: 5   |    |
|   | 7.0-7.9: 0<br>8.0-8.9: 0  |    |
|   | CLOSEST EVENT: 4.2 ON WEDNESDAY, DECEMBER 04, 1991 LOCATED APPROX. 23 KILOMETERS NORTH OF THE SITE  |    |
|   | LARGEST 5 EVENTS:   |    |
|   | 6.6 ON TUESDAY, NOVEMBER 24, 1987 LOCATED APPROX. 97 KILOMETERS EAST OF THE SITE<br>6.6 ON WEDNESDAY, OCTOBER 21, 1942 LOCATED APPROX. 83 KILOMETERS EAST OF THE SITE   |    |
|   | 6.5 ON TUESDAY, APRIL 09, 1968 LOCATED APPROX. 78 KILOMETERS NORTHEAST OF THE SITE<br>6.4 ON FRIDAY, MARCH 19, 1954 LOCATED APPROX. 79 KILOMETERS NORTHEAST OF THE SITE |    |
|   | 6.0 ON THURSDAY, MARCH 25, 1937 LOCATED APPROX. 83 KILOMETERS NORTHEAST OF THE SITE   |    |
|   | EARTHQUAKE EPICENTER MAP  |    |
|   | FOR: EL MONTE NATURE SLOPE STABILITY INVESTIGATION ENCLOSUR<br>PRESERVE, LLC PROPOSED EL MONTE SAND MINE AND "A-5"  |    |
|   | DATE: NATURE PRESERVE PROJECT JOB NUMBE<br>JANUARY 2016 LAKESIDE, CALIFORNIA 15383-   | ER |
|   |   |    |

# APPENDIX B

**BORING LOGS** 

Date Drilled: 8/17/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 435

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

|                                     | DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS                | DRIVE    | BULK | BLOWS/6 IN.    | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|------------|----------------|---|------------------------|----------|------|----------------|-----------------------|-----------------------|--------------------|
| -                                   | -          |                | (SM) Silty Sand, fine to medium, few gravel to 2", dark brown | Native                 | $\times$ |      | 8<br>8<br>8    | 2.4<br>2.5            | Dist.                 | Ring               |
| -                                   | - 5 -      |                |   | Auger<br>Chatter       | $\times$ | ×××× | 11<br>19<br>22 | 1.2                   | Dist.                 | Ring               |
| -                                   | - 10 -     |                |   |                        | $\times$ | ***  | 7<br>9<br>14   | 2.6<br>2.5            | 117                   | SA<br>Ring         |
| -                                   | - 15 -     |                |   |                        | $\times$ |      | 6<br>10<br>14  | 4.5                   | 104                   | Ring               |
| -                                   | - 20 -     |                |   |                        | $\times$ |      | 11<br>11<br>15 | 2.1                   | 108                   | DS, Ring           |
| 15 1 1 1                            | - 25 -     |                | (SM) Silty Sand, fine to medium, dark grayish brown           |                        | $\times$ |      | 3<br>7<br>13   | 8.0<br>23.9           | 117                   | Ring               |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | - 30 -     |                | (   | Iron Oxide<br>Staining |          |      | 6<br>11<br>15  | 2.8<br>4.1            | 106                   | Ring               |
|                                     | ~          | СН             | SLOPE STABILITY INVESTIGA<br>13964 EL MONTE ROAD, LAKESIDE,   |                        | RNL      | A    |                | Job N<br>15383        |                       | Enclosure<br>B-1a  |

Date Drilled: 8/17/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D.

Surface Elevation(ft): 435

Logged by: VJR

|                                     | DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS     | DRIVE                 | BULK | BLOWS/6 IN.    | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|------------|----------------|---|-------------|-----------------------|------|----------------|-----------------------|-----------------------|--------------------|
| -<br>-<br>-                         |            |                | (SP-SM) Sand, fine to coarse, with silt and few gravel to 1/2", light brownish gray |             |                       |      | 9<br>14<br>16  | 4.1                   | 107                   | Ring               |
| -<br>-<br>-                         | 40 -       |                | (SM) Silty Sand, fine to medium with coarse, grayish brown                          | Grõundwater | I X I                 | **** | 8<br>11<br>16  | 23.0<br>28.7          | 103                   | Ring               |
| -                                   | 45 -       |                |   | Sand Plug   | $\left \right\rangle$ |      | 5<br>6<br>9    | 25.7                  | 97                    | Ring               |
| -                                   | 50 -       |                |   |             | $\left \right\rangle$ |      | 4<br>9<br>21   | 24.7                  | 99                    | Ring               |
| -                                   | 55 -       |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1", dark olive gray           | Sand Plug   |                       |      | 5<br>11<br>14  | 11.9                  | 115                   | Ring               |
| F                                   | 60 -       |                |   |             | $\left \right\rangle$ | **** | 8<br>15<br>28  | 10.5<br>17.4          | 124                   | Ring               |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | 65 -       |                |   |             | $\mathbf{X}$          |      | 12<br>16<br>21 | 15.4                  | 113                   | Ring               |
| ő                                   | •          | CH             | SLOPE STABILITY INVESTIG<br>13964 EL MONTE ROAD, LAKESIDE,                          |             | RNL                   | A    |                | Job N<br>15383        |                       | Inclosure<br>B-1b  |

Date Drilled: 8/17/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 435

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

| ſ                                   | •          |                |   |                                   | SAMPL |                   | E (%)                  | WT.                   |                           |
|-------------------------------------|------------|----------------|---|-----------------------------------|-------|-------------------|------------------------|-----------------------|---------------------------|
|                                     | DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS                           | DRIVE | BULK BLOWS/6 IN.  | FIELD<br>MOISTURE (%)  | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS        |
| -                                   |            |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1",<br>dark olive gray                |                                   |       | 6<br>10<br>16     | N.R.                   | N.R.                  | Ring                      |
| -                                   | - 75 -     |                | (SM) Silty Sand, fine to medium, with gravel to 2", black                                   | Gravel lens                       |       | 8<br>17<br>25     | 14.4<br>21.3           | 118                   | Ring                      |
| -                                   | - 80 -     |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1",<br>dark yellowish olive           |                                   |       | 18<br>23<br>27    | 9.3<br>10.3            | 149                   | Ring                      |
| -                                   | - 85 -     |                | 2", gray [Consolidated Sediment]  | Very Hard<br>drilling,<br>chatter | ×     | 23<br>50/1'       | 17.9                   | 110                   | Ring                      |
| -                                   | - 90 -     |                |   |                                   |       | 17<br>38<br>50/3' | 18.6                   | 116                   | DS, Ring                  |
| T 9/10/15                           | - 95 -     |                |   |                                   | X     | 50/5'             | 13.5                   | 127                   | Ring                      |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | - 100 -    |                | END OF BORING AT 105.25'<br>NO REFUSAL, NO FILL, NO BEDROCK<br>MODERATE CAVING IN UPPER 10' |                                   |       | 30<br>50/4'       |                        | 115                   | Ring                      |
| 1033                                | <          | CH             | GROUNDWATER AT 40'  |                                   | RNIA  | 50/2'             | N.R.<br>Job N<br>1538. |                       | Ring<br>Enclosure<br>B-1c |

Date Drilled: 8/19/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 440

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

|                                     | DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS | DRIVE        | BULK | BLOWS/6 IN.   | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|------------|----------------|---|---------|--------------|------|---------------|-----------------------|-----------------------|--------------------|
| -                                   | -          |                | (SM) Silty Sand, fine with medium, brown                                    | Native  | $\mathbf{X}$ |      | 2<br>3<br>3   | 2.1<br>2.8            | 92                    | Ring               |
| -                                   | 5 -        |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1", light olive brown |         | $\times$     |      | 4<br>8<br>8   | 1.5                   | Dist.                 | Ring               |
| -                                   | - 10 -     |                |   |         | $\times$     |      | 5<br>9<br>13  | 2.0<br>5.3            | 98                    | Ring               |
| -                                   | 15 -       |                |   |         | $\times$     |      | 6<br>8<br>11  | 3.3                   | 101                   | Ring               |
| -                                   | 20 -       |                | (SM) Silty Sand, fine to medIum, dark grayish brown                         |         | $\times$     |      | 4<br>6<br>7   | 18.0<br>12.4          | 97                    | Ring<br>SA         |
| T 9/10/15                           | 25 -       |                |   |         | $\times$     |      | 4<br>5<br>8   | 19.7                  | 92                    | Ring               |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | 30 -       |                | (SP-SM) Sand, fine to coarse, with silt, light olive brown                  |         | $\times$     |      | 7<br>10<br>17 | 2.7<br>2.8            | 104                   | Ring               |
| ≠∟<br>▲                             | <b>~</b>   | СН             | SLOPE STABILITY INVESTIG<br>13964 EL MONTE ROAD, LAKESIDE,                  |         | RNL          | A    |               | Job N<br>15383        |                       | inclosure<br>B-2a  |

Date Drilled: 8/19/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 440

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

| ( <del>4</del> )                    |     | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS                              | SAM   | PLES | BLOWS/6 IN.   | FIELD<br>MOISTURE (%) | DRY UNIT WT. (pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|-----|----------------|---|--------------------------------------|-------|------|---------------|-----------------------|--------------------|--------------------|
|                                     | DEL | GRA            | (SM) Silty Sand, fine to medium, few clay, olive gray         | REM                                  | DRIVE | BULK |               | USIOW 11.8            | <sup>2</sup> (pcf) | CAB<br>TAB<br>Ring |
| -                                   |     |                |   |                                      |       | **** | 7<br>9<br>11  | 12.0                  |                    |                    |
| - 4                                 | 0 - |                | dark olive gray   | ⊈<br>Groundwater<br>Auger<br>Chatter |       |      | 4<br>7<br>8   | 33.0                  | 88                 | Ring               |
| - 4                                 | -5  |                |   |                                      | X     |      | 6<br>11<br>15 | 21.0<br>19.5          | 100                | DS, Ring           |
| - 5                                 | 0   |                | (SM) Silty Sand, fine to medium, few clay, gray               |                                      | X     | ,    | 2<br>7<br>14  | 27.4<br>27.2          | 95                 | Ring               |
| - 5                                 | 5   |                |   |                                      | X     |      | 3<br>6<br>7   | 35.1                  | 87                 | Ring               |
| -                                   | 0 - |                |   |                                      | X     |      | 3<br>7<br>12  | 30.5                  | 91                 | DS, Ring           |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | 5 - |                | (SP-SM) Sand, fine to coarse, with silt, dark gray            |                                      | X     |      | 6<br>17<br>28 | 22.0                  | 106                | Ring               |
| jö                                  |     | СН             | SLOPE STABILITY INVESTIGA<br>13964 EL MONTE ROAD, LAKESIDE, O |                                      | RNL   | A    |               | Job N<br>15383        |                    | Enclosure<br>B-2b  |

Date Drilled: 8/19/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 440

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

| DEPTH (ft)           | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS               | DRIVE    | BULK | BLOWS/6 IN.    | 6 FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|----------------------|----------------|---|-----------------------|----------|------|----------------|-------------------------|-----------------------|--------------------|
|                      |                | (SP-SM) Sand, fine to coarse, with silt, dark gray  |                       | X        |      | 7<br>12<br>18  | 20.9<br>22.0            | 107                   | Ring               |
| - 75 -<br>- 75 -<br> |                |   | Sand Plug             | $\times$ |      | 10<br>21<br>45 | 24.2                    | 101                   | Ring               |
| - 80 -               |                |   |                       |          |      | 10<br>12       | 13.9                    | 123                   | Ring               |
| <br><br>- 85         |                | (SM) Silty Sand, fine to coarse, with clay and gravel to 2", gray [Consolidated Sediment] | Very Hard<br>Drilling |          |      | 50/5"          | N.R.                    | N.R.                  | Ring               |
|                      |                | END OF BORING<br>NO REFUSAL, NO FILL, NO BEDROCK  |                       | X        | ***  | 50/3"          | N.R.                    | N.R.                  | Ring               |
| <br>- 95 -           |                | SLIGHT CAVING IN UPPER 10'<br>GROUNDWATER AT 42.25'                                       |                       |          |      |                |                         |                       |                    |
|                      | -              |   |                       |          |      |                |                         |                       |                    |
| <b>~</b>             | СН             | SLOPE STABILITY INVESTIG<br>13964 EL MONTE ROAD, LAKESIDE,                                |                       | RNL      | A    |                | Job N<br>15383          |                       | Enclosure<br>B-2c  |

Date Drilled: 8/18/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 448

Driving Weight / Drop / Sampler Size: 140lbs./30in./2.0" O.D. Logged by: VJR Measured Depth to Wat

|                                     | DEPTH (ft) | GRAPHIC<br>LOG  | VISUAL CLASSIFICATION   | REMARKS | DRIVE    | BULK | BLOWS/6 IN. | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|------------|---|---|---------|----------|------|-------------|-----------------------|-----------------------|--------------------|
| -                                   |            |   | (SM) Silty Sand, fine, brown  | Native  | X        |      | 5<br>6<br>5 | 2.6                   |                       | Pass #200,<br>SPT  |
| -                                   | - 5 -      |   | (SP) Sand, fine to coarse, few gravel to 1/2", dark brown                             |         | $\times$ |      | 2<br>2<br>3 |                       |                       | Pass #200,<br>SPT  |
| -                                   | 10 -       | -   |   |         |          |      | 2<br>2<br>2 | 1.9                   |                       | Pass #200,<br>SPT  |
| -                                   | 15 -       | <ul> <li>-</li> <li>-</li></ul> |   |         | X        | ×    | 1<br>2<br>3 |                       |                       | Pass #200,<br>SPT  |
|                                     | - 20 -     | -   |   |         | X        |      | 4<br>4<br>3 |                       |                       | Pass #200,<br>SPT  |
| /10/15                              | - 25 -     | -   | (ML) Sandy Silt, fine with medium, dark brown   |         | X        |      | 3<br>3<br>4 |                       |                       | Pass #200,<br>SPT  |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | - 30 -     |   | (SP-SM) Sand, fine to coarse, with silt and few gravel to 1/2", light yellowish brown |         |          |      | 3<br>5<br>6 |                       |                       | Pass #200,<br>SPT  |
| -                                   | <          | СН  | SLOPE STABILITY INVESTIG.<br>13964 EL MONTE ROAD, LAKESIDE,                           |         | RNI      | A    |             | Job N<br>15383        |                       | Enclosure<br>B-3a  |

Date Drilled: 8/18/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 448

Driving Weight / Drop / Sampler Size: 140lbs./30in./2.0" O.D. Logged by: VJR Measured Depth to Wat

|            |                |   |   |       | PLES | -            | (%)                   |                       |                       |
|------------|----------------|---|---|-------|------|--------------|-----------------------|-----------------------|-----------------------|
| DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS   | DRIVE | BULK | BLOWS/6 IN   | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS    |
|            |                | (SP) Sand, fine to coarse, few gravel to 1/2", light vellowish brown            | Iron Oxide  | X     |      | 3<br>1<br>3  |                       |                       | Pass #200,<br>SPT     |
| - 40 -     |                | (ML) Sandy Silt, fine, with clay, olive brown                                   | Staining  |       |      |              |                       |                       |                       |
|            |                | (ML) Sandy Silt, fine to coarse, with clay and gravel to 1", dark grayish brown | Interbedded<br>sand and silt<br>lerges<br>Groundwater |       |      | 3<br>3<br>2  |                       |                       | DS, Pass<br>#200, SPT |
| - 45 -     |                | (SM) Silty Sand, fine to medium with coarse, grayish brown                      |   |       |      | 3<br>6<br>8  |                       |                       | Pass #200,<br>SPT     |
| - 50 -     |                |   | Interbedded<br>coarse sand<br>lenses                  | X     |      | 4<br>9<br>11 |                       |                       | Pass #200,<br>SPT     |
| - 55 -     |                |   |   | X     |      | 3<br>5<br>5  |                       |                       | Pass #200,<br>SPT     |
| - 60 -     |                | (SM) Silty Sand, fine with medium, black  |   |       |      | 3<br>5<br>5  |                       |                       | Pass #200,<br>SPT     |
| - 65 -     |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1/2", black               | -   |       |      | 4<br>7<br>12 |                       |                       | Pass #200,<br>SPT     |
| <b>~</b>   | СН             | SLOPE STABILITY INVESTIG<br>13964 EL MONTE ROAD, LAKESIDE,                      |   | RNI   | A    |              | Job N<br>15383        |                       | Enclosure<br>B-3b     |

Date Drilled: 8/18/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 448

Driving Weight / Drop / Sampler Size: 140lbs./30in./2.0" O.D. Logged by: VJR Measured Depth to Wat

|                          | DEPTH (ft)           | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS               | DRIVE    | BULK | BLOWS/6 IN.    | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|--------------------------|----------------------|----------------|---|-----------------------|----------|------|----------------|-----------------------|-----------------------|--------------------|
| -                        | -                    |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1/2", black                     | Sand Plug             | X        |      | 2<br>4<br>5    |                       |                       | Pass #200,<br>SPT  |
| -                        | 75                   |                |   |                       | $\times$ |      | 5<br>7<br>10   |                       |                       | Pass #200,<br>SPT  |
| -                        | 80                   |                |   |                       | $\times$ |      | 9<br>10<br>14  |                       |                       | Pass #200,<br>SPT  |
| -                        | 85 -                 |                | (2010) 2010, 2010 10 10 10 10 10 10 10 10 10 10 10 10                                 | /ery Hard<br>Drilling | $\times$ |      | 6<br>9<br>13   |                       |                       | Pass #200,<br>SPT  |
| -                        | 90 -                 |                |   |                       | $\times$ |      | 39<br>43<br>25 |                       |                       | Pass #200,<br>SPT  |
|                          | 95 -                 |                | END OF BORING<br>PRACTICAL REFUSAL ON HARD SOIL<br>NO BEDROCK, NO FILL, SLIGHT CAVING |                       | $\times$ |      | 11<br>12<br>18 |                       |                       | Pass #200,<br>SPT  |
| 83-8.GPJ CHJ.GDT 9/10/15 | -<br>-<br>100 —<br>- |                | GROUNDWATER AT 42.25'   |                       |          |      |                |                       |                       |                    |
|                          | •                    | СН             | SLOPE STABILITY INVESTIGA<br>13964 EL MONTE ROAD, LAKESIDE, O                         |                       |          | A    |                | Job N<br>15383        |                       | Enclosure<br>B-3c  |

Date Drilled: 8/18/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 443

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

|                                     | DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS | DRIVE    | BULK | BLOWS/6 IN.   | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|------------|----------------|---|---------|----------|------|---------------|-----------------------|-----------------------|--------------------|
|                                     | ·          |                | (SM) Silty Sand, fine, brown  | Native  | X        |      | 9<br>15<br>19 | 4.1<br>4.8            | 108                   | Ring               |
|                                     | - 5 -      |                | (SM) Silty Sand, fine to medium, dark yellowish brown   |         |          |      | 5<br>7<br>9   | 5.1                   | 104                   | Ring               |
|                                     | - 10 -     |                |   |         |          |      | 6<br>11<br>11 | 6.3<br>6.4            | 107                   | Ring<br>SA         |
|                                     | - 15 -     |                |   |         |          |      | 4<br>5<br>6   | 4.3                   | 99                    | DS, Ring           |
|                                     | - 20 -     |                | (SP-SM) Sand, fine to coarse, with silt, light yellowish<br>brown<br>(ML) Sandy Silt, fine, few clay, brown |         | $\times$ |      | 6<br>13<br>13 | 16.1                  | Dist.                 | Ring               |
| 9/10/15                             | - 25 -     |                | (SP-SM) Sand, fine to coarse, with silt, light olive brown  |         | X        |      | 5<br>8<br>12  | 1.7                   | Dist.                 | Ring               |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | - 30 -     |                |   |         |          |      | 6<br>8<br>12  | N.R.                  | N.R.                  | Ring               |
| 103;                                | <b>~</b>   | CH             | SLOPE STABILITY INVESTIG.<br>13964 EL MONTE ROAD, LAKESIDE,   |         | RNI      | A    |               | Job N<br>15383        |                       | Enclosure<br>B-4a  |

Date Drilled: 8/18/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 443

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

|                                     | DEPTH (ft) | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS     | DRIVE           | BULK | BLOWS/6 IN.   | E FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|-------------------------------------|------------|----------------|---|-------------|-----------------|------|---------------|-------------------------|-----------------------|--------------------|
| -                                   | -          |                | (SP-SM) Sand, fine to coarse, with silt, light olive brown          | Groundwater |                 |      | 7<br>8<br>11  | 23.2                    | 97                    | Ring               |
| -                                   | - 40 -     |                |   |             | $\boxtimes$     |      | 3<br>6<br>9   | 20.2                    | 100                   | Ring               |
| -                                   | - 45 -     |                |   |             | $\left \right $ |      | 3<br>4<br>9   | N.R.                    | N.R.                  | Ring               |
| -                                   | - 50 -     |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1", dark gray |             | $\left \right $ |      | 5<br>11<br>19 | 14.6                    | 117                   | Ring               |
| -                                   | - 55 -     |                |   |             | $\times$        |      | 4<br>18<br>20 | 13.6                    | 116                   | Ring               |
| 3/10/15                             | - 60 -     |                |   |             | $\times$        |      | 3<br>12<br>13 | 16.6                    | 110                   | Ring               |
| 10331-3 15383-8.GPJ CHJ.GDT 9/10/15 | - 65 -     |                |   |             | $\times$        |      | 7<br>17<br>46 | 17.2                    | 115                   | Ring               |
| ₽<br>L                              | <b>~</b>   | CH             | SLOPE STABILITY INVESTIG.<br>13964 EL MONTE ROAD, LAKESIDE,         |             | RNL             | A    |               | Job N<br>15383          |                       | Enclosure<br>B-4b  |

Date Drilled: 8/18/15

Client: El Monte NP

Equipment: CME75 Truck Rig

Surface Elevation(ft): 443

Driving Weight / Drop / Sampler Size: 140lbs./30in./3.0" O.D. Logged by: VJR Measured Depth to Wat

| DEPTH (ft)     | GRAPHIC<br>LOG | VISUAL CLASSIFICATION   | REMARKS               | DRIVE    | BULK | BLOWS/6 IN.   | FIELD<br>MOISTURE (%) | DRY UNIT WT.<br>(pcf) | LAB/FIELD<br>TESTS |
|----------------|----------------|---|-----------------------|----------|------|---------------|-----------------------|-----------------------|--------------------|
| -              |                | (SP-SM) Sand, fine to coarse, with silt and gravel to 1", dark gray   | Sand Plug             | X        |      | 4<br>4<br>7   | N.R.                  | N.R.                  | Ring               |
| -<br>- 75<br>- |                |   |                       | $\times$ |      | 8<br>23<br>40 | 16.2                  | 115                   | Ring               |
| -<br>- 80<br>- |                |   | Sand Plug             | X        |      | 9<br>12<br>50 | 9.9                   | 126                   | Ring               |
| -<br>- 85<br>- |                | (SM) Silty Sand, fine to medium with coarse, with clay<br>and gravel to 2", dark gray [Consolidated Sediment] | Very Hard<br>Drilling | ×        |      | 50/4"         | 6.1                   | 135                   | Ring               |
| -<br>- 90      |                | END OF BORING   |                       | X        |      | 50            | 10.1                  | 123                   | Ring               |
| -<br>- 95<br>- | -              | NO REFUSAL, NO FILL, NO BEDROCK<br>SLIGHT CAVING IN UPPER 10'<br>GROUNDWATER AT 36.67'                        |                       |          |      |               |                       |                       |                    |
|                |                |   |                       |          |      |               |                       |                       |                    |
|                | CH             | SLOPE STABILITY INVESTIG<br>13964 EL MONTE ROAD, LAKESIDE,  |                       | RNI      | A    |               | Job N<br>15383        |                       | Enclosure<br>B-4c  |

|         |                   |                         |                    |                            | LC               | G O                  | FT             | EST BORING NO. B- 5  |                            |
|---------|-------------------|-------------------------|--------------------|----------------------------|------------------|----------------------|----------------|--|----------------------------|
|         | g Date(s<br>d By: | s):                     |                    | 2 <u>2/98</u><br>LS        | -                | illing Ec<br>ethod/H |                |  | <sup>-</sup> 475'<br>-453' |
| (feet)  | Sample<br>Type    | Blow<br>Count<br>(foot) | Density<br>Density | Moisture<br>Content<br>(%) | Lab<br>Tests     | nscs                 | Graphic<br>Log | MATERIAL DESCRIPTION   |                            |
|         |                   |                         |                    |                            |                  | SM                   |                | TOPSOIL: silty sand, loose, moist, brown.  |                            |
| 2-      |                   |                         |                    |                            |                  | - ŝŵ -               |                | ALLUVIUM (Oal): medium to coarse grained sand, loose, dam<br>gray brown to gray.       | <br>p,<br>-                |
| 6       | <<br>≺<br>н       | 7                       | 98                 | 2.7                        | GS               | ¢.                   |                |  |                            |
| 10-     | B                 | 13                      |                    |                            |                  |                      |                | :Becomes medium grained sand.  |                            |
| 14-<br> | <br>_н            |                         | 95                 | 24.0                       | <br>GS           | SM-SP                |                | (Qal): very silty fine grained micaceous sand, loose to medium dense, wet, gray brown. |                            |
| 8-      |                   |                         |                    |                            |                  |                      |                | :Becomes fine grained micaceous sand with silt.  |                            |
| 2-      | <u> </u>          | 16                      | -                  |                            |                  |                      |                | End of boring at -21 ft.<br>No free water encountered.                                 |                            |
| 4-      |                   |                         |                    | -                          |                  |                      |                |  |                            |
|         | inergy D          | W<br>D                  | /eight<br>rop      | ;                          | 140 lb<br>30 in. | <b>S</b> .           |                |  |                            |
| ease    |                   |                         |                    |                            |                  | 14                   |                | Explanation of Logs"<br>ate: May, 1998 Project No.: 97157-01                           |                            |
|         | G                 | GINEE                   | RING               | ASSOC<br>Consu             | lATES            | INC.                 |                | Log of Test Boring No. B- 5<br>El Monte Golf Course                                    | Plate<br>B6<br>1 of 1      |

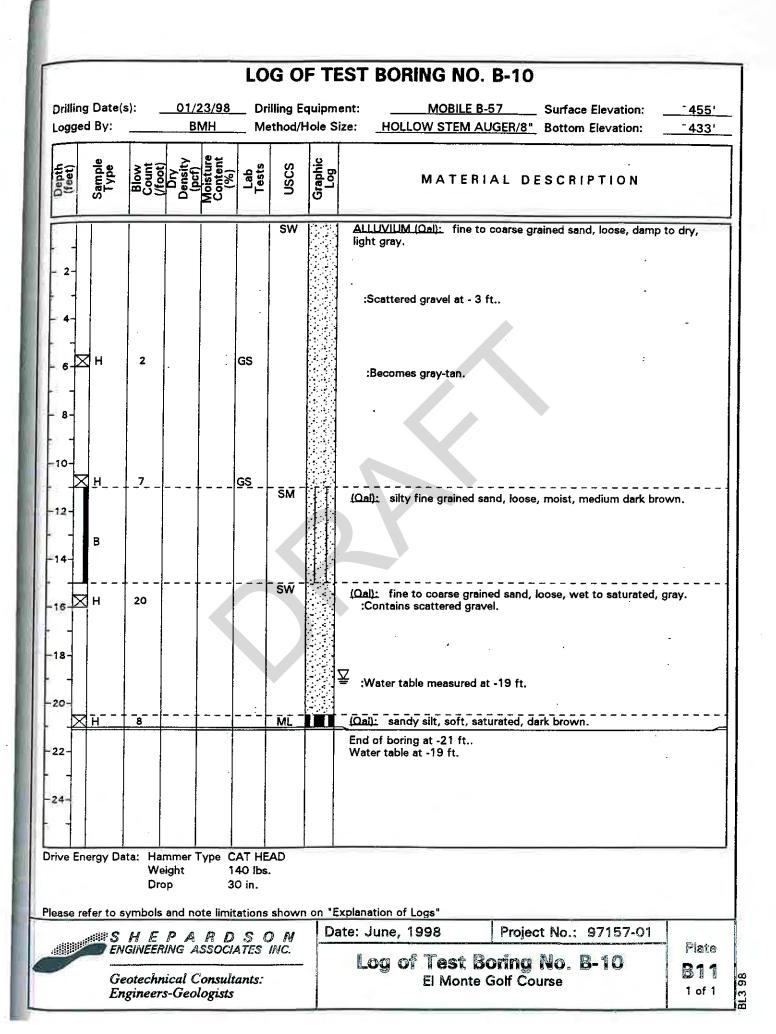
and a stark and the

|                                   |                          |                         |                            | LO               | GO                  | FT             | EST BORING NO. B- 6   |
|-----------------------------------|--------------------------|-------------------------|----------------------------|------------------|---------------------|----------------|---|
| Drilling Date<br>Logged By:       | e(s): _                  |                         | 2/98<br>LS                 |                  | illing Ec<br>thod/H |                |   |
| Depth<br>(feet)<br>Sample<br>Type | Blow<br>Count<br>(/foot) | Dry<br>Density<br>(pcf) | Moisture<br>Content<br>(%) | Lab<br>Tests     | nscs                | Graphic<br>Log | MATERIAL DESCRIPTION  |
| - 2-                              |                          |                         |                            |                  | ร์M<br>รีฬ-รีพี     |                | TOPSOIL: silty sand, loose, moist, brown.<br>ALLUVIUM (Oal): fine grained micaceous sand to silty sand, loose,<br>gray brown. |
|                                   | 9                        | 105                     | 4.6                        | GS               | - ŝŵ -              |                | c(Ωal): fine to coarse grained sand, loose, damp, gray.   |
| 10-<br>- X H<br>-12-<br>14-       | 11                       |                         |                            |                  |                     |                |   |
| -16 XH                            | 14                       |                         |                            | GS               |                     |                | Becomes medium to coarse grained sand.  |
| -18-<br><br>-20-                  |                          | -                       |                            |                  |                     |                | :Becomes fine to medium grained sand.   |
| -22-<br>24-                       | 15                       | •                       |                            |                  |                     |                | End of boring at -21 ft.<br>No free water encountered.  |
| Drive Energy                      |                          | veight<br>Prop          | :                          | 140 lb<br>30 in. | <b>IS.</b>          | <u> </u>       | *Exclanation of Logs*   |
|                                   | S H                      |                         |                            |                  |                     |                | "Explanation of Logs"<br>Date: May, 1998 Project No.: 97157-01  |
|                                   | Geoteci<br>Engine        | RING<br>Innical         | ASSOC<br>Consu             | ltants           | S INC.              |                | Log of Test Boring No. B- 6<br>El Monte Golf Course 1 of 1  |

|  | LOG OF  | TEST BORING NO. B- 7  |   |
|--|---|---|---|
| Drilling Date(s): _<br>Logged By:          | 01/22/98 Drilling Equip   |   |   |
| Depth<br>(feet)<br>Type<br>Blow<br>(foount |   | MATERIAL DESCRIPTION  |   |
| - 2-                                       | SW  | <u>ALLUVIUM:</u> fine grained micaceous silty sand to sand, loose, moist<br>to wet, gray brown to olive.  |   |
| - 6-XH 11                                  | GS  | :Becomes fine to coarse grained sand and drier.   |   |
| -10-<br>B<br>H<br>16<br>-12-<br>-14        |   | :Becomes damp.  |   |
| -16-X H 10<br>-18-<br>                     |   | :Becomes moist.<br>:Becomes fine to medium grained.   |   |
| -20-<br>-22-<br>                           |   | Becomes very wet to saturated.<br>End of boring at -21 ft.<br>Free intergranular moisture at bottom of boring, near the water<br>table.                   | - |
| v  | iammer Type CAT HEAD<br>Veight 140 lbs.<br>Drop 30 in.  | an "Explanation of Long"  |   |
| Geotect                                    | Is and note limitations shown of<br>E P A R D S O N<br>ERING ASSOCIATES INC.<br>hnical Consultants:<br>ers-Geologists | Date: May, 1998       Project No.: 97157-01         Log of Test Boring No. B- 7       Plat         El Monte Golf Course       Bar         1 of       1 of | 8 |

| Drilling<br>_oggee  | Date(<br>d By: | s):                        |             | <u>22/98</u><br>(LS | Di              | DG O<br>rilling Ed<br>ethod/H | quipm          |   |
|---------------------|----------------|----------------------------|-------------|---------------------|-----------------|-------------------------------|----------------|---|
| (feet)              | Sample<br>Type | Blow<br>Count              | Density     | Moisture<br>Content | Lab<br>Tests    | uscs                          | Graphic<br>Log |   |
| 2-                  |                |                            |             |                     |                 | SW                            |                | ALLUVIUM (Qal): medium to coarse grained sand, loose, medium dense, gray. |
| 4-<br>6-<br>8-      | Н              | 10                         | 103         | 2.9                 | GS              | *                             |                | -<br>Occasional scattered small gravel.                                   |
| -<br>0-<br>2-<br>4- | Н              | 15                         |             |                     | GS              |                               |                | :Becomes fine to coarse grained sand.                                     |
| -<br>5 X            | н              | 12                         |             |                     |                 |                               |                | ₩ :Water table measured at -15.4 ft.                                      |
|                     | H              | 11                         |             |                     |                 |                               |                | :Becomes very coarse grained sand.  |
| 2-<br>-<br>+-       |                |                            |             |                     |                 |                               |                |   |
|                     | ergy Da        | We<br>Dr                   | eight<br>op | 1<br>3              | 40 lbs<br>0 in. | •                             |                | xplanation of Logs"   |
|                     |                |                            |             |                     |                 |                               |                | te: May, 1998 Project No.: 97157-01                                       |
|                     |                | dinEEr<br>otechr<br>gineer | nical C     | onsult              | anis:           | INC.                          |                | Log of Test Boring No. B- 8<br>El Monte Golf Course 1 of 1                |

|                                 |  | LOG OF                | OF TEST BORING NO. B- 9   |
|---------------------------------|--|-----------------------|---|
|                                 | 01/23/98   |                       |   |
| Logged By:                      | BMH  | Method/Ho             | Hole Size: HOLLOW STEM AUGER/8" Bottom Elevation:435'   |
| Depth<br>(feet)<br>Type<br>Blow | (10001)<br>Dry<br>Density<br>(pcf)<br>Moisture<br>Content<br>(%) | Lab<br>Tests<br>USCS  | MATERIAL DESCRIPTION  |
| 2-                              |  | SW                    | ALIUVIUM (Oal): fine to coarse grained sand, loose, damp, light gray. Contains gravel at -1 ft.   |
|                                 |  |                       | : Layer of 1 " gravels at -3 ft.  |
|                                 |  | GS                    |   |
| 10<br>H 12<br>12-               |  |                       | :Becomes moist.<br>: 1" diameter gravels present between -11 ft. and -12ft  |
| -14-<br>-16 H 20                |  | GS <sup>−</sup> SM-SW | Becomes coarser grained, micaceous.<br>[Qal]: fine to medium grained sand to silty sand, medium dense to<br>loose, wet to saturated, medium gray. |
| -18-<br>                        |  |                       |   |
| -22-                            |  |                       | Water standing at -22.8 ft End of boring at -21 ft. Water table at -22.8 ft.  |
| -24-                            |  |                       |   |
| C                               | Veight 1<br>Drop 3   | 40 lbs.<br>10 in.     | n on "Explanation of Logs"  |
|                                 |  |                       | Date: May, 1998 Project No.: 97157-01   |
| Geoteci                         | E P A R D<br>ERING ASSOCI<br>Innical Consult<br>ers-Geologists   | ATES INC.             | Log of Test Boring No. B- 9<br>El Monte Golf Course 1 of 1  |



| -              |                |                            | _           |                     | LO               | G OI        | F TES          | T BORING NO. B-1                                  | 1                            |                        |
|----------------|----------------|----------------------------|-------------|---------------------|------------------|-------------|----------------|---|------------------------------|------------------------|
|                | ng Date(       | s):                        |             | <u>23/98</u>        |                  |             | juipment       |   | Surface Elevation:           | - 453'                 |
| _ogg(          | ed By:         |                            | BM          | HKLS                | Me               | ethod/H     | ole Size       | HOLLOW STEM AUGER/8                               | Bottom Elevation:            | - 431'                 |
| (feet)         | Sample<br>Type | Blow<br>Count              | Density     | Moisture<br>Content | Lab<br>Tests     | uscs        | Graphic<br>Log | MATERIAL  | DESCRIPTION                  |                        |
| =              |                |                            |             |                     | T                | SM-SW       |                | ALLUVIUM (Oal): medium to co                      | arse grained sand, loose, m  | noist,                 |
| 2-             |                |                            |             |                     |                  |             |                | vellow brown.<br>:Becomes interlayered with silty | · sand.                      | -                      |
| 6<br>8         | Кн             | 10                         | 104         | 6.5                 | GS               |             |                |   |                              |                        |
| 0-<br>2-<br>4- | ⊴н             | 7                          | 94          | 4.2                 | GS               |             | ti             | :Becomes light gray. Interlayere                  | d silty sand layers are 1" t | :o 2"                  |
| 6<br>          | ₫н             | 14                         |             |                     |                  |             | ₹              | :Water table measured at -18.6                    | īt                           |                        |
| P              | ₫н             | 20                         |             |                     |                  |             |                |   |                              |                        |
| 2-<br>-<br>4-  |                | P                          |             | -                   |                  |             |                | nd of boring at -21 ft<br>/ater table at -18.6 ft |                              |                        |
|                | nergy Da       | We<br>Dre                  | eight<br>op | 1<br>3              | 40 lbs.<br>0 in. |             | on "Expla      | mation of Logs"                                   |                              |                        |
|                | EN             |                            |             |                     |                  |             | 1              |   | ect No.: 97157-01            | - P01 - A              |
|                | Ge             | GINEEF<br>otechr<br>gineer | uical C     | onsuli              | ants:            | <i>INC.</i> |                | Log of Test Boring<br>El Monte Golf C             | NO. B-11<br>ourse            | Plate<br>B12<br>1 of 1 |

| ··· ··· ·                                   | LO   | G OF TES                             | T BORING NO. B-12   |
|---|--|--------------------------------------|---|
| Drilling Date(s):<br>Logged By:             |  | rilling Equipment<br>ethod/Hole Size |   |
|   | Blow<br>Count<br>(/foot)<br>Dry<br>Density<br>(pcf)<br>Moisture<br>Content<br>(%)<br>Tests | USCS<br>Graphic<br>Log               | MATERIAL DESCRIPTION  |
| 2-<br>- 2-<br>B                             | GS   | SW                                   | ALLUVIUM (Qal): fine to coarse grained sand, loose, damp, light<br>gray. Contains scattered 1" diameter gravel. |
| - 4-<br>6-XH                                | 12   |                                      | :Contains 1" size gravel between -5 ft. and -6 ft.  |
| - 8-<br>- 10-<br>- X H<br>-12-              | 8 GS   |                                      | :Below -11 ft. contains thin layers or lenses of dark brown silt.   |
| -14-<br><br>-16- <sup>X</sup> H<br><br>-18- | 17   | Ţ                                    | :Water table measured at -16.8 ft.  |
| <br>-20-<br>X H                             | 26   |                                      | :Becomes coarse grained sand.   |
| -22-  |  |                                      | End of boring at -21 ft.<br>Water table measured at -16.8 ft.   |
|   | a: Hammer Type CAT H<br>Weight 140 lb<br>Drop 30 in.<br>mbols and note limitation          | os.                                  | planation of Logs"  |
|   | H E P A R D S<br>GINEERING ASSOCIATES  | O N Dat                              | e: May, 1998 Project No.: 97157-01 Plate  |
|   | otechnical Consultants<br>gineers-Geologists   | •                                    | El Monte Golf Course 1 of 1   |

|                 | g Datei<br>d By: | (s):                    |                        | 23/98<br>MH                |                             | illing E<br>ethod/H |                |  | <u>447'</u><br>425' |
|-----------------|------------------|-------------------------|------------------------|----------------------------|-----------------------------|---------------------|----------------|--|---------------------|
| Uepth<br>(feet) | Sample<br>Type   | Blow<br>Count<br>(foot) | Dry<br>Density         | Moisture<br>Content<br>(%) | Lab<br>Tests                | nscs                | Graphic<br>Log | MATERIAL DESCRIPTION   |                     |
| -               | 1                | 1                       |                        | <u> </u>                   |                             | SW                  |                | ALLUVIUM (Oal): fine to coarse grained sand, loose, damp, y                    | rellow              |
| 2-              | •                |                         |                        |                            |                             |                     |                | brown.   |                     |
| 4-<br>6-2       | ∠н               | 6.                      | 103                    | 2.2                        | GS                          |                     |                |  | -                   |
| 8-              |                  | +                       |                        | <br>                       |                             | Ī ŠŴĪ               |                | (Oal): fine to coarse grained micaceous sand, loose, damp to                   |                     |
| -<br>-0         |                  |                         |                        |                            |                             |                     |                | saturated, orange brown.<br>Becomes medium brown with scattered blebs of silt. |                     |
| 2               | ⊈н               | 9                       | 114                    | 1.4                        | GS                          |                     |                |  |                     |
| 4-              |                  |                         |                        |                            |                             |                     |                |  |                     |
|                 | Сн               | 6                       |                        |                            |                             |                     |                |  |                     |
| 6               |                  |                         |                        |                            |                             |                     |                | ,  |                     |
| 8-              |                  |                         |                        |                            |                             |                     |                | ≚ :Water table measured at -18.8 ft.   |                     |
| 5               | Сн               | 10                      |                        |                            |                             |                     |                | :Contains little to no silt.   |                     |
| 2-<br>-         | <u>*-:</u>       |                         |                        |                            |                             |                     |                | End of boring at -21 ft.<br>Water table at -18.8 ft.                           |                     |
| 4-              |                  |                         |                        |                            |                             |                     |                |  |                     |
| ve E            | nergy C          |                         | ammer<br>leight<br>rop | •                          | CAT HE<br>140 lbs<br>30 in. |                     |                |  |                     |
|                 |                  |                         |                        |                            |                             |                     |                | Explanation of Logs"<br>ate: May, 1998 Project No.: 97157-01                   |                     |
|                 | E                | S H E<br>NGINEE         | RING J                 | ASSOC                      | iates                       | UNC.                |                | <u>,</u>   | Plate               |
|                 | -                |                         |                        | . <u> </u>                 |                             |                     | -              | Log of Test Boring No. B-14  | 815                 |

|                              |                    |                         |  | LO                | g of           | OF TEST BORING NO. B-15   |
|------------------------------|--------------------|-------------------------|--|-------------------|----------------|---|
|                              | ig Date(<br>ad By: | s):                     | 01/23/98<br>BMH                                |                   |                | Equipment: <u>MOBILE B-57</u> Surface Elevation: <u>*436'</u><br>/Hole Size: <u>HOLLOW STEM AUGER/8*</u> Bottom Elevation: <u>*414'</u> |
| Depth<br>(feet)              | Sample<br>Type     | Blow<br>Count<br>(foot) | Density<br>(pcf)<br>Moisture<br>Content<br>(%) | Lab<br>Tests      | []             | Did MATERIAL DESCRIPTION  |
| - 2-                         |                    |                         |  |                   | SW             | ALLUVIUM (Oal): fine to medium grained slightly silty sand, loose, medium brown.  |
| - 6                          | н<br>В             | 7                       | * - +  | GS                | - <b>s</b> ŵ - | <u>(Ωai):</u> medium to coarse grained sand, loose, moist, brownish gray<br>to olive gray.  |
| -10-<br>-12-<br>-12-<br>-14- | ⊴н                 | 13                      |  | GS                |                |   |
| - 16-2                       | <u>с</u> н         | 74                      |  |                   | Ŝ₩ -           | (Oal): silty fine grained sand, loose, moist, olive gray.   |
| -20-                         | Zн                 | 9                       |  |                   |                | Contains some silt lenses.<br>Becomes wet.  |
| -22-                         |                    |                         |  |                   |                | End of boring at -21 ft.<br>No free water encountered.  |
|                              | -                  | Weig<br>Drop            | 3  | 40 lbs.<br>10 in. |                | n on "Explanation of Logs"  |
|                              |                    | HEF                     | <sup>»</sup> A R D<br>IG ASSOCI                | ) S (             | ) N            | Date: May, 1998 Project No.: 97157-01<br>Plate Plate  |
|                              |                    |                         | cal Consul<br>Geologists                       |                   |                | El Monte Golf Course 1 of 1   |

|                           |                                       |  | LO              | G OF       | F TEST BORING NO. B-16  |
|---------------------------|---------------------------------------|--|-----------------|------------|---|
| Drilling Da               | e(s):0                                | 1/26/98  | _ Dri           | illing Equ | uipment:MOBILE B-57 Surface Elevation:447'  |
| Logged By                 |                                       | BMH  | _ Me            | ethod/Ho   | ole Size: <u>HOLLOW STEM AUGER/8"</u> Bottom Elevation: <u>371'</u>               |
| Depth<br>(feet)<br>Sample | Blow<br>Count<br>(foot)<br>Dry<br>Dry | Content<br>(pcf)<br>Moisture<br>Content<br>(%) | Lab<br>Tests    | uscs       | MATERIAL DESCRIPTION  |
|                           |                                       |  |                 | SM         | TOPSOIL/ALLUVIUM (Oal): silty fine grained sand, loose, medium dense, silty sand. |
| - 2-                      |                                       |  |                 |            |   |
| - 4                       |                                       |  |                 | - sw -     | ALLUVILIM (Qal): fine to coarse grained sand, loose, dry, brown                   |
| - 6 × н                   | 7                                     | , e  | GS              |            | gray.   |
| - 8-                      |                                       |  |                 |            |   |
| 10-                       |                                       |  |                 |            |   |
| - ZH                      | 8                                     |  | GS              |            |   |
| -12-                      |                                       |  |                 |            |   |
| -14-                      |                                       |  |                 |            |   |
| -16-XH                    | 13                                    |  |                 |            | :Becomes coarser grained.   |
| -18-                      |                                       |  |                 |            |   |
| -20-                      |                                       |  |                 |            |   |
| – 22–                     | 18                                    |  |                 |            |   |
| -24-                      |                                       |  |                 |            |   |
| -26-                      |                                       |  |                 |            |   |
| ╞╶┥┥╸                     |                                       |  |                 | ริพี รีพี  |   |
| -28-                      |                                       |  |                 |            | ¥wet to saturated, gray brown. :Water table measured at -28.2 ft.                 |
| -30-                      |                                       |  |                 | -          |   |
| -32                       | - +                                   |  |                 | - ŝŵ -     | (Oal): fine to coarse grained sand, loose to medium dense,                        |
| -34-                      |                                       |  |                 |            | saturated, gray. Contains occasional small amounts of gravel.                     |
| - 36-                     |                                       |  |                 |            |   |
| - 38-                     |                                       |  |                 |            |   |
|                           |                                       |  |                 |            |   |
| Drive Energ               | / Data: Hamm<br>Weigh                 |  | AT HI<br>40 ibs |            |   |
|                           | Drop                                  | 3  | O in.           |            |   |
|                           |                                       |  |                 |            | Date: May, 1998 Project No.: 97157-01   |
|                           | SHEP<br>ENGINEERING                   | A R D<br>3 ASSOCI                              | S (<br>ATES     | ON<br>INC. | Plate   |
|                           | Geotechnica<br>Engineers-G            |  |                 |            | Log of Test Boring No. B-16<br>El Monte Golf Course 1 of 2                        |

|        | g Date(<br>d By: | s):                     |               | 26/98<br>MH                | Drilli       | G OF<br>ing Equ<br>hod/Ho | ipm  |  |
|--------|------------------|-------------------------|---------------|----------------------------|--------------|---------------------------|------|--|
| (feet) | Sample<br>Type   | Blow<br>Count<br>(foot) | Density       | Moisture<br>Content<br>(%) | Lab<br>Tests | USCS<br>Grathia           |      | MATERIAL DESCRIPTION   |
|        |                  |                         |               |                            |              |                           |      | [Ωal]: fine to coarse-grained sand, loose to medium dense,<br>saturated, gray. Contains occasional small amounts of gravel<br>(Ωal]: fine to coarse-grained sand, loose to medium dense,<br>saturated, gray. Contains occasional small amounts of gravel |
| ref    | er to syr        | Weig<br>Drop<br>mbols a | ght<br>nd not | 140<br>30<br>e limitat     |              | G                         | "Exp | End of boring at -75 ft.<br>Water table measured at -28.2 ft.<br>Definition of Logs"<br>a: May, 1998 Project No.: 97157-01   |

|   |                   |                          |                         |                            | 10              |           | = Ŧ            | EST BORING NO. B-17  |
|---|-------------------|--------------------------|-------------------------|----------------------------|-----------------|-----------|----------------|--|
|   | g Date(<br>ed By: | s): _                    |                         | 26/98<br>MH                | Di              | illing Ec | luipn          | nent: MOBILE 8-57 Surface Elevation:   |
| Depth<br>(feet)                                   | Sample<br>Type    | Blow<br>Count<br>(/foot) | Dry<br>Density<br>(ncf) | Moisture<br>Content<br>(%) | Lab<br>Tests    | USCS      | Graphic<br>Log | MATERIAL DESCRIPTION   |
|   | в                 |                          |                         |                            |                 | SM        |                | ALLUVIUM (Oai): silty fine grained sand, loose, moist, medium dense.                                     |
| - 4   | ×                 | 8                        | 1<br>74                 | 5.3                        | GS              | ¯ŜΜ¯,     |                | Ωal: silty fine grained micaceous sand, loose, dry, medium brown.<br>Contains organic fragments, porous. |
| - 6   | ≤н<br>            | 10                       |                         |                            |                 | ŜŴ-ŴĒ     |                | Ωal: interbedded silt and sand, loose, dry, light gray to medium brown with orange staining, porous.     |
| -12-<br>-<br>-<br>14-                             | ≤ H               | - 21 -                   |                         |                            | GS              | ŜŴ-ŜŴ     |                | (Ωal): clean sand with interbeds of silty sand, loose, dry, light gray.                                  |
| -16-2<br>-16-2                                    | <br>≤н            | 14                       |                         |                            | <b></b>         | ŜŴ-ŜP     |                | (Qal): medium to coarse grained sand, loose, dry, light gray.  |
| 20-<br>22-<br>22-                                 | ≤н                | 15                       | •                       |                            |                 |           |                | :Becomes mostly fine grained sand, damp to moist.<br>:Becomes fine to coarse grained sand, wet.          |
| 24-<br>26-<br>28-                                 | ≤ H               | 18                       |                         |                            |                 |           |                | ♀ :Water table measured at -27.6 ft.   |
| 30<br>  | ss                | 19                       |                         |                            |                 |           |                |  |
| 34-<br>-<br>36-                                   |                   |                          |                         |                            |                 |           |                |  |
| -38   |                   |                          |                         |                            |                 |           | -              | :Becomes medium gray.  |
|   | nergy Da          | We<br>Dro                | eight<br>op             | 1<br>3                     | 40 lbs<br>0 in. |           |                | · ·  |
| lease i   |                   | HE                       | PA                      | RD                         | S (             | ) N       | 1              | Explanation of Logs"<br>ate: May, 1998 Project No.: 97157-01   |
| Geotechnical Consultants:<br>Engineers-Geologists |                   |                          |                         |                            |                 |           |                | Log of Test Boring No. B-17<br>El Monte Golf Course 1 of 2   |

|   | <u></u>            |                          |                         |                            | 10                |           | F TF   | ST BORING NO. B-17  |
|---|--------------------|--------------------------|-------------------------|----------------------------|-------------------|-----------|--|---|
|   | g Date(s<br>ed By: | s):                      |                         | 26/98_<br>MH               | _ Dri             | illing Ec | quipme                                       | ent:MOBILE B-57Surface Elevation:470'   |
| (feet)  | Sample<br>Type     | Blow<br>Count<br>(/foot) | Dry<br>Density<br>(pcf) | Moisture<br>Content<br>(%) | Lab<br>Tests      | nscs      | Graphic<br>Log                               | MATERIAL DESCRIPTION  |
| 42-   | ss                 | 18                       |                         |                            |                   | 1         |  | (Qal): medium to coarse-grained sand, medium dense, saturated,<br>dry, light gray |
| 44 -<br>46 -<br>48 -                              |                    |                          |                         |                            |                   | -         |  |   |
| 50-<br>52-<br>54-                                 | ss                 | 19                       |                         |                            |                   |           |  | :Contains dark gray to black silt interbeds.                                      |
| 56-<br>58-<br>50-<br>52-<br>54-<br>56-2           | Ss                 | 20                       |                         |                            |                   |           |  | :Laminated layers of fine to very fine grained sand, dark gray.                   |
| 8-<br>-<br>0-<br>-<br>2-<br>-<br>4-               |                    |                          | -                       |                            |                   |           |  |   |
| 8-  | <u>ss</u>          | 47                       | -                       |                            |                   |           |  | End of boring at -76.5 ft.<br>Water table measured at -27.6 ft.                   |
|   | Energy D           | W<br>Dr                  | eight<br>op             | 1                          | 140 lbs<br>30 in. | 5.        | <u>.                                    </u> |   |
| ase   |                    |                          |                         |                            |                   |           |  | Explanation of Logs"<br>ate: May, 1998 Project No.: 97157-01                      |
| Geotechnical Consultants:<br>Engineers-Geologists |                    |                          |                         |                            |                   |           |  | Log of Test Boring No. B-17<br>El Monte Golf Course 2 of                          |

| )rillin   | g Date(s       | s):                     | 01/:                    | 28/98                      | Dri          | lling Ed | quipme                            | ent:JEEP R   | liG                        | _ Surface Elevation: _                               | <sup>-</sup> 437'                      |
|-----------|----------------|-------------------------|-------------------------|----------------------------|--------------|----------|-----------------------------------|--|----------------------------|--|--|
|           | d By:          |                         | Bi                      | мн                         |              |          | lole Si                           |  |                            | _ Bottom Elevation: _                                | <sup>-</sup> 415'                      |
| (feet)    | Sample<br>Type | Blow<br>Count<br>(foot) | Dry<br>Density<br>(pcf) | Moisture<br>Content<br>(%) | Lab<br>Tests | nscs     | Graphic<br>Log                    | MATER  | RIAL D                     | ESCRIPTION   |  |
| ╤┿        |                | 1                       | <u> </u>                | <u>I</u>                   | <u> </u>     | SM       |                                   | TOPSOIL/ALLUVIUM 2:                                | silty fine                 | grained sand, loose, moist,                          | ······································ |
| - 2-      |                |                         |                         |                            | GS           |          |                                   | medium to dark brown.                              | ,                          |  |  |
|           |                |                         |                         |                            |              | -        |                                   |  |                            | -  | -                                      |
| 4-        | В              |                         | -                       |                            |              |          |                                   |  |                            | :  | -                                      |
| +<br>• 6- | - <b>J</b><br> |                         |                         |                            |              |          |                                   |  |                            | :  |  |
| -         |                |                         |                         |                            |              |          |                                   |  |                            |  |  |
| · 8+      | Ъ              | +                       |                         | + <b></b> -                |              | Ĩ ŜŴ Î   |                                   | ALLUVIUM: medium to<br>to brownish gray. Conta     | o coarse gr<br>ains scatte | rained sand, loose, moist, ye<br>red 1" size gravel. | eliow                                  |
| 10        |                |                         |                         |                            |              |          |                                   |  |                            |  |  |
| 12-       | в              |                         |                         |                            | GS           |          |                                   |  |                            |  |  |
| 14-       |                |                         |                         |                            |              |          |                                   |  |                            |  |  |
| +         | ļ              |                         |                         |                            |              |          |                                   |  |                            |  |  |
| 16        | 1              |                         |                         |                            |              |          |                                   |  |                            |  |  |
| 18-       | в              |                         |                         |                            |              |          |                                   | ,  |                            | · ·  |  |
| 20        |                | <i>6</i> .              |                         |                            |              |          |                                   |  |                            |  |  |
| -         |                |                         |                         |                            |              |          |                                   | End of boring at -20 ft.<br>No free water encounte | red.                       |  |  |
| 22-       |                |                         |                         |                            |              | -        |                                   |  |                            |  |  |
| 24-       |                |                         |                         |                            |              |          |                                   |  |                            |  |  |
| -         |                |                         |                         |                            |              |          |                                   |  |                            |  |  |
| rive f    | nergy D        | W                       | ammer<br>eight<br>rop   |                            | lbs.<br>in.  |          |                                   |  |                            | <u></u>  |  |
| lease     | refer to       |                         |                         |                            |              | s show   | n on "F                           | Explanation of Logs"                               |                            |  |  |
| auto      |                |                         |                         |                            |              | -        |                                   | ate: May, 1998                                     | Proj                       | ect No.: 97157-01                                    | Plate                                  |
| 4141      |                |                         |                         |                            |              |          | - Log of lest boring No. B-18 R1G |  |                            |  |  |
|           |                | eotech                  | mcal (<br>rs-Geo        |                            |              |          | El Monte Golf Course 1 of 1       |  |                            |  |  |

| xunocy<br>31<br>30<br>44<br>16<br>21<br>21 |   | MH<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor<br>autor | M  | sw<br>GM<br>SW   | Graphic   |   |
|--|---|--|--|--|---|---|
| 31<br>30<br>44<br>16<br>21                 | 119   | 10.9<br>14.1   | Lab<br>Tests   | SW<br>. GM   |   | ALI UVIUM (Oal): well-graded sand, fine to medium -grained, loose<br>humid, light gray<br>Oal: gravely sand, medium dense, moist, light gray, contains 1"<br>rounded gravels<br>Oal: well-graded sand, medium dense, moist, light gray; contains<br>scattered 3/4" gravel |
| 30<br>44<br>16<br>21                       | 116<br>113  | 10.9<br>14.1   |  | . GM   |   | humid, light gray         Ωal: gravelly sand, medium dense, moist, light gray, contains 1"         rounded gravels         Ωal: well-graded sand, medium dense, moist, light gray; contains scattered 3/4" gravel         Y         water table at 16.5 feet              |
| 30<br>44<br>16<br>21                       | 116<br>113  | 10.9<br>14.1   |  |  |   | Ωal: gravelly sand, medium dense, moist, light gray, contains 1"         rounded gravels         Ωal: well-graded sand, medium dense, moist, light gray; contains scattered 3/4" gravel         Y         water table at 16.5 feet  |
| 30<br>44<br>16<br>21                       | 116<br>113  | 10.9<br>14.1   |  | SW   |   | Tounded gravels<br>Ωal: well-graded sand, medium dense, moist, light gray; contains<br>scattered 3/4" gravel<br>water table at 16.5 feet  |
| 44<br>16<br>21                             | 113   | 14.1   |  |  |   |   |
| 16<br>21                                   |   |  |  |  |   |   |
| 21   | 112   | 18.2   |  |  |   |   |
|  |   |  |  |  |   |   |
| 21   |   |  |  |  |   | :well-graded sand, medium dense, saturated, medium gray, contains interlayered fine and coarse sand   |
|  |   |  |  |  |   | :1 to 4 inch layers of silt, to 32 feet   |
| 20   |   |  |  |  |   | :well-graded sand, minor amounts of silt and gravel, medium dense, saturated, light gray  |
| 23   |   |  |  |  |   |   |
|  | :   |  |  |  |   | ALLUVIUM (Qai): well-graded sand, medium dense, saturated, medium gray  |
| 10   |   |  |  |  |   | :becomes loose  |
|  |   |  |  |  |   |   |
| We   | ight  | 14   | 10 ibs.  |  | <u>:::</u>  |   |
| mbols                                      | and no  | te limita  | ations   | shown  |   |   |
| H E<br>Sineeri                             | P A<br>ING AS                                     | R D<br>ssocia  | S O  | N<br>NC:   | Dat   | te: May, 1998 Project No.: 97157-01 Pla<br>Log of Test Boring No. B-19 Pla  |
|  | 10<br>a: Har<br>We<br>Dro<br>mbols<br>H E<br>WEER | 10<br>a: Hammer T<br>Weight<br>Drop<br>mbols and no<br>M E P A<br>WREERING A.  | 10<br>a: Hammer Type Ca<br>Weight 14<br>Drop 30<br>mbols and note limita<br>H E P A R D<br>WEERING ASSOCIA | 10<br>a: Hammer Type Cable wi<br>Weight 140 lbs.<br>Drop 30 in.<br>Thools and note limitations<br>H E P A R D S OF<br>INFERING ASSOCIATES I<br>Difference of the second se | 10<br>a: Hammer Type Cable winch<br>Weight 140 lbs.<br>Drop 30 in.<br>The properties of the second<br>International consultants in the second<br>International consultants: | 10<br>a: Hammer Type Cable winch<br>Weight 140 lbs.<br>Drop 30 in.<br>Theols and note limitations shown on "Ex-<br>H E P A R D S O N<br>WHEERING ASSOCIATES INC.<br>Discrete consultants:   |

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|                                      |   |                            | LO               | G OF        | TE   | ST BORING NO. B-19   |            |  |  |  |  |
|--------------------------------------|---|----------------------------|------------------|-------------|--|--|------------|--|--|--|--|
| Drilling Date(s)                     | ):02/   | 10/98                      | Dri              | lling Equ   | ipme   | nt:  | <u>57'</u> |  |  |  |  |
| Logged By:                           |   | MH                         | _ Me             | thod/Ho     | le Siz   | e: <u>WASH BORING/3.5</u> Bottom Elevation: <u>34</u>  | <u>47'</u> |  |  |  |  |
| Depth<br>(feet)<br>Sample<br>Type    | Blow<br>Count<br>(/foot)<br>Dry<br>Density      | Moisture<br>Content<br>(%) | Lab<br>Tests     | USCS        | Log  | S MATERIAL DESCRIPTION   |            |  |  |  |  |
|                                      | 22  |                            |                  |             |  | :medium dense  |            |  |  |  |  |
| -60-<br>-62-<br>-64-<br>-66-         |   |                            | -                |             |  |  |            |  |  |  |  |
| -70-<br>-72-<br>-74-<br>-76-         | 42  |                            |                  |             |  | :medium-grained sand with silt, poorly graded, dense, saturated, dark gray   |            |  |  |  |  |
| -78<br>-80-                          | 15  | -                          |                  |             |  | :contains 1/2" gravel; well-graded but coarser<br><u>ALLUVIUM (Oal):</u> well-graded sand, medium dense, saturated, dark   |            |  |  |  |  |
| -82-<br>-84-<br>-86-<br>-88-<br>-90- |   |                            |                  | GW          |  | Qray<br>(Ωal): sandy gravels, dense, saturated, medium gray  |            |  |  |  |  |
| -92-                                 |   |                            |                  |             |  | :heavy gravels   |            |  |  |  |  |
| -94                                  |   |                            |                  | CL<br>GW-SW |  | <u>ALLUVIUM:</u> :clay layer, soft, saturated, blue gray<br>( <u>Oal</u> ): gravel and sand, dense, saturated, medium gray | -          |  |  |  |  |
| 108-                                 | 50<br>50/2"                                     |                            |                  | SM          |  | DECOMPOSED GRANITE BEDROCK: silty sand, coarse, very dense<br>saturated, dark gray   | , <b>,</b> |  |  |  |  |
| 410<br>412<br>114                    | 50/2  |                            |                  |             | 1.1.1  | End of boring at 110.2 feet  |            |  |  |  |  |
| Drive Energy Da                      | Weight<br>Drop                                  | 1                          | 40 lb:<br>30 in. | s.          | op "E  | volenation of Logs"  |            |  |  |  |  |
|                                      |   |                            |                  |             |  | xplanation of Logs"<br>Ite: May, 1998 Project No.: 97157-01  |            |  |  |  |  |
| EN<br>G                              | HEP<br>IGINEERING<br>eotechnical<br>ngineers-Ge | ASSOC                      | tants:           |             | Log of Test Boring No. B-19<br>El Monte Golf Course 2 of 2 |  |            |  |  |  |  |

|  |                        |  |         |                            | LO     | G OI            | FTE                           | TEST BORING NO. B-21                                      |             |                            |               |  |  |
|--|------------------------|--|---------|----------------------------|--------|-----------------|-------------------------------|---|-------------|----------------------------|---------------|--|--|
|  | ng Dat                 | e(s): _                                  |         | 1 <u>8/98</u><br>MH        |        | illing Ec       |                               |   |             | Surface Elevation: _       | <u>- 466'</u> |  |  |
| (feet) 60  | Sample<br>Tvpe<br>Tvpe | Blow<br>Count<br>(foot)                  | 1       | Moisture<br>Content<br>(%) |        | sthod/H<br>SOSN | Graphic<br>Log                | <b>.</b>  |             | SCRIPTION                  | <u>440'</u>   |  |  |
|  | 0,                     |  |         | 20                         |        |                 |                               |   |             |                            |               |  |  |
| 2-   |                        |  |         |                            |        | ML              |                               | ALLUVIUM(Qai): sandy silt                                 | , medium    | ı stiff, moist, dark brown |               |  |  |
| 4-   |                        |  |         |                            |        | ŜŴ-ŴĹ           |                               | Qal: sandy silt to silty sand<br>and medium brown, porous | i, mediun   | n dense, moist, yellow br  | own           |  |  |
| 6 -<br>-<br>8 -                                      |                        | 20                                       | 72      | 12.1                       | CN     | SM              |                               | <u>Qal:</u> silty fine sand, mediur<br>medium brown       | n dense,    | moist, medium gray and     |               |  |  |
| -<br>-<br>-  |                        |  |         |                            |        | SW              |                               | Qal: well-graded sand, med<br>:gravelly layer to 13 feet  | lium dens   | se, moist, light gray      |               |  |  |
|  |                        |  |         |                            | :      |                 |                               |   |             |                            |               |  |  |
| ; - [<br>-<br>-                                      | ∑ ss                   | 26                                       |         |                            |        |                 |                               | :becomes more coarse-gra                                  | inea        |                            |               |  |  |
|  | X ss                   | 32                                       |         |                            |        | SP<br>-         |                               | <u>Oal:</u> poorly-graded fine san                        | d, mediur   | m dense, moist, light gra  | y             |  |  |
|  |                        |  |         |                            |        |                 |                               |   | l at 24.5 1 | feet                       |               |  |  |
| ;-[  | ss<br>S                | 22                                       |         |                            |        |                 |                               | -   | <u> </u>    |                            |               |  |  |
| -  |                        |  |         |                            |        |                 |                               | End of boring at 26.5 feet                                |             |                            |               |  |  |
|  | rks:                   |  |         |                            |        |                 |                               |   |             |                            |               |  |  |
| lease refer to symbols and note limitations shown or |                        |  |         |                            |        |                 |                               | xplanation of Logs"<br>Ite: April, 1998                   | Proiec      | t No.: 97157-01            |               |  |  |
|  |                        | S H E<br>ENGINEEI<br>Geotech<br>Engineei | nical ( | Consult                    | tants: | INC.            | - Log of Test Boring No. B-21 |   |             | Plate<br>B22               |               |  |  |

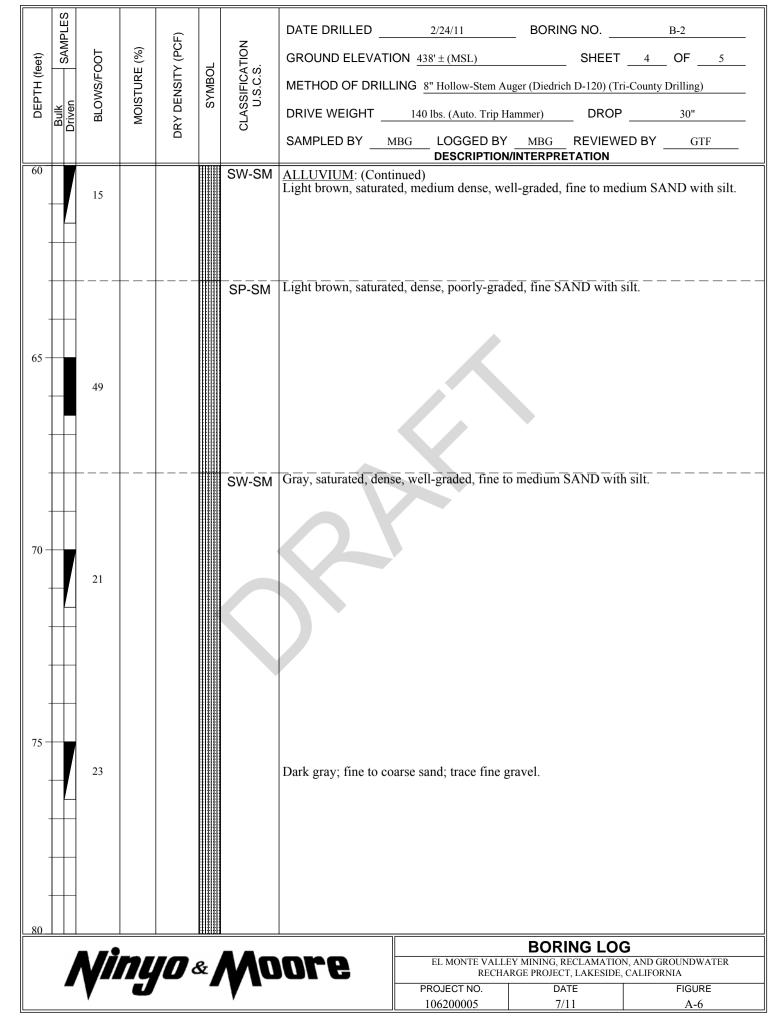
|   | LOG OF TEST BORING NO. B-24 |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
|---|-----------------------------|--------------------------|-------------------------|----------------------------|----------------------------|-------------|--|--|--------------|---------------------------|--------------|--|--|--|
|   | g Date(s                    | s): _                    |                         | 20/98                      |                            |             | luipment   |  |              | Surface Elevation:        |              |  |  |  |
| .ogge   | ed By:                      |                          | BI                      | МН                         | Me                         | ethod/H     | ole Size   | WASH BORING  | G/3.5"       | Bottom Elevation:         | <u>-331'</u> |  |  |  |
| (feet)  | Sample<br>Type              | Blow<br>Count<br>(/foot) | Dry<br>Density<br>(pcf) | Moisture<br>Content<br>(%) | Lab<br>Tests               | nscs        | Graphic<br>Log   | MATERIAL DESCRIPTION                               |              |                           |              |  |  |  |
| -   |                             |                          |                         | Ţ                          |                            | SW          |  | ALLUVIUM (Oai): well g<br>dense, moist, brownish-g | raded sand   | , fine to coarse-grained, | medium       |  |  |  |
| 2-  |                             |                          |                         |                            |                            |             |  | dense, moist, brownish-g                           | gray to ligh | t gray                    |              |  |  |  |
| 4-  |                             |                          | :                       |                            |                            |             |  |  |              |                           |              |  |  |  |
| 6-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 8-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| -01   |                             |                          |                         |                            |                            |             |  |  |              |                           | -            |  |  |  |
| 2-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 4-  |                             |                          |                         |                            |                            |             |  |  |              |                           | i.           |  |  |  |
| 6-  |                             |                          |                         |                            |                            |             |  |  |              |                           | 1            |  |  |  |
| 8-  |                             |                          |                         |                            |                            |             | , #1 + <del>1</del> - 1<br>+ 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | contains thin silt layers:                         | 5            |                           |              |  |  |  |
| .o-   |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 2   |                             |                          |                         |                            |                            |             |  |  |              | -                         |              |  |  |  |
| 4   |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 6   |                             |                          |                         |                            |                            |             |  | gravelly at 25 feet                                |              |                           |              |  |  |  |
| 8-  |                             |                          |                         |                            |                            | -           |  |  |              |                           |              |  |  |  |
| 0-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 2-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 4-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 16-   |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 8-  |                             |                          |                         |                            |                            |             |  | silt layers at 37-38 feel                          | t            | -                         |              |  |  |  |
| <b>0</b>  |                             |                          |                         |                            |                            |             | /  |  |              | : .                       |              |  |  |  |
| 2   |                             |                          |                         |                            |                            |             | • • • • •  | :gravel layer at 42 to 43                          | 3 feet       |                           |              |  |  |  |
| 4   |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 6-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| в-  |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 0   |                             |                          |                         |                            |                            |             |  |  |              | · ·                       |              |  |  |  |
| 2   |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| 4   |                             |                          |                         |                            |                            |             |  |  |              |                           |              |  |  |  |
| -   | inergy Da                   | w                        | ammer<br>eight<br>op    | 1                          | able v<br>40 lbs<br>60 in. | vinch<br>s. |  |  |              |                           |              |  |  |  |
| ase   | refer to s                  | symbol                   | s and n                 | ote limi                   | tations                    | s shown     |  | lanation of Logs"                                  | 1 prot       | -t No + 07157 01          | 1            |  |  |  |
| SHEPARDSON  |                             |                          |                         |                            |                            | O N         | Date   | e: May, 1998                                       |              | ct No.: 97157-01          | - Plate      |  |  |  |
| ENGINEERING ASSOCIATES INC.                       |                             |                          |                         |                            |                            | //v().      | <ul> <li>Log of Test Boring No. B-24</li> </ul>                    |  |              | B25                       |              |  |  |  |
| Geotechnical Consultants:<br>Engineers-Geologists |                             |                          |                         |                            |                            |             | El Monte Golf Course 1 of  |  |              |                           |              |  |  |  |

|  | **             |                          |                         |                            | LO               | GO       | FTI            | TEST BORING NO. B-24  |  |  |  |  |  |  |
|--|----------------|--------------------------|-------------------------|----------------------------|------------------|----------|----------------|---|--|--|--|--|--|--|
|  | g Date(:       | s): _                    |                         | 20/98                      |                  | illing E |                |   |  |  |  |  |  |  |
| Logge  | d By:          |                          |                         | MH                         | Me               | ethod/l  | tole S         | Size: WASH BORING/3.5" Bottom Elevation:331'  |  |  |  |  |  |  |
| Depth<br>(feet)  | Sample<br>Type | Blow<br>Count<br>(/foot) | Dry<br>Density<br>(pcf) | Moisture<br>Content<br>(%) | Lab<br>Tests     | nscs     | Graphic<br>Log | MATERIAL DESCRIPTION  |  |  |  |  |  |  |
| -58<br>-60<br>-<br>-62<br>-64<br>-<br>-66  |                |                          |                         |                            |                  |          |                | ALLUVIUM (Qal): well graded sand, fine to coarse-grained, medium<br>dense, moist, brownish-gray to light gray<br>:silt layers         |  |  |  |  |  |  |
| 68-<br>70-<br>72-<br>74-<br>76-  |                |                          |                         |                            |                  | ĞŴ,      |                | Qal: sandy gravels, dense, saturated, gray  |  |  |  |  |  |  |
| - 78 -<br>- 80 -<br>- 82 -<br>- 84   |                |                          |                         |                            |                  | ŚŴ -     |                | Ωal: well-graded sand   |  |  |  |  |  |  |
| - 86   |                |                          |                         |                            |                  |          |                | Ωal: Gravel and cobble in a sandy matrix; dense, saturated, gray<br>:layer of sand or smaller gravels to 92 feet                      |  |  |  |  |  |  |
| -94<br>-96<br>-98<br>-<br>100<br>-<br>102<br>-<br>104                            | 55             |                          | •                       |                            |                  | SM       |                | DECOMPOSED GRANITE BEDROCK: silty sand, dense to very dense,<br>saturated, yellow gray<br>:hard rock veins or inclusions to 97.5 feet |  |  |  |  |  |  |
| +06 - X  | SS             | 69                       |                         |                            |                  |          |                | End of boring at 105.5 feet   |  |  |  |  |  |  |
| <br>+08-<br><br>+10-<br>   |                |                          |                         |                            |                  |          |                |   |  |  |  |  |  |  |
| Drive En<br>Please re  |                | We<br>Dro                | ight<br>P               | 14<br>30                   | 40 lbs.<br>) in. |          | on "E          | xplanation of Logs"   |  |  |  |  |  |  |
| SHEPARDSON   |                |                          |                         |                            |                  |          |                |   |  |  |  |  |  |  |
| ENGINEERING ASSOCIATES INC.<br>Geotechnical Consultants:<br>Engineers-Geologists |                |                          |                         |                            |                  |          |                | Log of Test Boring No. B-24<br>El Monte Golf Course 2 of 2  |  |  |  |  |  |  |

|   | g Date(        | s):                      |   | 7/03                       |              |                                       | juipment  |  |                               | Surface Elevation:                | 465'    |
|---|----------------|--------------------------|---|----------------------------|--------------|---------------------------------------|---|--|-------------------------------|-----------------------------------|---------|
| _ogg                                      | ed By:         |                          | 8   | MH                         | Me           | ethod/H                               | ole Size:   | Hollow stem a  | auger/8"                      | Bottom Elevation:                 | ~435'   |
| (feet)                                    | Sample<br>Type | Blow<br>Count<br>(ftoot) | Dry<br>Density<br>(pcf)   | Moisture<br>Content<br>(%) | Lab<br>Tests | nscs                                  | Graphic<br>Log  | MATE   | RIAL DI                       | ESCRIPTION                        |         |
| 2-  | B              |                          |   |                            | MD<br>DS     | SW                                    |   | ALLUVIUM (Qal): well-gra<br>dense, moist, medium brov                        | aded sand, me<br>vn to medium | dium to coarse-grained, n<br>gray | tedium  |
| 4-  |                | 32                       | 96  | 8.6                        |              |                                       |   |  |                               | :                                 | -       |
| 6-2<br>8-                                 | Вн             | 16                       |   |                            |              | , , , , , , , , , , , , , , , , , , , |   |  |                               |                                   |         |
|   | ss             | 4                        |   |                            |              |                                       |   |  |                               |                                   |         |
| 2 ]<br>4-<br>▼                            | ss             | 26                       |   |                            |              |                                       |   |  |                               |                                   |         |
| 6-1/2<br>                                 |                |                          |   |                            |              |                                       |   |  |                               |                                   |         |
|   | SS             | 25                       |   |                            | 3S           |                                       |   | :cobble layer, approximate   | ely one foot th               | ick                               |         |
|   | ss             | 50/6"                    |   |                            |              |                                       |   |  |                               |                                   |         |
|   |                |                          |   |                            |              | SM                                    | Di<br>to  | ECOMPOSED GRANITE ()<br>very dense, moist, orange-<br>groundwater at 28 feet | <u>(gr):</u> bedrock<br>gray  | , silty fine to coarse sand,      | dense   |
|   | SS             | 50/2*                    |   |                            | _            |                                       |   | End of boring at 30.2 feet;  | boring backfil                | led with bentonite chins          |         |
| arks                                      | <u> </u><br>s: | <u>_</u>                 |   |                            |              |                                       |   |  | <b>.</b>                      |                                   |         |
| e ref                                     | er to sym      | ibols and i              | note lim  | itations                   | shown        | on "Expla                             | nation of   | Logs"  |                               |                                   |         |
| SHEPARDSON<br>ENGINEERING ASSOCIATES INC. |                |                          |   |                            |              |                                       | Date:   | February, 2003   | Project                       |                                   | (Claire |
|   |                | otechnic                 | and the second se |                            |              |                                       | Log of Test Boring No. B-27<br>EL MONTE GOLF COURSE B34 |  |                               |                                   |         |

| DEPTH (feet)<br>Bulk SAMPLES<br>BLOWS/FOOT<br>07<br>00<br>07<br>07<br>07<br>07<br>07<br>07<br>07<br>07<br>07<br>07<br>07 | DRY DENSITY (PCF)<br>SYMBOL | G CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATIC<br>METHOD OF DRILLI<br>DRIVE WEIGHT<br>SAMPLED BYI | nued)                               | SHEET<br>er (Diedrich D-120) (Tri<br>nmer) DROP<br>MBG REVIEWE<br>NTERPRETATION | OF5                         |
|--|-----------------------------|------------------------------|--|-------------------------------------|---|-----------------------------|
|  |                             | SP-SM                        |  |                                     |   | dium SAND with silt.        |
|  |                             | SM                           | Light brown, moist, n  | hedium dense, silty find            | to medium SAND.   |                             |
|  |                             |                              | Fine to coarse, silty sa   | and.                                |   |                             |
|  |                             |                              | nre  |                                     | BORING LOG<br>MINING, RECLAMATION   | I, AND GROUNDWATER          |
| Nin  | <b>7</b> • • •              |                              |  | RECHARC<br>PROJECT NO.<br>106200005 | GE PROJECT, LAKESIDE,<br>DATE<br>7/11   | CALIFORNIA<br>FIGURE<br>A-4 |

| 30       s       s       s       s       LLUVUM: (Continued)<br>Light brown, saturated, medium dense, silty fine to coarse SAND.         45       67/10*       Sp       Light brown, saturated, wery dense, poorly-graded, medium SAND.         45       67/10*       Sp       Light brown, saturated, wery dense, poorly-graded, medium SAND.         45       67/10*       SW-SM       Fight brown, saturated, medium dense, well-graded, Tine to coarse SAND with silt; trace fine gravel.         50       18       Dense with fine gravel.       Dense with fine gravel.         60       EXEMPTE VALLEY MULTION AND GROMADY ATELE ALLARKET, LANDOR, AND GROMADY ATELE ALLARKET, PROMISED, CALIFORMAN | DEPTH (feet)<br>Bulk SAMPLES<br>Driven SAMPLES<br>BLOWS/FOOT<br>MOISTURE (%)<br>DRY DENSITY (PCF) | SYMBOL<br>CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       2/24/11       BORING NO.       B-2         GROUND ELEVATION       438' ± (MSL)       SHEET       3       OF       5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--|---|--------------------------------------|---|
| SW-SM Light brown, saturated, medium dense, well-graded, fine to coarse SAND with silt; trace<br>18 18 25 25 25 Dense with fine gravel.  | 8 ऱू  |                                      | Light brown, saturated, medium dense, silty fine to coarse SAND.  |
| 25<br>25<br>25<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0   |   | SW-SM                                |   |
|  | 25  |                                      | Dense with fine gravel.   |
|  |   | s Mo                                 | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO DATE LECUIDE   |



| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       2/24/11       BORING NO.       B-2         GROUND ELEVATION       438' ± (MSL)       SHEET       5       OF       5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF                      |
|------------------------------|------------|--------------|-------------------|--------|----------------------------|--|
| 80                           | 25         |              |                   |        | SM                         | ALLUVIUM: (Continued)<br>Brownish black, saturated, medium dense, silty fine SAND.<br>Gray; very dense; fine to medium sand.<br>Refusal to further drilling.   |
| 90                           | -          |              |                   |        |                            | Total Depth = 85.5 feet.<br>Groundwater encountered at approximately 41 feet during drilling.<br>Backfilled with approximately 30 cubic feet of bentonite grout shortly after drilling on<br>2/24/11.<br><u>Note:</u><br>Groundwater, though not encountered at the time of drilling, may rise to a higher level<br>due to seasonal variations in precipitation and several other factors as discussed in the<br>report. |
| 95                           |            | m            |                   | 8      |                            | BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER         RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE  |
|                              | ∕ ▼        | 7            | _                 |        |                            | PROJECT NO. DATE FIGURE  |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT  | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATIO   | 3/11/11<br>ON 440' ± (MSL)<br>ING 8" Hollow-Stem Au<br>140 lbs. (Auto. Trip Ha | ger (Diedrich D-120) (Tr                                | OF4                        |
|------------------------------|-------------|--------------|-------------------|--------|----------------------------|---|--|---|----------------------------|
|                              |             |              | Ъ                 |        |                            |   | IBG LOGGED BY  | MBG REVIEW  | ED BY                      |
|                              | 6           |              |                   |        | SP                         | <sup>1</sup> / <sub>2</sub> inch).<br>Brown, moist, mediu | oorly-graded, fine to r<br>m dense, silty fine SA                              |   | e subangular gravel (up to |
|                              |             | <b>16 -</b>  |                   | ~      |                            |   | EL MONTE VALLE   | BORING LOO<br>Y MINING, RECLAMATIO                      |                            |
|                              | <b>y</b> // | Ц            |                   | ŝ.     | M                          | ore   |  | AY MINING, RECLAMATIO<br>RGE PROJECT, LAKESIDE,<br>DATE |                            |
|                              | V           |              |                   |        | V                          |   | 106200005  | 7/11  | A-8                        |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT | 3/11/11<br>ON 440' ± (MSL)<br>ING 8" Hollow-Stem Aug<br>140 lbs. (Auto. Trip Ha<br>IBG LOGGED BY | ger (Diedrich D-120) (1<br>mmer) DROI<br>MBG REVIEW | Г <u>2</u><br>Ггі-County<br>Р | _ OF          | 4    |
|------------------------------|------------|--------------|-------------------|--------|----------------------------|---|--|---|-------------------------------|---------------|------|
|                              | 14         |              |                   |        | SW-SM                      | <u>ALLUVIUM</u> : (Conti<br>Light brown, moist, 1   |  | INTERPRETATION                                      | m SANI                        | D with silt   | <br> |
|                              | 9          |              |                   |        | ML                         |   | nedium dense, fine san   |   |                               |               |      |
| 30                           | 28         |              |                   |        | SM                         | Light brown, moist, n                               | medium dense, silty fir  | ie SAND.  |                               |               |      |
| 35                           | 5          |              |                   |        | <br>ML                     | Dark brown, wet, Too                                | sse, fine sandy SILT.  |   |                               |               |      |
| 40                           |            | Ţ            |                   |        |                            | Saturated.  |  |   |                               |               |      |
|                              |            | <b>50</b> -  |                   | -      |                            |   | EL MONTE VALLEY  | BORING LO   | ON AND G                      | ROUNDWA       | TER  |
|                              | V          | Ц            |                   | Ý      |                            | ore   | RECHAR   | GE PROJECT, LAKESIDI                                | E, CALIFOR                    | RNIA          |      |
|                              | V          | 0            |                   |        | V                          |   | PROJECT NO.<br>106200005   | DATE<br>7/11  |                               | FIGURE<br>A-9 |      |

| 30       9       SM       ALLLYUUM: (Continued)<br>Dark brown, saturated, medium dense, silty fine SAND, trace fine gravel.         45       26       SP-SM       Gray, saturated, medium dense, poorly-graded, fine to medium SAND with silt; few fine<br>gravel.         45       26       SM       Dark brown; saturated, medium dense, poorly-graded, fine to medium SAND with silt; few fine<br>gravel.         50       30       SM       Dark brown; saturated, dense, silty fine to medium SAND.         51       26       SM       Dark brown; saturated, dense, silty fine to medium SAND.         51       26       SM       Dark brown; saturated, dense, silty fine to medium SAND.         51       26       Becomes finer.       EDCRING LOG         60       PECHAGE ROCKT, LACESIFE, CALPREND, NUMCECONNAVITE<br>BECHAGE ROCKT, LACESIFE, CALPREND, NUMCECONNAVITE | DEPTH (feet) | Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL          | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED<br>GROUND ELEVATIO<br>METHOD OF DRILL<br>DRIVE WEIGHT<br>SAMPLED BY | ON <u>440</u><br>_ING <u>8"</u><br>_140 II<br>/IBG | ± (MSL)<br>Hollow-Stem Auge | r (Diedrich<br>mer)<br>MBG | <br>DROP<br>REVIEWED | 3 (<br>ounty Dr | DF               |          |
|--|--------------|------------------------|------------|--------------|-------------------|-----------------|----------------------------|--|--|-----------------------------|----------------------------|----------------------|-----------------|------------------|----------|
| 45       26       gravel.         50       30       SM       Dark brown, saturated, dense, silly fine to medium SAND.         51       30       SM       Dark brown, saturated, dense, silly fine to medium SAND.         55       26       Becomes finer.         60       Becomes finer.         BORING LOG         BORING LOG         BORING LOG         LI MONTE WALLEY MINING RECLAMATION, AND GROUNDWATER         RECHARCE PROJECT I. ACKADE NA         PROJECT NO. DATE         PROJECT NO. DATE  | 40           |                        | 9          |              |                   |                 | SM                         | Dark brown, saturate   | inued)<br>ed, medi                                 | um dense, silty f           | îine SAN                   | D; trace fine        |                 |                  |          |
| 50       30         55       26         60       Becomes finer.         60       Becomes finer.         60       Becomes finer.         60       BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE         FIGURE   | 45 -         |                        | 26         |              |                   |                 | SP-SM                      |  | lium der   | ise, poorly-grade           | ed, fine to                | medium SA            | ND wit          | <u>h silt;</u> i | few fine |
| 26       Becomes finer.         60       BORING LOG         BORING LOG         BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO. DATE         PROJECT NO. DATE   | 50 -         |                        | 30         |              |                   |                 | SM                         | Dark brown, saturate   | ed, dens   | e, silty fine to mo         | edium SA                   | <u>₩</u> D. — — — —  |                 |                  |          |
| Boring Log           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE  |              |                        | 26         |              |                   |                 |                            | Becomes finer.   |  |                             |                            |                      |                 |                  |          |
|  | 60           |                        |            |              |                   | <u>e:::::::</u> | 440                        | nro  | I  |                             | MINING, RE                 | ECLAMATION, A        |                 |                  | ΓER      |
|  |              |                        |            | IJ           |                   | ×               |                            | UI G   | PR   | RECHARG                     | E PROJECT                  | , LAKESIDE, CA       | LIFORNI         | A                |          |

| L S S                  |  |                   |                                      | DATE DRILLED 3/11/11 BORING NO. B-3   |
|------------------------|--|-------------------|--------------------------------------|---|
| et)<br>SAMPLES         | DT (%)                                 | DRY DENSITY (PCF) | NOI                                  | $\begin{array}{c c} \hline & & \\ \hline \\ \hline$ |
| DEPTH (feet)           | S/FOC                                  | ISITY .           | SYMBOL<br>SSIFICAT<br>U.S.C.S.       | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)  |
| DEPT<br>Bulk<br>Driven | BLOWS/FOOT                             | Y DEN             | SYMBOL<br>CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"  |
|                        |  | DR                | ō                                    | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF  |
| 60                     | 46                                     |                   | SP                                   | DESCRIPTION/INTERPRETATION       ALLUVIUM: (Continued)  |
|                        |  |                   |                                      | Brown, saturated, dense, poorly-graded, fine to medium SAND.  |
|                        |  |                   |                                      | Total Depth = 61.5 feet.<br>Groundwater encountered at approximately 39 feet during drilling.<br>Backfilled with approximately 21 cubic feet of bentonite grout on shortly after drilling on 3/11/11.<br><u>Note:</u>   |
|                        |  |                   |                                      | Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report.   |
| 65                     |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
| 70                     |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
| 75                     |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
|                        |  |                   |                                      |   |
| 80                     |  |                   |                                      |   |
|                        | lin                                    | IN A              |                                      | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER  |
|                        | - '''''''''''''''''''''''''''''''''''' |                   |                                      | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE<br>106200005 7/11 A-11  |
|                        |  |                   |                                      | 106200005 7/11 A-11   |

| t)                       | OT             | (%)          | (PCF)             |        | NOI                        | DATE DRILLED         3/11/11 and 3/14/11         BORING NO.         B-4           GROUND ELEVATION         442' ± (MSL)         SHEET         1         OF         4                                |
|--------------------------|----------------|--------------|-------------------|--------|----------------------------|---|
| DEPTH (feet)<br>ulk      | iven 3A        | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | METHOD OF DRILLING <u>8"</u> Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)   |
| DEP <sup>-</sup><br>Bulk | Driven<br>BLOV | -SIOM        | ςΥ DEN            | S      | CLASS<br>U.                | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"  |
|                          |                |              | ä                 |        |                            | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF<br>DESCRIPTION/INTERPRETATION  |
|                          | 7              |              |                   |        | SP                         | DESCRIPTION/INTERPRETATION         ALLUVIUM:         Light brown, moist, loose, poorly-graded, fine to medium SAND.         Loose to medium dense.         Gray; medium dense; fine to coarse sand. |
|                          | 25             |              |                   |        | SW-SM                      | sand.   |
|                          | <b>N</b> //    | Ц            |                   | &      | Mg                         | DOTC<br>PROJECT NO. DATE FIGURE   |
|                          | V              |              |                   |        | V                          |   |

| DEPTH (feet) | Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT<br>SAMPLED BY | 3/11/11 and 3/14/11         ON       442' ± (MSL)         ING       8" Hollow-Stem Auge         140 lbs. (Auto. Trip Han         4BG       LOGGED BY         DESCRIPTION/IN | er (Diedrich<br>nmer)<br>MBG | _ DROP<br>REVIEWE | 2<br>County | OF             | 4       |
|--------------|------------------------|------------|--------------|-------------------|--------|----------------------------|---|---|------------------------------|-------------------|-------------|----------------|---------|
| 25 -         |                        | 25         |              |                   |        | SP-SM                      |   | n dense, poorly-graded,   |                              | arse SAND         | ; with      | few fine       | gravel. |
| 30           |                        | 9          |              |                   |        | SM                         | Boring terminated or<br>Boring resumed on 3                       | 3/14/11.  |                              |                   |             |                |         |
| 35           |                        | 5          | <u>₹</u>     |                   |        | ML                         | Dark brown, moist, r<br>Saturated; loose.                         | medium dense, fine sand   | Jy SILT.                     |                   |             |                |         |
|              |                        | V          | N            | <b>[</b> ]        | &      | Ma                         | ore   |   | MINING, RE<br>GE PROJECT     | , LAKESIDE, C     | AND GF      | NIA            |         |
|              | _                      | V          | U            |                   |        | <b>y</b> -                 |   | PROJECT NO.<br>106200005  | DAT<br>7/1                   |                   |             | FIGURE<br>A-13 |         |

| DEPTH (feet)<br>Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED<br>GROUND ELEVATION<br>METHOD OF DRILLIN<br>DRIVE WEIGHT<br>SAMPLED BYMB | <ul> <li>V <u>442' ± (MSL)</u></li> <li>IG <u>8" Hollow-Stem Aug</u></li> <li>140 lbs. (Auto. Trip Hau</li> <li>G LOGGED BY</li> </ul> | SHEET<br>ger (Diedrich D-120) (T<br>nmer) DROI<br>MBG REVIEW | Γ <u>3</u> OF <u>4</u> |
|--|------------|--------------|-------------------|--------|----------------------------|---|--|--|------------------------|
| 40                                     | 21         |              |                   |        | SM                         | <u>ALLUVIUM</u> : (Continu<br>Brown, saturated, med                                   | ued)   | NTERPRETATION  |                        |
|  | 17         |              |                   |        | SP-SM                      | Brown, saturated, med   |  |  | SAND with silt.        |
| 50                                     | 29         |              |                   |        |                            |   |  |  |                        |
| 55                                     | 15         |              |                   |        | SW-SM                      | Brown, saturated, med   | ium dense, well-grad   |  |                        |
|  |            |              | 10 4              | & J    | Mn                         | ore   |  | BORING LO<br>MINING, RECLAMATIO<br>GE PROJECT, LAKESIDI      | ON, AND GROUNDWATER    |
|  | <b>V</b>   | -7           |                   | _      |                            |   | PROJECT NO.<br>106200005   | DATE<br>7/11   | FIGURE<br>A-14         |

|              | ы.<br>S          |            |              |                   |        |                            |  |  | D 4               |
|--------------|------------------|------------|--------------|-------------------|--------|----------------------------|--|--|-------------------|
| <b>•</b>     | SAMPLES          | Τ          | (%           | PCF)              |        | NO                         | DATE DRILLED         3/11/11 and 3/14/11         BORI           GROUND ELEVATION         442' ± (MSL)  | NG NO<br>SHEET 4                                       | B-4<br>OF 4       |
| H (fee       | S<br>S           | S/FOC      | ) ar         | SITY (            | SYMBOL | FICATI<br>C.S.             | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedri  |  |                   |
| DEPTH (feet) | Bulk<br>Driven   | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYN    | CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer)  | DROP   | 30"               |
|              | Dri              | ш          | Σ            | DRY               |        | CL                         | SAMPLED BY MBG LOGGED BY MBG   |  |                   |
| 60           |                  |            |              |                   |        | SP-SM                      | DESCRIPTION/INTERPR  |  |                   |
|              |                  | 77/9"      | 127          |                   |        |                            | Grayish brown, saturated, very dense, poorly-graded  | d, fine SAND with                                      | silt              |
|              |                  |            |              |                   |        |                            | Fotal Depth = 61.5 feet.         Groundwater encountered at approximately 35 feet of         Backfilled with approximately 21 cubic feet of bents         3/14/11.         Note:         Groundwater may rise to a level higher than that me variations in precipitation and several other factors a | onite grout shortly<br>easured in borehole             | e due to seasonal |
| 65 -         |                  |            |              |                   |        |                            |  |  | ieport.           |
| 70 -         |                  |            |              |                   |        |                            |  |  |                   |
| 75 -         |                  |            |              |                   |        |                            |  |  |                   |
|              |                  |            |              |                   |        |                            |  |  |                   |
|              |                  |            |              |                   |        |                            |  |  |                   |
|              |                  |            |              |                   |        |                            |  |  |                   |
|              | $\left  \right $ |            |              |                   |        |                            |  |  |                   |
|              |                  |            |              |                   |        |                            |  |  |                   |
| 80           |                  |            |              |                   |        |                            |  |  |                   |
|              |                  | M          |              |                   | &      |                            | EL MONTE VALLEY MINING,  | RING LOG<br>RECLAMATION, AND C<br>CT, LAKESIDE, CALIFO |                   |
|              |                  |            | J            |                   |        |                            |  | PATE //11  | FIGURE<br>A-15    |

| DEPTH (feet) | Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLA   | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT<br>SAMPLED BY | 3/14/11<br>ON <u>450' ± (MSL)</u><br>ING <u>8" Hollow-Stem Aug</u><br>140 lbs. (Auto. Trip Har<br><u>1BG</u> LOGGED BY<br>DESCRIPTION/I | er (Diedrich D<br>nmer)<br>MBG R       | SHEET<br>-120) (Tri-C<br>DROP<br>EVIEWEI | 1<br>County 1 | OF<br>Drilling)<br>30" |     |
|--------------|------------------------|------------|--------------|-------------------|--------|-------|---|---|--|--|---------------|------------------------|-----|
| 0            |                        |            |              |                   |        | SM    | <u>ALLUVIUM</u> :<br>Dark brown, moist, l                         | oose, silty fine SAND;  | trace roots.                           |  |               |                        |     |
| 5-           |                        | 8          |              |                   |        | SP-SM |   | st, loose, poorly-graded  |  | ium SAN                                  | īD witl       | h silt.                |     |
| 10 -         |                        | 5          |              |                   |        | SM    |   | oose, silty fine SAND.  |  |  |               |                        |     |
| 20           |                        | 16         |              |                   |        | SP-SM | sand.   | r dense, poorry-graded,   | The to mean                            | uni SAN                                  | D with        | , sm, uac              |     |
|              |                        | Vi         | <u>n</u>     | 10 4              | &      | Ma    | ore   | EL MONTE VALLEY<br>RECHAR   | BORIN<br>MINING, RECL<br>GE PROJECT, L | AMATION,                                 | AND GR        |                        | ΓER |
|              |                        | V          | J            |                   | _      |       |   | PROJECT NO.<br>106200005  | DATE<br>7/11                           |  |               | FIGURE<br>A-16         |     |

| DEPTH (feet) | Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION <u>450' ± (MSL)</u><br>METHOD OF DRILLING <u>8" Hollow-Stem Auger</u><br>DRIVE WEIGHT <u>140 lbs. (Auto. Trip Hamr</u> | (Diedrich D-120) (Tri<br>ner) DROP<br>MBG REVIEWE               | OF<br>i-County Drilling)<br> |
|--------------|--------------|------------|--------------|-------------------|--------|----------------------------|---|---|------------------------------|
| 25 -         |              | 20         |              |                   |        |                            |   |   |                              |
|              |              | 11         |              |                   |        | SW-SM                      | Gray, moist, medium dense, well-graded, fine<br>gravel.   |   | with silt; trace angular     |
| 30 -         |              | 7          |              |                   |        | ML                         | Dark brown, moist, loose to medium dense, fi  |   |                              |
| 35 -         |              | 16         |              |                   |        | SM                         | Dark brown, moist, medium dense, silty fine s   | SAND.   |                              |
| 40           |              | Vi         | ny           | <b>10</b> 2       | £      | Mo                         | EL MONTE VALLEY M   | BORING LOC<br>MINING, RECLAMATION<br>PROJECT, LAKESIDE,<br>DATE | N, AND GROUNDWATER           |
|              |              | •          |              |                   |        | V                          | 106200005   | DATE<br>7/11  | A-17                         |

| DEPTH (fe<br>Buik | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLA   | DATE DRILLED       3/14/11       BORING NO.       B-5         GROUND ELEVATION       450' ± (MSL)       SHEET       3       OF       4         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)       DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|-------------------|------------|--------------|-------------------|--------|-------|---|
| 40                | 6          | <u>↓</u>     |                   |        | ML    | ALLUVIUM: (Continued)<br>Dark brown, moist, loose, fine sandy SILT.<br>Saturated.   |
|                   | 20         |              |                   |        | SM    | Dark brown, saturated, medium dense to dense, silty fine SAND.  |
| 50                | 22         |              |                   |        | SP-SM | Dark brown, saturated, medium dense, poorly-graded, fine SAND with silt.  |
| 55                | 23         |              |                   |        | SW-SM | Brown, saturated, dense, well-graded, fine to medium SAND with silt.  |
|                   | M          | in l         | 10 2              | Se j   | Ma    | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE   |
|                   | -          |              |                   |        |       | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-18   |

|        |        | S              |                   |              |                   |        |                            |   |  |  |  |
|--------|--------|----------------|-------------------|--------------|-------------------|--------|----------------------------|---|--|--|--|
|        |        | SAMPLES        | F                 | ()           | CF)               |        | CLASSIFICATION<br>U.S.C.S. |   | 3/14/11  |  |  |
| (foot) | (ieer) | −  S/          | ,F00 <sup>-</sup> | RE (%        | ITY (F            | ЗОГ    | CATIC<br>S.S.              |   | <b>DN</b> $450' \pm (MSL)$                       |  | T4 OF4   |
|        |        | , u            | BLOWS/FOOT        | MOISTURE (%) | DENSI             | SYMBOL | SSIFIC<br>U.S.O            |   | ING <u>8" Hollow-Stem Au</u>                     |  |  |
|        | ן ב    | Bulk<br>Driven | BLo               | MO           | DRY DENSITY (PCF) |        | CLA                        |   | 140 lbs. (Auto. Trip Ha                          |  | P30"   |
|        |        |                |                   |              | ]                 |        |                            | SAMPLED BYM   | BG LOGGED BY                                     | MBG REVIEN                                 | VED BYGTF  |
| 6      | 0      |                | 39                |              |                   |        | SP-SM                      | trace coarse sand.  | d, medium dense, poo                             | rly-graded, fine to                        | medium SAND with silt;                               |
| 6      |        |                |                   |              |                   |        |                            | Backfilled with appro<br>3/14/11.<br><u>Note</u> :<br>Groundwater may ris | tered at approximately<br>oximately 21 cubic fee | et of bentonite grou<br>n that measured in | t shortly after drilling on borehole due to seasonal |
| 6.     | -      |                |                   |              |                   |        |                            |   |  |  |  |
| 7      | 0      |                |                   |              |                   |        |                            |   |  |  |  |
|        |        |                |                   |              |                   |        |                            |   |  |  |  |
| 7      | 5 -    |                |                   |              |                   |        |                            |   |  |  |  |
|        | +      |                |                   |              |                   |        |                            |   |  |  |  |
|        |        |                |                   |              |                   |        |                            |   |  |  |  |
|        |        |                |                   |              |                   |        |                            |   |  |  |  |
|        | t      |                |                   |              |                   |        |                            |   |  |  |  |
|        | +      |                |                   |              |                   |        |                            |   |  |  |  |
| _8     | 0      |                |                   |              |                   |        |                            |   |  |  |  |
|        |        |                |                   |              |                   | e /    | AAn                        | ore   |  |  | ON, AND GROUNDWATER                                  |
|        |        |                |                   | 3            |                   |        |                            |   | PROJECT NO.<br>106200005                         | RGE PROJECT, LAKESID<br>DATE<br>7/11       | FIGURE<br>A-19                                       |
|        |        |                |                   |              |                   |        |                            |   | 100200003  | // 11                                      | 11-1/  |

| et)<br>SAMPLES         |            |          | F)                |        | 7                          | DATE DRILLED                  | 2/25/11                   | BORING NO.             |            | B-6                       |         |
|------------------------|------------|----------|-------------------|--------|----------------------------|-------------------------------|---------------------------|------------------------|------------|---------------------------|---------|
| feet)                  | 100T       | E (%)    | DRY DENSITY (PCF) | Ы      | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION              | ON 455' ± (MSL)           | SHEET                  | Г <u>1</u> | _ OF                      | 4       |
| DEPTH (feet)<br>ulk SA | BLOWS/FOOT | MOISTURE | ENSI              | SYMBOL | SIFIC<br>J.S.C.            | METHOD OF DRILL               | ING 8" Hollow-Stem Aug    | er (Diedrich D-120) (T | Fri-County | Drilling)                 |         |
| DEF<br>Bulk<br>Driven  | BLC        | MOM      | RYDI              | 0      | CLAS                       | DRIVE WEIGHT                  | 140 lbs. (Auto. Trip Har  | nmer) DROI             | P          | 30"                       |         |
|                        |            |          |                   |        |                            | SAMPLED BY                    | IBG LOGGED BY             | MBG REVIEW             | VED BY     | GTF                       |         |
|                        | 9          |          |                   |        | SM<br>SW                   |                               | loose, silty, fine to med |                        | AND.       |                           |         |
|                        |            |          |                   |        | SM                         |                               | silty SAND; trace root    |                        |            |                           |         |
|                        | 12         |          |                   |        | SW-SM                      |                               | rell-graded, fine to med  |                        |            |                           |         |
|                        | 13         |          |                   |        | SP-SM                      | Gray and light brown<br>silt. | n, moist, medium dense    | , poorly-graded, fi    | ne to me   | dium SA1                  | ND with |
|                        | . / 2      |          |                   |        |                            |                               | EL MONTE VALLEY           | BORING LO              |            | POLINDWA'                 | TEP     |
|                        | V/         | ГĻ       |                   | Se     | M                          | ore                           | EL MONTE VALLEY<br>RECHAR | GE PROJECT, LAKESIDI   | E, CALIFOI | ROUNDWA<br>RNIA<br>FIGURE |         |
|                        | V          |          |                   |        | V                          |                               | 106200005                 | DATE<br>7/11           |            | A-20                      |         |

|              | SAMPLES        | L          |              | CF)               |        | z                          | DATE DRILLED         2/25/11         BORING NO.         B-6  |
|--------------|----------------|------------|--------------|-------------------|--------|----------------------------|--|
| DEPTH (feet) | 72             | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | BOL    | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION     455' ± (MSL)     SHEET     2     OF     4   |
| DEPTH        | Ĕ<br>L         | LOWS       | OISTU        | DENS              | SYMBOL | ASSIFI<br>U.S.(            | METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"              |
|              | Bulk<br>Driven | B          | Ĕ            | DRY               |        | CL                         | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF   |
| 20           |                |            |              |                   |        | SW-SM                      | DESCRIPTION/INTERPRETATION   |
|              |                | 19         |              |                   |        |                            | ALLUVIUM: (Continued)<br>Dark brown, moist, medium dense, well-graded, fine to coarse SAND with silt and<br>gravel.  |
| 25 -         |                | 20         |              |                   |        | SP-SM                      | Grayish brown, moist, medium dense to dense, poorly-graded, fine to medium SAND<br>with silt.  |
| 30 -         |                | 16         |              |                   |        |                            | Medium dense.  |
| 35 -         |                | 10         | Ţ            |                   |        |                            | Saturated.   |
|              |                | Vi         |              | Π                 | & I    |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           FIGURE |
|              |                |            | 7            |                   |        |                            | PROJECT NO. DATE FIGURE<br>106200005 7/11 A-21   |

| et)<br>SAMPLES         |             |              |                   |             |                            | DATE DRILLED  | 2/25/11                                  | BORING                                | NO                      | B-6                              |     |
|------------------------|-------------|--------------|-------------------|-------------|----------------------------|---|--|---------------------------------------|-------------------------|----------------------------------|-----|
| eet)<br>SAM            | DOT         | (%) Ξ        | DRY DENSITY (PCF) |             | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION  | ON 455'±(MSL)                            |                                       | SHEET                   | 3 OF                             | 4   |
| DEPTH (feet)<br>ulk SA | BLOWS/FOOT  | MOISTURE (%) | INSIT             | SYMBOL      | SIFIC/                     | METHOD OF DRILL   | ING 8" Hollow-Stem Aug                   | er (Diedrich D                        | <b>)-</b> 120) (Tri-Cou | unty Drilling)                   |     |
| Bulk DEF               | BLOV        | MOIS         | RY DE             | ω           | CLAS:                      | DRIVE WEIGHT  | 140 lbs. (Auto. Trip Har                 | mmer)                                 | DROP                    | 30"                              |     |
|                        |             |              |                   |             |                            | SAMPLED BYM   | IBG LOGGED BY                            |                                       | REVIEWED E<br>Ation     | BY GTI                           |     |
| 40                     | 8           |              |                   |             | ML                         | ALLUVIUM: (Conti<br>Dark brown, saturate<br>Very dense. | nued)<br>d, loose, fine sandy SII        | LT.                                   |                         |                                  |     |
| 50                     | 50/2"       |              |                   |             |                            | METAVOLCANIC  | ROCK:<br>d, soft, weathered ME           | ΓΑVOLCAN                              | NIC ROCK.               |                                  |     |
| 55                     | 50/5"       |              |                   |             |                            | Light brown and gray                                    | <i>I</i> .                               |                                       |                         |                                  |     |
|                        | A #2        | -            |                   | <u>+ u </u> |                            |   | EL MONTE VALLES                          |                                       |                         |                                  | TED |
|                        | <b>N</b> // | ТЧ           |                   | ۶£          | Ma                         | ore   | EL MONTE VALLEY<br>RECHAR<br>PROJECT NO. | MINING, RECI<br>GE PROJECT, L<br>DATE | AKESIDE, CAL            | ID GROUNDWA<br>IFORNIA<br>FIGURI |     |
|                        | V           |              |                   |             | V                          |   | 106200005                                | DATE<br>7/11                          |                         | A-22                             | =   |

| Ш<br>S                             |                                   |        |                            |   | 0/05/11                  |  |  |
|------------------------------------|-----------------------------------|--------|----------------------------|---|--------------------------|--|--|
| et)<br>SAMPLES<br>OT               | %)<br>PCF)                        |        | NO                         |   | 2/25/11                  | BORING NO  | B-6                                    |
| I (feet                            | JRE (°                            | SYMBOL | ICATI<br>C.S.              |   |                          | uger (Diedrich D-120) (Tr                            |  |
| DEPTH (feet)<br>tulk SA<br>iven SA | MOISTURE (%)<br>DRY DENSITY (PCF) | SYM    | CLASSIFICATION<br>U.S.C.S. |   | 140 lbs. (Auto. Trip H   |  |  |
| DEP<br>Bulk<br>Driven<br>BLOV      | DR\ A                             |        | CL                         |   | BG LOGGED BY             | ,  |  |
| 60 50/4"                           |                                   |        |                            |   | DESCRIPTION              |  |  |
| 30/4                               |                                   |        |                            | METAVOLCANIC I<br>Light brown and gray<br>Total Depth = 60.3 fe | , saturated, soft, wea   | thered METAVOLCA                                     | ANIC ROCK.                             |
|                                    |                                   |        |                            | Groundwater encoun  | tered at approximatel    | ly 35 feet during drilli<br>eet of bentonite grout s | ng.<br>hortly after drilling on        |
|                                    |                                   |        |                            |   |                          | an that measured in bo<br>er factors as discussed    | orehole due to seasonal in the report. |
| 65                                 |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
| 70                                 |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
| 75                                 |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
|                                    |                                   |        |                            |   |                          |  |  |
| 80                                 |                                   |        |                            |   |                          | BORING LOO   | <u> </u>                               |
|                                    | nuo                               | &      | Mo                         | ore   |                          | EY MINING, RECLAMATION<br>ARGE PROJECT, LAKESIDE,    | N, AND GROUNDWATER                     |
|                                    | J                                 |        |                            |   | PROJECT NO.<br>106200005 | DATE<br>7/11   | FIGURE<br>A-23                         |

| DEPTH (feet) | Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/1/11       BORING NO.       B-7         GROUND ELEVATION 453'± (MSL)       SHEET       1       OF       5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--------------|------------------------|------------|--------------|-------------------|--------|----------------------------|---|
| 0            |                        |            |              |                   |        | SM<br>SP                   | ALLUVIUM:<br>Brown, moist, loose, silty fine to medium SAND.<br>Grayish brown, damp, medium dense, poorly-graded, fine to coarse SAND with fine   |
| 5            |                        | 15         |              |                   |        | 54                         | gravel.   |
| 10           |                        | 15         |              |                   |        | SP-SM                      | Light brown, moist, medium dense, poorly-graded, fine to medium SAND with silt; trace<br>roots.   |
|              |                        | 11         |              |                   |        | SW-SM                      |   |
|              |                        | Vi         | ny           | 10 4              | &      | Ma                         | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE   |
|              |                        | V          |              |                   |        | V                          | 106200005 7/11 A-24   |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLA   | DATE DRILLED       3/1/11       BORING NO.       B-7         GROUND ELEVATION       453' ± (MSL)       SHEET       2       OF       5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|------------------------------|------------|--------------|-------------------|--------|-------|--|
|                              | 18         | \_₩          |                   |        | SW-SM | ALLUVIUM: (Continued)<br>Gray to light brown, moist, medium dense, well-graded, fine to coarse SAND with silt.   |
| 40                           | 17         | ny           | 10 4              | æ      |       | Brown, saturated, medium dense, fine sandy SILT; micaceous.           Borng Log           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE   |
|                              |            | -            |                   |        | V     | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-25  |

|    | Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL       | CLASSIFICATION<br>U.S.C.S. | METHOD OF DRILLI<br>DRIVE WEIGHT<br>SAMPLED BY | DN <u>453' ± (MSL)</u><br>ING <u>8" Hollow-Stem Aug</u><br>140 lbs. (Auto. Trip Han<br>BG LOGGED BY<br>DESCRIPTION/II | er (Diedrich D-120) ( <sup>*</sup><br>nmer) DRO       | T <u>3</u><br>Γri-County | _ OF           |     |
|----|--------------|------------|--------------|-------------------|--------------|----------------------------|--|---|---|--------------------------|----------------|-----|
| 40 |              | 25         |              |                   |              | <u>ML</u><br>SP-SM         |  | dium dense, fine sandy<br>ise, poorly-graded, fine  |   | D with si                | lt. — — —      |     |
| 45 |              | 22         |              |                   |              | SM                         |  | e, silty fine SAND; mi  |   |                          |                |     |
| 50 |              |            |              |                   |              | SP                         |  | d, medium dense, poor   |   |                          |                |     |
|    |              | 27         |              |                   |              | SW-SM                      | Light brown, saturate                          | d, dense, well-graded,  | fine to coarse SAM                                    | ND with                  | silt           |     |
|    |              | Vì         |              | 10 4              | <u>&amp;</u> | Ma                         | ore  |   | BORING LC<br>MINING, RECLAMATI<br>GE PROJECT, LAKESID | ON, AND C                |                | TER |
|    |              |            | J            |                   |              |                            |  | PROJECT NO.<br>106200005  | DATE<br>7/11  |                          | FIGURE<br>A-26 |     |

| DEPTH (feet)<br>Bulk SAMPLES | <b>BLOWS/FOOT</b> | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL                  | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/1/11       BORING NO.       B-7         GROUND ELEVATION 453' ± (MSL)       SHEETA OF5         METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|------------------------------|-------------------|--------------|-------------------|-------------------------|----------------------------|---|
|                              | 26                |              |                   |                         | SM                         | <u>ALLUVIUM</u> : (Continued)<br>Reddish brown, saturated, dense, silty fine to coarse SAND; few gravel.  |
| 65                           | 19                |              |                   |                         | ML                         | Reddish brown, saturated, medium dense, fine sandy SILT.  |
|                              | 18                |              |                   |                         | SM                         | Reddish brown, saturated, medium dense, silty fine to coarse SAND with fine gravel.   |
|                              | 23                |              |                   |                         |                            | Dense; no gravel.   |
|                              |                   |              |                   | <u>entititi</u><br>e_ / |                            | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER  |
|                              |                   | 3            |                   | ×                       |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           106200005         7/11  |

| DEPTH (feet) | Driven SAMPLES<br>BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL  | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/1/11       BORING NO.       B-7         GROUND ELEVATION       453' ± (MSL)       SHEET5OF5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP30"         SAMPLED BY       MBG       LOGGED BYMBG       REVIEWED BYGTF  |
|--------------|------------------------------|--------------|-------------------|---|----------------------------|---|
|              | 89/11"                       |              |                   | こうちょう いいのう ちょうちょう   | SM                         | ALLUVIUM: (Continued)<br>Dark brown, saturated, very dense, silty fine to medium SAND; with fine gravel.<br><u>METAVOLCANIC ROCK</u> :<br>Yellow and brown, saturated, soft, weathered METAVOLCANIC ROCK.   |
| 90-          | 76                           |              |                   | A CAN |                            | Total Depth = 86.5 feet.         Groundwater encountered at approximately 30 feet during drilling.         Backfilled with approximately 30 cubic feet of bentonite grout shortly after drilling on 3/1/11. <u>Note</u> :         Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report. |
| 95           |                              |              |                   |   |                            |   |
|              |                              | 'ng          | <b>  0</b> 4      | St  | Ma                         | DOCCE<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE<br>106200005 7/11 A-28   |

| 0       SM       ALLUVIUM:<br>Brown, moist, loose, silty fine SAND.         SP       Gray, moist, medium dense, poorly-graded, fine to medium SAND; trace coarse sand<br>gravel (up to ½ inch).         10       12         10       12         10       12         10       12         15       20         16       Medium dense, poorly-graded, fine to medium SAND with silt. | TH (fe | Driven SAMPLES | BLOWS/FOOT | MOISTURE (%)   | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED<br>GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT<br>SAMPLED BYM | ON <u>456' ± (MSL)</u><br>LING <u>8" Hollow-1</u><br>140 lbs. (Auto<br>4BG LOGGE | Stem Auger (Diedric<br>Trip Hammer) | -<br><u>h D-120) (Tri</u><br>DROP<br>REVIEWE | 1<br>-County | OF<br>Drilling)<br>30" | <u>4</u> |
|--|--------|----------------|------------|----------------|-------------------|--------|----------------------------|--|--|-------------------------------------|--|--------------|------------------------|----------|
| 12<br>12<br>12<br>15   |        |                | 22         |                |                   |        |                            | Brown, moist, loose,<br>Gray, moist, medium  | 1 dense, poorly-   |                                     | Tedium SAN                                   | ND; tra      | ce coarse              | sand and |
|  |        |                |            |                |                   |        | SP-SM                      |  |  | graded, fine to m                   | Tedium SAN                                   | ND wit       | h silt.                |          |
| Boring Log         Boring Log         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER         Recharge PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE   |        |                | 17         | $\overline{n}$ |                   | s I    | AAn                        | nre  | EL MONTI   | E VALLEY MINING, F                  | RECLAMATION                                  | N, AND G     |                        | TER      |
| PROJECT NO.         DATE         FIGURE           106200005         7/11         A-29  |        | -              |            | 7              |                   |        |                            |  |  | D. DA                               | TE   | CALIFU       | FIGURE                 |          |

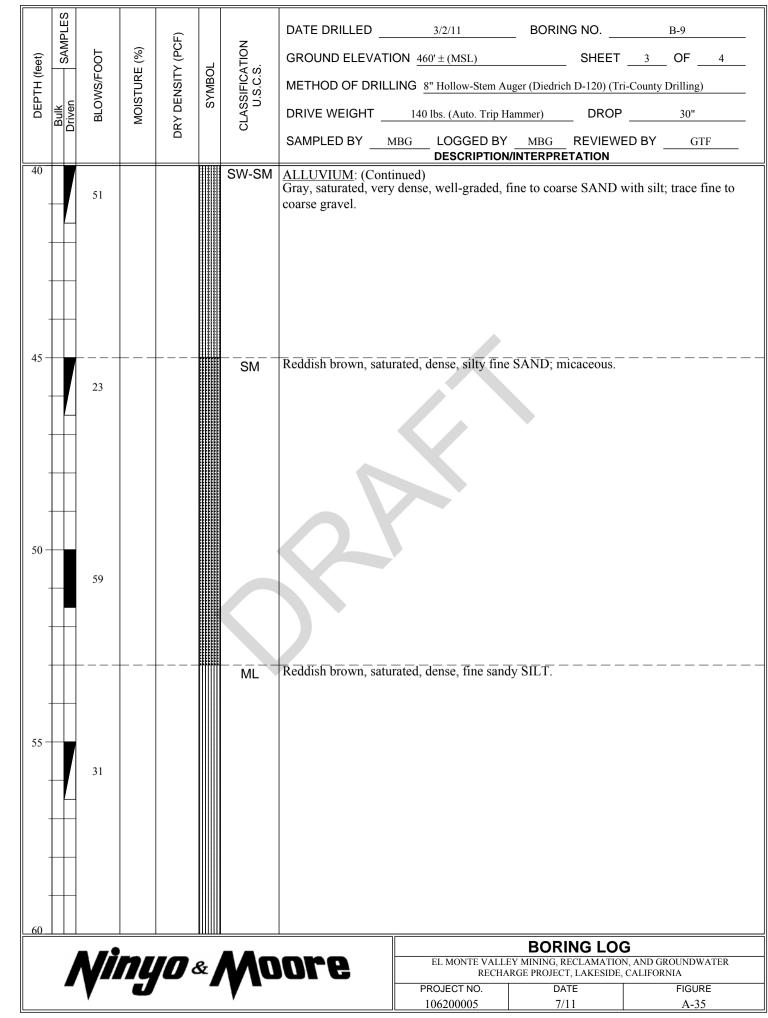
| DEPTH (feet)<br>Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/3/11       BORING NO.       B-8         GROUND ELEVATION 456'± (MSL)       SHEET       2       OF       4         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--|------------|--------------|-------------------|--------|----------------------------|---|
|  | 27         |              |                   |        | SP                         | <u>ALLUVIUM</u> : (Continued)<br>Gray, moist, medium dense, poorly-graded, fine to medium SAND.<br>Reddish brown; fine to coarse sand.  |
| 25                                     | 36         |              |                   |        | SM                         | Brown, wet, dense to very dense, silty fine SAND; with gravel.  |
|  |            |              |                   |        | SW<br>ML                   | Gray, moist, very dense, well-graded, fine to coarse SAND with some gravel (up to 1<br>inch).<br>Reddish brown, wet, dense, fine sandy SILT; micaceous.   |
| 30                                     | 29         |              |                   |        |                            |   |
| 35                                     | 51         |              |                   |        |                            |   |
| 40                                     | <b>V</b> i | <i>nų</i>    | <b>[0</b> &       | Se     |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE   |
|  |            | J            |                   |        |                            | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-30   |

|              | SAMPLES                |              | :F)               |                       | 7                          | DATE DRILLED         3/3/11         BORING NO.         B-8  |
|--------------|------------------------|--------------|-------------------|-----------------------|----------------------------|---|
| (feet)       | iven SAM<br>BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | oL                    | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION         456' ± (MSL)         SHEET         3         OF         4  |
| DEPTH (feet) | /SMC                   | ISTUF        | JENSI             | SYMBOL                | SSIFIC<br>U.S.C            | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)  |
| DEI<br>Bulk  | BLOV                   | MO           | DRY D             |                       | CLAS                       | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"  |
|              |                        |              |                   |                       |                            | SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF         DESCRIPTION/INTERPRETATION   |
|              | 15                     |              |                   |                       | ML                         | <u>ALLUVIUM</u> : (Continued)<br>Reddish brown, saturated, medium dense, fine sandy SILT.   |
| 45           | 27                     |              |                   |                       | SM                         | Grayish brown, saturated, dense, silty fine to coarse SAND.<br>Trace gravel (up to ½ inch).   |
| 50           | 55                     |              |                   |                       |                            | Reddish brown; silty fine sand.   |
| 55-          | 79/8"                  |              |                   |                       |                            |   |
|              |                        |              |                   | いていていてい していないないにないいない |                            | METAVOLCANIC ROCK:<br>Dark gray, saturated, soft, weathered METAVOLCANIC ROCK.  |
|              |                        |              |                   | 0                     |                            | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER  |
|              | <b>//</b> /            | ŢĻ           |                   | Š.                    |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE |
|              | V                      |              |                   |                       | V                          |   |

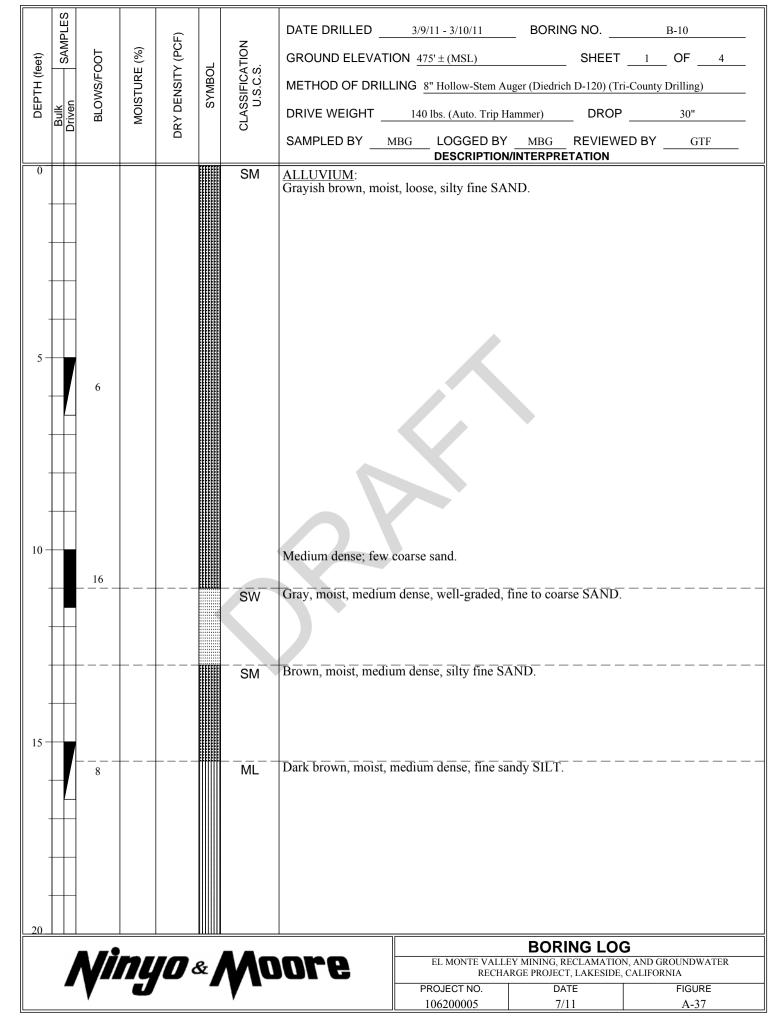
| DEPTH (feet)<br>Bulk SAMPLES<br>Driven BLOWS/FOOT | MOISTURE (%)<br>DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/3/11       BORING NO.       B-8         GROUND ELEVATION       456' ± (MSL)       SHEET       4       OF       4         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)       DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|---|-----------------------------------|--------|----------------------------|--|
|   |                                   |        | CLA                        |  |
|   | inyo                              | &      | Ma                         | DOPPE<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE<br>106200005 7/11 A-32  |

| O       SP       ALLUYIUM:<br>Brown, moist, loose, silty fine to medium SAND.         5       18       SP       Gray, moist, medium dense, poorly-graded, fine to medium SAND; trace fine gravel.         10       22       SW-SM       Gray, moist, dense, well-graded, fine to coarse SAND with silt. |  |
|---|--|
| 15     16       16     Medium dense.       20     BORING LOG  |  |
| Dingo & Moore       Borns Los         El MONTE VALLEY MINING, RECLAMATION, AND GROUNDW         RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE         106200005       7/11   |  |

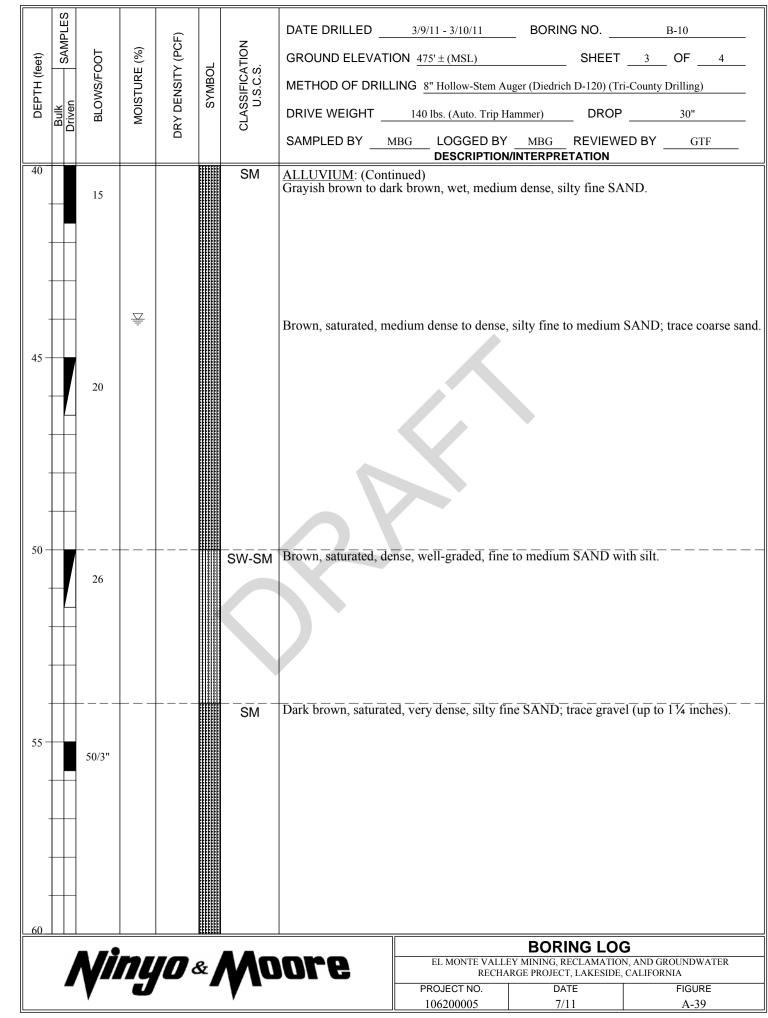
|    | BLOWS/FOOT     | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATI<br>METHOD OF DRILL<br>DRIVE WEIGHT | 3/2/11<br>ON <u>460' ± (MSL)</u><br>ING <u>8" Hollow-Stem Aug</u><br>140 lbs. (Auto. Trip Har<br><u>ABG</u> LOGGED BY<br>DESCRIPTION/I | SHEET<br>(Diedrich D-120) (T<br>nmer) DROF | 2_ OF4<br>ri-County Drilling)   |
|----|----------------|--------------|-------------------|--------|----------------------------|---|--|--|---------------------------------|
|    | 6              |              |                   |        | ML                         | <u>ALLUVIUM</u> : (Cont<br>Dark brown, wet, loo   | inued)<br>ose, fine sandy SILT; m  | iicaceous.                                 |                                 |
|    | 17             |              |                   |        | SM<br>SW-SM                |   | st, medium dense, silty,   |  |                                 |
| 30 | 24             |              |                   |        |                            |   |  |  |                                 |
| 35 | 28             | \_\<br>      |                   |        | SP-SM                      | micaceous.  | saturated, medium den  |  |                                 |
| 40 |                |              |                   |        | SW-SM                      |   | v dense, weii-graded, fii  |  |                                 |
|    |                |              |                   | 0      |                            | nrn   | EL MONTE VALLEY  | BORING LO                                  | <b>G</b><br>DN, AND GROUNDWATER |
|    | <b>/ / /</b> / | 14           |                   | ×      |                            | ore   |  | GE PROJECT, LAKESIDE                       |                                 |
|    | V              |              |                   |        | V                          |   | 106200005  | 7/11                                       | A-34                            |



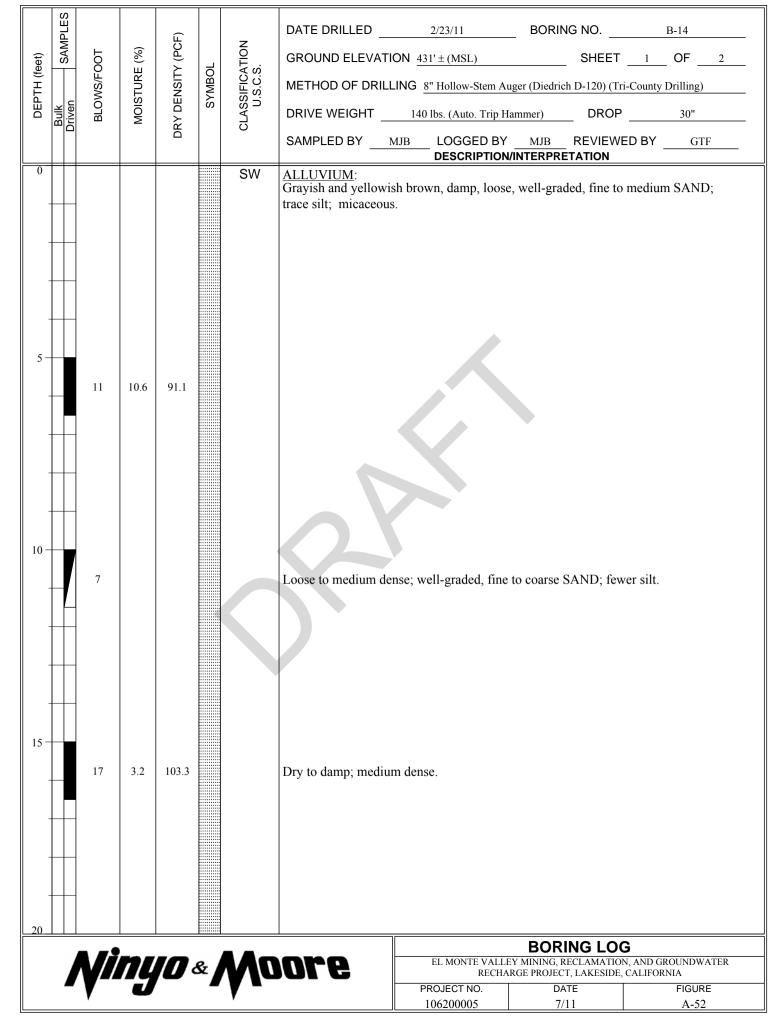
| DEPTH (feet) | Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL              | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/2/11       BORING NO.       B-9         GROUND ELEVATION 460' ± (MSL)       SHEET       4       OF       4         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF  |
|--------------|--------------|------------|--------------|-------------------|---------------------|----------------------------|---|
| 60           |              | 18         |              |                   |                     | ML                         | ALLUVIUM: (Continued)<br>Reddish brown, saturated, medium dense, fine sandy SILT.   |
|              |              | 50/6"      |              |                   |                     | SP-SM                      | Brown, saturated, very dense, poorly-graded, fine to medium SAND with silt; some fine<br>to coarse gravel.<br>Brown, saturated, dense, silty fine SAND.   |
|              |              | 53         |              |                   | いたとうというないないであってもあいた |                            | METAVOLCANIC ROCK:<br>Yellow and gray, saturated, soft, weathered METAVOLCANIC ROCK.  |
| 80           |              | Vi         |              | 10 4              | \$                  |                            | Total Depth = 76.5 feet.         Groundwater encountered at approximately 35 feet during drilling.         Backfilled with approximately 27 cubic feet of bentonite grout shortly after drilling on 3/2/11.         Note:         Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report.         BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE |
|              |              |            | J            | _                 |                     |                            | PROJECT NO. DATE FIGURE   |



| DEPTH (feet)<br>Bulk SAMPLES | <b>BLOWS/FOOT</b> | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT                | 3/9/11 - 3/10/11<br>ON <u>475' ± (MSL)</u><br>ING <u>8" Hollow-Stem Aug</u><br>140 lbs. (Auto. Trip Har<br><u>1BG</u> LOGGED BY<br>DESCRIPTION/I | sHEET<br>(Diedrich D-120) (T<br>nmer) DROF              | T OF4       Fri-County Drilling)           |
|------------------------------|-------------------|--------------|-------------------|--------|----------------------------|--|--|---|--|
|                              | 7                 |              |                   |        | ML<br>SM                   |  | inued)<br>oose to medium dense,<br>medium dense, silty fin   |   |  |
| 25                           | 29                |              |                   |        |                            |  |  |   |  |
| 30                           | 21                |              |                   |        |                            | Dense; trace medium<br>Boring terminated or<br>Boring resumed on 3 |  |   |  |
| 35                           |                   |              |                   |        | SW-SM                      |  |  | aded, fine to mediu                                     | im SAND with silt; little                  |
| 40                           | Vi                | ny           | <i>D</i> 4        | Se /   | SM                         | Grayish brown, mois  | RECHAR   | BORING LO<br>MINING, RECLAMATIO<br>GE PROJECT, LAKESIDI | OG<br>ON, AND GROUNDWATER<br>E, CALIFORNIA |
|                              | V                 |              |                   |        | V                          |  | PROJECT NO.<br>106200005   | DATE<br>7/11  | FIGURE<br>A-38                             |



|              |         | S            |        |            |              |                   |        |                            |  |                                  |                       |                           |
|--------------|---------|--------------|--------|------------|--------------|-------------------|--------|----------------------------|--|----------------------------------|-----------------------|---------------------------|
|              |         | SAMPLES      |        |            | (            | CF)               |        | Z                          | DATE DRILLED                                       | 3/9/11 - 3/10/11                 | BORING NO.            | B-10                      |
| (feet)       | · · · · | SA           | 5      | FOOT       | ЗЕ (%        | TY (P             | Ъ      | CATIC<br>S.                | GROUND ELEVATIC                                    |                                  | SHEET                 |                           |
| DEPTH (feet) |         |              | c      | BLOWS/FOOT | MOISTURE (%) | ENSI              | SYMBOL | CLASSIFICATION<br>U.S.C.S. |  | NG <u>8" Hollow-Stem Aug</u>     |                       | i-County Drilling)        |
|              |         | Bulk<br>Bulk | Driven | BL(        | MO           | DRY DENSITY (PCF) |        | CLAS                       |  | 140 lbs. (Auto. Trip Har         |                       |                           |
|              |         |              |        |            |              |                   |        |                            | SAMPLED BY   |                                  | MBG REVIEW            | ED BYGTF                  |
| 60           | )       |              |        |            |              |                   |        | SM                         | <u>ALLUVIUM</u> : (Contin<br>Dark brown, saturated | ued)<br>L very dense, silty fine | e SAND.               |                           |
|              | ł       | -            |        | 34         |              |                   |        |                            | ,  | ,,,,                             |                       |                           |
|              | +       |              |        |            |              |                   | ****** |                            | Total Depth = $61.5$ fee<br>Groundwater encount    |                                  | 44 feet during drilli | ng.                       |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       | shortly after drilling on |
|              | t       |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | +       | _            | _      |            |              |                   |        |                            |  |                                  |                       | orehole due to seasonal   |
| 65           | ;       |              |        |            |              |                   |        |                            | variations in precipita                            | tion and several other           | factors as discussed  | in the report.            |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | t       | +            |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | +       |              | _      |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | +       |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
| 70           | ) -     | _            |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | Ī       |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | ł       | -            | -      |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            | 7  |                                  |                       |                           |
|              | +       | +            |        |            |              |                   |        |                            |  |                                  |                       |                           |
| 75           | ; –     |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | Ť       |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | ł       | +            | -      |            |              |                   |        |                            |  |                                  |                       |                           |
|              | +       |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              |         |              |        |            |              |                   |        |                            |  |                                  |                       |                           |
|              | t       | ╡            |        |            |              |                   |        |                            |  |                                  |                       |                           |
| _8(          | )       |              |        |            |              |                   |        |                            |  |                                  | BORING LOO            | 2                         |
|              |         |              |        |            |              |                   | & _    |                            | ore  |                                  |                       | N, AND GROUNDWATER        |
|              |         |              |        |            | 7            | _                 |        |                            |  | PROJECT NO.                      | DATE                  | FIGURE                    |
|              |         |              |        |            |              |                   |        |                            |  | 106200005                        | 7/11                  | A-40                      |



|              | SAMPLES             |                       | _            | CF)               |        | z                          | DATE DRILLED         2/23/11         BORING NO.         B-14  |
|--------------|---------------------|-----------------------|--------------|-------------------|--------|----------------------------|---|
| eet)         | SAI                 | 001                   | E (%)        | Y (P(             | 5      | ATIO<br>S.                 | GROUND ELEVATION         431' ± (MSL)         SHEET         2         OF         2  |
| DEPTH (feet) |                     | iven 1                | MOISTURE (%) | NSIT              | SYMBOL | CLASSIFICATION<br>U.S.C.S. | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)  |
| DEP          | Bulk                | <u>Briven</u><br>BLOV | MOIS         | DRY DENSITY (PCF) | Ś      |                            | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"  |
|              |                     |                       |              | D D               |        |                            | SAMPLED BY MJB LOGGED BY MJB REVIEWED BY GTF<br>DESCRIPTION/INTERPRETATION  |
| 20           |                     |                       |              |                   |        | SM                         | ALLUVIUM: (Continued)   |
|              |                     | 7                     |              |                   |        |                            | Dark brown, damp to moist, loose to medium dense, silty fine SAND; micaceous.   |
|              |                     |                       |              |                   |        |                            |   |
|              |                     |                       |              |                   |        |                            |   |
|              | H                   | +                     | <u> </u>     | <u> </u>          |        | SW                         | Grayish brown, dry to damp, medium dense, well-graded, fine to coarse SAND;   |
|              |                     |                       |              |                   |        | 000                        | micaceous.  |
|              | $\square$           |                       |              |                   |        |                            |   |
| 25 -         |                     |                       |              |                   |        |                            |   |
|              |                     | 28                    | 4.1          | 100.7             |        |                            |   |
|              |                     |                       |              |                   |        |                            | Total Depth = 26.5 feet.  |
|              | +                   | _                     |              |                   |        |                            | Groundwater not encountered.  |
|              |                     |                       |              |                   |        |                            | Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 2/23/11.                          |
|              |                     |                       |              |                   |        |                            | Note:   |
|              | +                   | _                     |              |                   |        |                            | Groundwater, though not encountered at the time of drilling, may rise to a higher level                                   |
| 30 -         |                     |                       |              |                   |        |                            | due to seasonal variations in precipitation and several other factors as discussed in the report.                         |
|              |                     |                       |              |                   |        |                            |   |
|              | +                   | _                     |              |                   |        |                            |   |
|              | $\square$           |                       |              |                   |        |                            |   |
|              |                     |                       |              |                   |        |                            |   |
|              | +                   | -                     |              |                   |        |                            |   |
|              | $\square$           | _                     |              |                   |        |                            |   |
|              |                     |                       |              |                   |        |                            |   |
| 35 -         | +                   |                       |              |                   |        |                            |   |
|              | $\square$           | _                     |              |                   |        |                            |   |
|              |                     |                       |              |                   |        |                            |   |
|              | $\uparrow \uparrow$ |                       |              |                   |        |                            |   |
|              | $\parallel$         | _                     |              |                   |        |                            |   |
|              |                     |                       |              |                   |        |                            |   |
|              |                     |                       |              |                   |        |                            |   |
| 40           |                     |                       | <u> </u>     |                   |        |                            | BORING LOG  |
|              |                     | Mi                    |              |                   | &      |                            | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE |
|              |                     | - ▼                   | 1            | _                 |        |                            |   |
|              |                     |                       |              |                   |        |                            | 106200005 7/11 A-53   |

| DEPTH (feet)<br>Bulk SAMPLES<br>Driven BLOWS/FOOT<br>MOISTURE (%) | DRY DENSITY (PCF) | CLASSIFICATION<br>U.S.C.S. | METHOD OF DRILLI | <ul> <li>DN <u>436' ± (MSL)</u></li> <li>NG <u>8" Hollow-Stem Aug</u></li> <li>140 lbs. (Auto. Trip Har</li> </ul> | ger (Diedrich D-120) (Tr<br>mmer) DROP                    | 1 OF 5                                |
|---|-------------------|----------------------------|------------------|--|---|---------------------------------------|
|   |                   | ML                         | SAMPLED BYM      | JB LOGGED BY DESCRIPTION/I   | MJB REVIEW  | ED BYGTF<br>cattered medium to coarse |
|   | UD &              |                            | ore              |  | BORING LOO<br>MINING, RECLAMATIO<br>GE PROJECT, LAKESIDE, | N, AND GROUNDWATER                    |
|   |                   |                            |                  | PROJECT NO.<br>106200005   | DATE<br>7/11  | FIGURE<br>A-54                        |

| S S            |             |              |                   |                 |                            |                                       |                               |                      |                              |
|----------------|-------------|--------------|-------------------|-----------------|----------------------------|---------------------------------------|-------------------------------|----------------------|------------------------------|
| et)<br>SAMPLES |             |              | CF)               |                 | Z                          | DATE DRILLED                          | 2/23/11                       | BORING NO.           | B-15                         |
| feet)          | BLOWS/FOOT  | MOISTURE (%) | ď.<br>∠           | Ы               | ATIO<br>S.                 | GROUND ELEVATION                      | $\frac{436' \pm (MSL)}{100}$  | SHE                  | ET OF5                       |
| DEPTH (feet)   | WS/F        | STUR         | LISNE             | SYMBOL          | SIFIC<br>.S.C.             | METHOD OF DRILL                       | ING <u>8" Hollow-Stem Aug</u> | ger (Diedrich D-120) | ) (Tri-County Drilling)      |
| DEP<br>Bulk    | BLO         | MOIS         | DRY DENSITY (PCF) | S               | CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT                          | 140 lbs. (Auto. Trip Har      | mmer) DR             | OP                           |
|                |             |              | ä                 |                 | 0                          | SAMPLED BY                            |                               |                      | EWED BYGTF                   |
| 20             |             |              |                   |                 | SM                         | ALLUVIUM: (Conti                      | nued)                         | NTERPRETATIO         |                              |
|                |             |              |                   |                 |                            | Dark brown, damp, le sand; micaceous. | oose to medium dense,         | silty fine SAND      | ; scattered medium to coarse |
|                |             |              |                   |                 |                            | ,                                     |                               |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
|                | _           |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
| 25             | _           |              |                   |                 |                            | Few medium to coars                   | se sand: fewer silt           |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                | 1           |              |                   |                 |                            |                                       |                               |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
| 30             | _           |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       | ·                             |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
|                | _           |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                | 1           |              |                   |                 |                            |                                       |                               |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
| 25             |             |              |                   |                 |                            |                                       |                               |                      |                              |
| 35             |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                | -           |              |                   |                 |                            |                                       |                               |                      |                              |
|                | _           |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   |                 |                            |                                       |                               |                      |                              |
|                |             |              |                   | <u>ecctetti</u> |                            |                                       |                               | BORING L             |                              |
|                | <b>N</b> // | <u>]</u> [   | 0                 | £               | MQ                         | ore                                   | RECHAR                        | GE PROJECT, LAKES    |                              |
|                | V           | U            |                   | _               | V -                        |                                       | PROJECT NO.<br>106200005      | DATE<br>7/11         | FIGURE<br>A-55               |

| Image: series of the series | OF<br>i-County Drilling)<br> |
|---|------------------------------|
| 40       SM       ALLUVIUM: (Continued)<br>Brown, damp, medium dense, silty fine SAND; some medium to   | o coarse sand; micaceous.    |
| 45 SW Grayish brown, saturated, medium dense to dense, well-graded, micaceous.  | fine to coarse SAND;         |
|   |                              |
| Ningo & Moore       EL MONTE VALLEY MINING, RECLAMATION         Recharge project, Lakeside,       PROJECT NO.         Dormatical data       Date         106200005       7/11   |                              |

|              | LES            |            |              |                   |        |                            | DATE DRILLED  | 2/23/11                  | BORING NO.                                     | B-15                  |
|--------------|----------------|------------|--------------|-------------------|--------|----------------------------|---|--------------------------|--|-----------------------|
| et)          | SAMPLES        | J          | (%)          | (PCF              |        | NOI                        |   | ON 436' ± (MSL)          |  | 4 OF 5                |
| H (fee       |                | S/FO(      | JRE          | SITY              | SYMBOL | CLASSIFICATION<br>U.S.C.S. |   | ING 8" Hollow-Stem Au    |  |                       |
| DEPTH (feet) | Bulk<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYN    |                            |   | 140 lbs. (Auto. Trip Ha  |  |                       |
|              | Dri            | Ш          | Σ            | DRY               |        |                            |   | IJB LOGGED BY            |  |                       |
|              |                |            |              |                   | mm     |                            |   | DESCRIPTION              |  |                       |
| 60           |                | 20         |              |                   |        | SW-SM                      | <u>ALLUVIUM</u> : (Conti<br>Grayish brown, satur<br>with silt; micaceous. | ated, medium dense to    | ) dense, well-graded,                          | , fine to coarse SAND |
| 65           |                | 51         |              |                   |        |                            | Dense.  |                          |  |                       |
| - 70         |                | 21         |              |                   |        |                            |   |                          |  |                       |
|              |                | 39         |              |                   |        |                            | Medium dense.   | m conturated ware day    | so well goods a fire                           |                       |
| 00           |                |            |              |                   |        | SW+GW                      | Gray to grayish brow GRAVEL; micaceou                                     |                          | se, well-graded, fine                          | to coarse SAND and    |
| 80           |                |            |              |                   |        |                            |   |                          | BORING LO                                      |                       |
|              |                | VÍ         | Ŋ            | <b>[</b> ]        | ۶£     | MO                         | ore   | RECHA                    | Y MINING, RECLAMATIO<br>RGE PROJECT, LAKESIDE, | , CALIFORNIA          |
|              |                | V          | J            |                   |        | ▼ -                        |   | PROJECT NO.<br>106200005 | DATE<br>7/11                                   | FIGURE                |

| et)<br>SAMPLES<br>OT                | (H)   | z                          | DATE DRILLED         2/23/11         BORING NO.         B-15  |
|-------------------------------------|---|----------------------------|---|
| DEPTH (feet)<br>ulk SAI<br>iven SAI | MOISTURE (%)<br>DRY DENSITY (PCF)<br>SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION     436' ± (MSL)     SHEET     5     OF     5  |
| DEPTH<br>en<br>COWS                 | DISTURE (                                   | ASSIF<br>U.S.              | METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"   |
| DEF<br>Bulk<br>Driven<br>BLO        | DRY   | GL                         | DRVE WEIGHT       140 lbs. (Auto: Trip Hammer)       DROF       30         SAMPLED BY       MJB       LOGGED BY       MJB       REVIEWED BY       GTF         DESCRIPTION/INTERPRETATION  |
| 80<br>38<br>85<br>50/4"             |   | SW+GW                      |   |
| 90 50/4"                            |   | GP-GM                      | Gray, saturated, very dense, poorly-graded, fine to coarse GRAVEL with silt; some<br>cobbles.<br>Refusal to further drilling.<br>Total Depth = 91.0 feet.<br>Groundwater encountered at approximately 45 feet during drilling.<br>Backfilled with approximately 32 cubic feet of bentonite grout shortly after drilling on<br>2/23/11.<br><u>Note</u> :<br>Groundwater may rise to a level higher than that measured in borehole due to seasonal<br>variations in precipitation and several other factors as discussed in the report. |
|                                     | ŊØ&   |                            | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER  |

| et)<br>SAMPLES         | ЮТ         | (%)          | DRY DENSITY (PCF) |        | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED         3/14/11         BORING NO.         B-16           GROUND ELEVATION         444' ± (MSL)         SHEET         1         OF         3     |
|------------------------|------------|--------------|-------------------|--------|----------------------------|---|
| DEPTH (feet)<br>ulk SA | BLOWS/FOOT | MOISTURE (%) | INSIT             | SYMBOL | SIFICA<br>J.S.C.S          | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)  |
| DEP<br>Bulk<br>Driven  | BLO        | MOIS         | RY DE             | N      | CLAS                       | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"  |
|                        |            |              |                   |        |                            | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF DESCRIPTION/INTERPRETATION   |
|                        | 8          |              |                   |        | SM                         | ALLUVIUM:<br>Brown, moist, loose, silty fine SAND.<br>Dark brown; medium dense.   |
|                        | 15         |              |                   |        |                            |   |
|                        | 4          |              |                   |        | <br>SP                     | Gray, moist, Toose, poorly-graded, fine SAND; some medium sand; trace coarse sand.  |
|                        | M          |              | 10 4              | Sz     | Ma                         | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE |
|                        |            |              |                   | -      |                            | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-59   |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT                                   | ON 444' ± (MSL)<br>ING 8" Hollow-Stem Auge<br>140 lbs. (Auto. Trip Han<br>1BG LOGGED BY | er (Diedrich D-120) (Tr<br>nmer) DROP | 2<br>ri-County I | OF<br>Drilling)<br>30" | 3   |
|------------------------------|------------|--------------|-------------------|--------|----------------------------|--|---|---------------------------------------|------------------|------------------------|-----|
|                              | 12         |              |                   |        | SP-SM                      | <u>ALLUVIUM</u> : (Conti<br>Gray, damp, medium | inued)<br>1 dense, fine sandy SILT  | Γ; trace medium sar                   | nd.              |                        |     |
|                              | 9          |              |                   |        | SM                         |  | t, medium dense, silty fi   |                                       |                  |                        |     |
| 30                           | 16         |              |                   |        | SP                         | Gray, moist, medium                            | i dense, poorly-graded,   | fine SAND.                            |                  |                        |     |
| 35                           | 9          |              | <b>└</b>          |        | SM                         | Gray to brown, mois                            | t, medium dense, silty f  | ine SAND. — — —                       |                  |                        |     |
| 40                           |            |              |                   |        | 1<br>-<br>-                | METAVOLCANIC<br>Yellow, moist, soft,           | ROCK:<br>weathered METAVOLO   | CANIC ROCK.                           |                  |                        |     |
|                              | • / }      | <b></b>      |                   |        |                            |  | EL MONTE VALLEV   | BORING LO                             |                  | ROUNDWAT               | TER |
|                              | <b>V</b>   | Ц            |                   | Ý      |                            | ore  |   | DATE                                  |                  |                        |     |
|                              | <b>V</b>   |              |                   |        | V                          |  | 106200005   | 7/11                                  |                  | A-60                   |     |

| 40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40  | DESCRIPTION/INTERPRETATION           VOLCANIC ROCK:           YOULCANIC ROCK:   |
|---|---|
| Groundw         Backfille         3/14/11.         Note:         Groundw         due to sea         report.         50         50         50         60 | water, though not encountered at the time of drilling, may rise to a higher level easonal variations in precipitation and several other factors as discussed in the |
| Ninyo & Moor  | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE   |
|   | 106200005 7/11 A-61   |

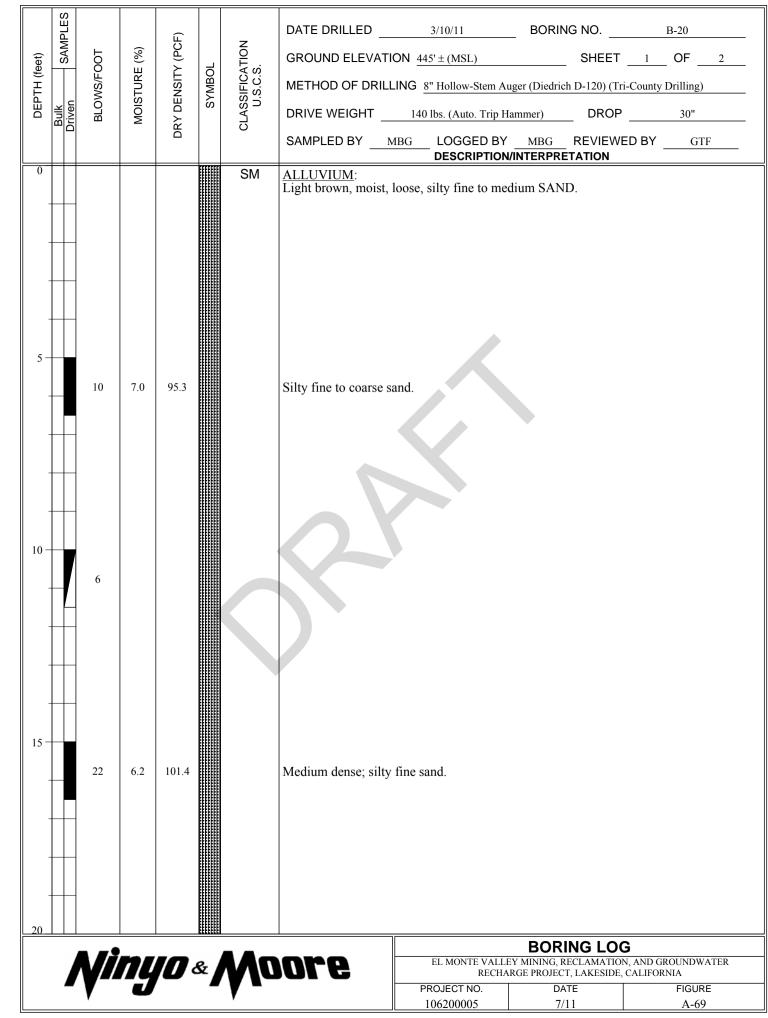
| LES                    |            |              |                   |         |                            | DATE DRILLED          | 2/25/11                 | BORING NO.                          | B-17               |
|------------------------|------------|--------------|-------------------|---------|----------------------------|-----------------------|-------------------------|-------------------------------------|--------------------|
| et)<br>SAMPLES         | ы          | (%)          | (PCF              |         | NOI                        |                       | <b>ON</b> 443' ± (MSL)  |                                     | 1 <b>OF</b> 2      |
| DEPTH (feet)<br>ulk SA | /S/FO      | 'URE         | ISITY             | SYMBOL  | FICA<br>S.C.S.             |                       | ING 8" Hollow-Stem Au   |                                     |                    |
| DEP1<br>Bulk<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYI     | CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT          | 140 lbs. (Auto. Trip Ha | ammer) DROP                         | 30"                |
| ۵<br>۵                 |            | 2            | DR                |         | 5                          |                       | IBG LOGGED BY           |                                     | ED BY GTF          |
| 0                      |            |              |                   |         | SM                         | ALLUVIUM:             | DESCRIPTION             | INTERPRETATION                      |                    |
|                        |            |              |                   |         |                            | Grayish brown, dam    | p, loose to medium de   | nse, silty SAND.                    |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         | SW                         | Gray, dry to damp, lo | oose, well-graded, fine | e to coarse SAND.                   |                    |
| 5                      |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        | 9          | 3.8          | 100.0             |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            | <u> </u>     |                   | FFFFFFF |                            | Light brown moist     | medium dense, silty, f  | ing to again SAND                   | traca racta        |
| 10                     |            |              |                   |         | SM                         | Light brown, moist, i | inedium dense, sitty, i | ine to coarse SAND,                 | trace roots.       |
|                        | 14         | 15.2         | 97.4              |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
| 15                     |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        | 14         | 15.2         | 97.4              |         |                            | Brown.                |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
|                        |            |              |                   |         |                            |                       |                         |                                     |                    |
| _20                    |            |              |                   |         |                            |                       | Г                       |                                     |                    |
|                        |            | n            |                   | e I     |                            | ore                   |                         | BORING LOC<br>Y MINING, RECLAMATION | I, AND GROUNDWATER |
|                        |            | 13           |                   | ~       |                            |                       | PROJECT NO.             | RGE PROJECT, LAKESIDE,              | FIGURE             |
|                        | -          |              |                   |         |                            |                       | 106200005               | 7/11                                | A-62               |

|      | ,    |         |            | 1            | 1                 | -      | 1                          | 1  |
|------|------|---------|------------|--------------|-------------------|--------|----------------------------|--|
|      |      | SAMPLES |            |              | (III)             |        |                            | DATE DRILLED         2/25/11         BORING NO.         B-17   |
| (100 | 201) | SAM     | ООТ        | (%)          | Y (PCI            | _      | NTION                      | GROUND ELEVATION         443' ± (MSL)         SHEET         2         OF         2   |
|      |      |         | BLOWS/FOOT | MOISTURE (%) | NSIT              | SYMBOL | SIFICA<br>S.C.S.           | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)   |
|      |      | Bulk    | BLO        | MOIS         | DRY DENSITY (PCF) | လ်     | CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"   |
|      |      |         |            |              | B                 |        |                            | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF<br>DESCRIPTION/INTERPRETATION   |
| 20   | 0    |         |            |              |                   |        | SM                         | ALLUVIUM: (Continued)<br>Brown, moist, medium dense, silty fine to coarse SAND.  |
|      | -    | _       | 8          |              |                   |        |                            | Brown, moist, mealum dense, silty line to coarse SAND.   |
|      | _    |         | _          |              |                   |        |                            |  |
|      |      |         |            |              |                   |        |                            |  |
|      |      |         |            |              | <u> </u>          |        | <br>                       | Gray, dry to damp, medium dense, well-graded, fine to medium SAND.   |
|      | -    |         | _          |              |                   |        | 310                        | Gray, ary to damp, medium dense, wen graded, me to medium brittip.   |
| 2:   | 5 —  |         |            |              |                   |        |                            |  |
|      |      |         | 22         | 3.2          | 101.0             |        |                            |  |
|      |      |         |            |              |                   |        | SM                         | Brown, moist, medium dense, silty SAND.<br>Total Depth = 26.5 feet.  |
|      | -    |         | -          |              |                   |        |                            | Groundwater not encountered.<br>Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on                          |
|      | +    | _       | -          |              |                   |        |                            | 2/25/11.   |
|      | _    |         | _          |              |                   |        |                            | Note:<br>Groundwater, though not encountered at the time of drilling, may rise to a higher level   |
|      |      |         |            |              |                   |        |                            | due to seasonal variations in precipitation and several other factors as discussed in the report.  |
| 3    | 0 -  |         |            |              |                   |        |                            |  |
|      | -    |         | -          |              |                   |        |                            |  |
|      | -    |         | _          |              |                   |        |                            |  |
|      |      |         |            |              |                   |        |                            |  |
|      |      |         |            |              |                   |        |                            |  |
|      | -    |         | -          |              |                   |        |                            |  |
| 3:   | 5 —  | _       | _          |              |                   |        |                            |  |
|      | _    |         | _          |              |                   |        |                            |  |
|      |      |         |            |              |                   |        |                            |  |
|      |      |         |            |              |                   |        |                            |  |
|      | +    |         | -          |              |                   |        |                            |  |
|      | +    | +       | -          |              |                   |        |                            |  |
| _4   | 0    |         |            |              |                   |        |                            |  |
|      |      |         |            |              |                   | &      |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO. |
|      |      |         |            | 19           |                   |        |                            | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-63  |
|      |      |         |            |              |                   |        |                            |  |

| et)<br>SAMPLES         |            |              | (-                |        |                            | DATE DRILLED        | 3/10/11 - 3/11/11        | BORING NO.                           | B-19                |
|------------------------|------------|--------------|-------------------|--------|----------------------------|---------------------|--------------------------|--------------------------------------|---------------------|
| eet)<br>SAMI           | ТОС        | (%)          | DRY DENSITY (PCF) |        | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATIO     | ON 444' ± (MSL)          | SHEET                                | OF                  |
| DEPTH (feet)<br>ulk SA | BLOWS/FOOT | MOISTURE (%) | INSIT             | SYMBOL | SIFICA<br>S.C.S.           | METHOD OF DRILL     | ING 8" Hollow-Stem Aug   | ger (Diedrich D-120) (T              | ri-County Drilling) |
| DEP<br>Bulk<br>Driven  | BLO        | MOIS         | ςY DE             | လဲ     | n<br>CLASS                 | DRIVE WEIGHT        | 140 lbs. (Auto. Trip Ha  | mmer) DROF                           | 30"                 |
|                        |            |              |                   |        |                            | SAMPLED BY          | IBG LOGGED BY            | MBG REVIEW                           | ED BY GTF           |
|                        | 20         |              |                   |        | SW                         |                     | oose, well-graded, find  | e to coarse SAND.                    |                     |
| 10                     |            |              |                   |        | SW-SM                      | Gray, moist, medium | dense, well-graded, fi   | ne to medium SAN                     | D with silt.        |
|                        | 10         |              |                   |        |                            |                     | subangular gravel (up    |                                      |                     |
| 20                     |            |              |                   |        |                            |                     |                          |                                      |                     |
|                        |            |              |                   | & /    |                            | ore                 |                          |                                      | ON, AND GROUNDWATER |
|                        |            | 3            |                   |        |                            |                     | PROJECT NO.<br>106200005 | GE PROJECT, LAKESIDE<br>DATE<br>7/11 | FIGURE<br>A-66      |

| DEPTH (feet) | Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/10/11 - 3/11/11       BORING NO.       B-19         GROUND ELEVATION       444' ± (MSL)       SHEET       2       OF       3         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--------------|--------------|------------|--------------|-------------------|--------|----------------------------|--|
| -            |              | 7          |              |                   |        | SM<br>SW-SM                | ALLUVIUM: (Continued)<br>Dark brown, moist, loose to medium dense, silty fine SAND.<br>Grayish brown, moist, medium dense, well-graded, fine to medium SAND with silt.   |
|              |              | 27         |              |                   |        |                            | Boring terminated on 3/10/11.<br>Boring resumed on 3/11/11.  |
| 30           |              | 4          |              |                   |        | SM                         | Gravish brown, moist, loose, silty fine to medium SAND.  |
| 35           |              | 17         | <u>_</u> ₩   |                   |        | SP                         | Grayish brown, saturated, medium dense, poorly-graded, fine to medium SAND.  |
|              |              | Vi         | nų           | <b>[</b> ]        | &      | Ma                         | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE  |
|              | -            | V          | U            |                   | _      | V -                        | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-67  |

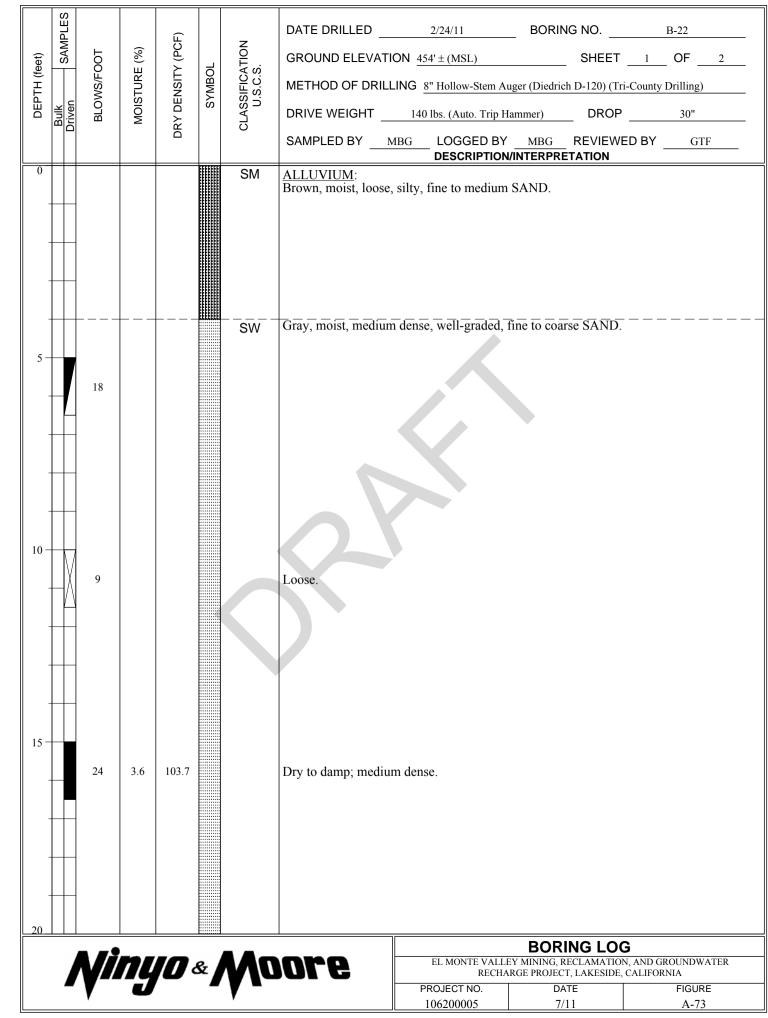
| DEPTH (feet)<br>Bulk SAMPLES<br>Driven SAMPLES<br>BLOWS/FOOT<br>MOISTURE (%)<br>DRY DENSITY (PCF) | SYMBOL<br>CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/10/11 - 3/11/11       BORING NO.       B-19         GROUND ELEVATION       444' ± (MSL)       SHEET       3       OF       3         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF                            |
|---|--------------------------------------|---|
|   | SP                                   | ALLUVIUM: (Continued)<br>Dark brown, saturated, medium dense, poorly-graded, fine to medium SAND; little<br>coarse sand.  |
| 45  | SM                                   | Dark brown, saturated, medium dense, silty fine SAND.   |
|   |                                      | Loose.  |
| 21  |                                      | Dense.  |
|   |                                      | Refusal on gravel and cobbles.         Total Depth = 57.1 feet.         Groundwater encountered at approximately 35 feet during drilling.         Backfilled with approximately 20 cubic feet of bentonite grout shortly after drilling on 3/11/11.         Note: Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report. |
| Ninyo   | e. 🗛 🗖                               | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER  |
| <b>11130</b> °  | */ <b>/</b> /                        | RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE         FIGURE           106200005         7/11         A-68  |



| DEPTH (feet)<br>Bulk control EC | NS/FO | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/10/11       BORING NO.       B-20         GROUND ELEVATION       445' ± (MSL)       SHEET       2       OF       2         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)       DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|---------------------------------|-------|--------------|-------------------|--------|----------------------------|--|
| 20                              | 21    |              |                   |        | SM<br>ML                   | ALLUVIUM: (Continued)<br>Light brown, moist, dense, silty fine SAND.<br>Dark brown, moist, loose, fine sandy SILT; some fine to medium sand.   |
| 30                              |       |              |                   |        |                            | Total Depth = 26.5 feet.         Groundwater not encountered.         Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 3/10/11.         Note:         Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.             |
| 35                              |       | <b>n</b>     |                   | 8      | <b>8A</b> n                | BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER         RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE         FIGURE   |
|                                 |       | 7            |                   |        |                            | PROJECT NO. DATE FIGURE<br>106200005 7/11 A-70   |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT | 3/10/11<br>ON <u>450' ± (MSL)</u><br>ING <u>8" Hollow-Stem Aug</u><br>140 lbs. (Auto. Trip Hau<br>IBG LOGGED BY<br>DESCRIPTION/I | ger (Diedrich D-120) (Tr<br>mmer) DROF | Γ1_OF2              |
|------------------------------|------------|--------------|-------------------|--------|----------------------------|---|--|--|---------------------|
|                              |            |              |                   |        | SM                         |   | ace roots.   | I.                                     |                     |
|                              |            |              |                   | e.     | AAn                        | ore   |  | Y MINING, RECLAMATIC                   | ON, AND GROUNDWATER |
|                              | <b>V</b>   | -4           |                   | ×      |                            |   |  | GE PROJECT, LAKESIDE                   |                     |
|                              | V          | -            |                   |        | V                          |   | 106200005  | 7/11                                   | A-71                |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | S CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT<br>SAMPLED BYM<br>ALLUVIUM: (Conti | DESCRIPTION/                        | ger (Diedrich D-120) (T<br>ummer) DROF<br>MBG REVIEW<br>INTERPRETATION | T     2     OF     2       Tri-County Drilling)       P     30"       WED BY     GTF   |
|------------------------------|------------|--------------|-------------------|--------|------------------------------|--|-------------------------------------|--|--|
| 25                           | 50/4"      |              |                   |        |                              |  | hered METAVOLCAN                    | JIC ROCK.  |  |
| 35                           |            |              |                   |        |                              | 3/10/11.<br><u>Note</u> :<br>Groundwater, though                                       | ountered.<br>oximately 10 cubic fee | e time of drilling, m  | t shortly after drilling on<br>nay rise to a higher level<br>ctors as discussed in the |
|                              | Ni         | Ŋ            | <b>[</b> ]        | &      | Ma                           | ore  | RECHAR                              | RGE PROJECT, LAKESIDI  | ON, AND GROUNDWATER<br>DE, CALIFORNIA  |
|                              | V          |              |                   |        | V                            |  | PROJECT NO.<br>106200005            | DATE<br>7/11   | FIGURE<br>A-72   |



| DEPTH (feet)<br>Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       2/24/11       BORING NO.       B-22         GROUND ELEVATION       454' ± (MSL)       SHEET       2       OF       2         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)       DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--|------------|--------------|-------------------|--------|----------------------------|--|
|  | 18         |              |                   |        | ML<br>SC                   | ALLUVIUM: (Continued)<br>Gray to grayish brown, moist, medium dense, fine sandy SILT.<br>Brown, moist, stiff, clayey fine SAND.  |
| 30                                     | 19         |              |                   |        | 50                         | Total Depth = 26.5 feet.<br>Groundwater not encountered.<br>Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 2/24/11.<br><u>Note:</u><br>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.                          |
| 35                                     |            |              |                   |        |                            |  |
|  | <b>V</b> ľ | Ŋ            | <b> 0</b>         | &      | No                         | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           FIGURE   |
|  | V          | -            |                   |        | V                          | 106200005 7/11 A-74  |

| LES                                  |            |              |                   |         |                            | DATE DRILLED                     | 2/28/11 and 3/1/11      | BORING NO.           | B-23                               |
|--------------------------------------|------------|--------------|-------------------|---------|----------------------------|----------------------------------|-------------------------|----------------------|------------------------------------|
| et)<br>SAMPLES                       | OT         | (%)          | DRY DENSITY (PCF) |         | NOL                        |                                  | <b>ON</b> 455' ± (MSL)  | ·                    | 1 <b>OF</b> 5                      |
| H (fee                               | S/FO       | URE          | SITY              | SYMBOL  | FICAT<br>C.S.              |                                  | ING 8" Hollow-Stem Aug  |                      |                                    |
| DEPTH (feet)<br>Bulk SA<br>Driven SA | BLOWS/FOOT | MOISTURE (%) | DEN               | SYN     | CLASSIFICATION<br>U.S.C.S. |                                  | 140 lbs. (Auto. Trip Ha |                      | 30"                                |
| D                                    | ш          | 2            | DRY               |         | 5                          |                                  | IBG LOGGED BY           |                      | ED BY GTF                          |
| 0                                    |            |              |                   |         | SM                         |                                  |                         | NTERPRETATION        |                                    |
|                                      |            |              |                   |         | SM                         | ALLUVIUM:<br>Brown, damp, loose, | silty fine to medium S  | AND.                 |                                    |
|                                      |            |              |                   |         |                            |                                  |                         |                      |                                    |
|                                      |            |              |                   |         |                            | Medium dense; scatte             | ered coarse sand.       |                      |                                    |
| 20                                   | •          | )            | 1                 | EFFFEEE |                            | Micaceous.                       |                         | BORING LO            |                                    |
|                                      | MĨ         | <u>n</u>     | <b>[</b> ]        | Se      | MO                         | ore                              | RECHAR                  | GE PROJECT, LAKESIDE | N, AND GROUNDWATER<br>, CALIFORNIA |
| -                                    | V          | U            |                   |         | <b>V</b> -                 |                                  | PROJECT NO.             | DATE<br>7/11         | FIGURE                             |

| et)<br>SAMPLES |  |              | F)                |        |                            | DATE DRILLED         2/28/11 and 3/1/11         BORING NO.         B-23  |
|----------------|--|--------------|-------------------|--------|----------------------------|--|
| eet)<br>SAM    | DEPTH (feet)<br>Bulk SAM<br>Driven SAM<br>BLOWS/FOOT | ≡ (%)        | DRY DENSITY (PCF) | 2      | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION         455' ± (MSL)         SHEET         2         OF         5   |
| DTH (f         |  | MOISTURE (%) | ENSIT             | SYMBOL |                            | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)   |
| Bulk           |  |              | sy de             | Ś      |                            | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"   |
|                |  |              |                   |        |                            | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF DESCRIPTION/INTERPRETATION  |
|                |  |              |                   |        | SM                         |  |
| 35             |  | Ţ            |                   |        |                            | Saturated.   |
| 40             | 9  |              |                   |        |                            | BORING LOG   |
|                | NĨ   | Ŋ            | <b> </b> 0 {      | Se     | Mo                         | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           FIGURE |
|                | V  |              |                   |        | ▼ _                        | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-76  |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       2/28/11 and 3/1/11       BORING NO.       B-23         GROUND ELEVATION       455' ± (MSL)       SHEET       3       OF       5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)       DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|------------------------------|------------|--------------|-------------------|--------|----------------------------|---|
|                              |            |              | DRY               |        | SM                         |   |
| 60                           | Vi         | ny           | 10 4              | &      | Ma                         | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           106200005         7/11  |

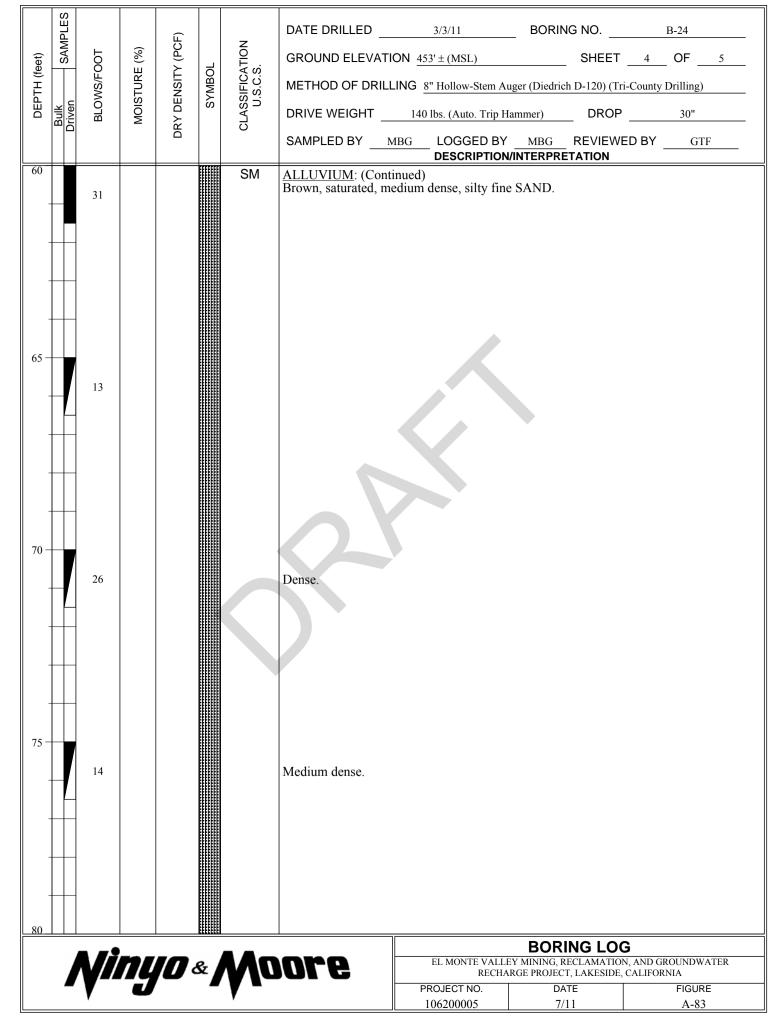
| DEPTH (feet)<br>Bulk SAMPLES<br>Driven | BLOWS/FOOT           | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATI<br>METHOD OF DRILL<br>DRIVE WEIGHT | 2/28/11 and 3/1/11<br>ON 455' ± (MSL)<br>ING 8" Hollow-Stem Aug<br>140 lbs. (Auto. Trip Har<br>ABG LOGGED BY<br>DESCRIPTION/I | er (Diedrich D-12)<br>nmer) D<br>MBG REV | IEET4<br>20) (Tri-County<br>ROP<br>/IEWED BY | OF<br>Drilling)<br>30" | 5   |
|--|----------------------|--------------|-------------------|--------|----------------------------|---|---|--|--|------------------------|-----|
|  | 43<br>41<br>50<br>34 |              |                   |        | SP-SM                      | silt.<br>Very dense; fine to c                    |   | poorly-graded, f                         | fine to mediu                                |                        |     |
|  |                      |              |                   | e /    | <b>A A n</b>               | ore   | EL MONTE VALLEY   |  | ATION, AND G                                 |                        | TER |
|  | V"                   | 4            |                   | *      |                            |   | RECHAR  | GE PROJECT, LAKE                         | ESIDE, CALIFOF                               | RNIA<br>FIGURE         |     |
|  | V                    |              |                   |        | V                          |   | 106200005   | 7/11                                     |  | A-78                   |     |

| (feet)                           | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | oL     | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED         2/28/11 and 3/1/11         BORING NO.         B-23           GROUND ELEVATION         455' ± (MSL)         SHEET         5         OF         5   |
|----------------------------------|------------|--------------|-------------------|--------|----------------------------|--|
| DEPTH (feet)<br>ulk SA<br>ven SA | I/SMC      | ISTUF        | ENSI              | SYMBOL |                            | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)   |
| DEP<br>Driven                    | BL(        | MO           | IRY D             |        | CLAS                       | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"   |
|                                  |            |              |                   |        |                            | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF<br>DESCRIPTION/INTERPRETATION   |
|                                  | 59         |              |                   |        | SP                         | <u>ALLUVIUM</u> : (Continued)<br>Gray, saturated, very dense, poorly-graded, fine to medium SAND.<br>Boring terminated on 2/28/11.<br>Boring resumed on 3/1/11.  |
| 85                               | 61         |              |                   |        | SW-SM                      | Gray. saturated, very dense, well-graded, fine to coarse SAND with silt.   |
|                                  |            |              |                   |        |                            | Refusal to further drilling.   |
| 90                               |            |              |                   | ~      |                            | Total Depth = 88.0 feet.<br>Groundwater encountered at approximately 35 feet during drilling.<br>Backfilled with approximately 31 cubic feet of bentonite grout shortly after drilling on 3/1/11.<br><u>Note</u> : Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report. |
| 0.5                              |            |              |                   |        |                            |  |
|                                  |            |              |                   |        |                            |  |
|                                  | •          | <br>)        |                   |        |                            | BORING LOG   |
|                                  | VĬ         |              | 10 4              | &      | MD                         | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE  |
|                                  | V          | U            |                   | _      | <b>V</b> -                 | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-79  |

| DEPTH (feet)<br>Bulk SAMPLES<br>Driven BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATI<br>METHOD OF DRILI<br>DRIVE WEIGHT | 3/3/11<br>ON <u>453' ± (MSL)</u><br>ING <u>8" Hollow-Stem Aug</u><br>140 lbs. (Auto. Trip Har<br><u>1BG</u> LOGGED BY<br>DESCRIPTION/I | ger (Diedrich D-120) (Tr<br>mmer) DROP                     | OF<br>i-County Drilling) |
|---|--------------|-------------------|--------|----------------------------|---|--|--|--------------------------|
|   |              |                   |        | SP                         | Medium dense; trace                               | e gravel (up to ½ inch).   | ine SAND.  | se sand.                 |
| N   | <b>inu</b>   | <b>[]]</b> 8      | &      | Ma                         | ore   |  | BORING LOC<br>MINING, RECLAMATION<br>GE PROJECT, LAKESIDE, | N, AND GROUNDWATER       |
|   | U            |                   |        |                            |   | PROJECT NO.<br>106200005   | DATE<br>7/11   | FIGURE<br>A-80           |

| et)<br>SAMPLES        |        |              | (F)               |        | 7                          | DATE DRILLED         3/3/11         BORING NO.         B-24  |
|-----------------------|--------|--------------|-------------------|--------|----------------------------|--|
| eet)<br>SAN           | TH (fe | MOISTURE (%) | Y (PC             | ۲      | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION         453' ± (MSL)         SHEET         2         OF         5   |
| TH (f                 |        |              | INSIT             | SYMBOL | SIFIC/                     | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)   |
| DEP<br>Bulk<br>Driven |        | MOIS         | DRY DENSITY (PCF) | s,     |                            | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"   |
|                       |        |              | Ð                 |        |                            | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF<br>DESCRIPTION/INTERPRETATION   |
|                       |        |              |                   |        | SM                         | <u>ALLUVIUM</u> : (Continued)<br>Light brown, moist, medium dense, silty fine SAND; little medium to coarse sand; trace<br>gravel (up to <sup>1</sup> / <sub>2</sub> inch); trace roots. |
|                       |        |              |                   |        |                            | Brown; wet.  |
| 30                    |        |              |                   |        |                            | Fine to medium sand; little coarse sand; trace roots.<br>Dense.  |
| 35                    |        |              |                   |        | SW                         | Brown, moist, dense, well-graded, fine to coarse SAND.   |
|                       |        | n            |                   | e l    |                            | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER   |
|                       |        | 3            |                   | *      |                            | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE  |
| 11                    | ,      |              |                   |        | ,                          | 106200005 7/11 4 91  |

| DEPTH (feet)<br>Bulk SAMPLES<br>Driven SAMPLES<br>BLOWS/FOOT<br>MOISTURE (%) | DRY DENSITY (PCF)<br>SYMBOL<br>CLASSIFICATION<br>U.S.C.S. | METHOD OF DRILL                         | ON <u>453' ± (MSL)</u><br>LING <u>8" Hollow-Stem A</u><br>140 lbs. (Auto. Trip H<br>1BG LOGGED BY | uger (Diedrich D-120) (Tri-<br>Iammer) DROP | <u>3</u> OF <u>5</u><br>-County Drilling)<br><u>30"</u> |
|--|---|---|---|---|---|
|  | SW  | ALLUVIUM: (Cont<br>Brown, saturated, de |   |   |   |
|  |   | Grayish brown; mica<br>Trace silt.      |   | BORING LOG                                  |   |
| Ninye  |   | 9-1U                                    |   | ARGE PROJECT, LAKESIDE, (<br>DATE<br>7/11   |   |



| DEPTH (feet) Bulk Driven Driven | VS/FO | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/3/11       BORING NO.       B-24         GROUND ELEVATION       453' ± (MSL)       SHEET5 OF5         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP30"         SAMPLED BY       MBG       LOGGED BYMBG       REVIEWED BYGTF   |
|---------------------------------|-------|--------------|-------------------|--------|----------------------------|--|
| 80                              | 22    |              |                   |        | SM<br>SP-SM                | ALLUVIUM: (Continued)<br>Brown, saturated, medium dense, silty fine SAND.<br>Brown, saturated, medium dense, poorly-graded, fine SAND with silt.   |
| 90                              |       |              |                   |        |                            | Refusal to further drilling.         Total Depth = 87.0 feet.         Groundwater encountered at approximately 40 feet during drilling.         Backfilled with approximately 30 cubic feet of bentonite grout shortly after drilling on 3/3/11.         Note:         Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report. |
| 95                              |       | 'ny          |                   | £      | Ma                         | BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER         RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE         PROJECT NO.       DATE         106200005       7/11  |

| DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/4/11       BORING NO.       B-25         GROUND ELEVATION       465' ± (MSL)       SHEET       1       OF       2         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|------------------------------|------------|--------------|-------------------|--------|----------------------------|---|
|                              | 19         | 3.5          | 110.5             |        | SM<br>SW-SM                | ALLUVIUM:<br>Gray, damp, loose, silty fine to medium SAND.<br>Gray, damp, medium dense, well-graded, fine to coarse SAND with silt.   |
|                              | 16         |              |                   |        |                            |   |
|                              | 45         | 6.2          | 100.0             |        |                            | Dense.  |
| 20                           | Ni         |              | 10 e              | & /    |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           FIGURE  |
|                              | <b>V</b>   | 1            | _                 |        |                            | PROJECT NO.         DATE         FIGURE           106200005         7/11         A-85   |

|              | SAMPLES        | ()           | CF)               |        | N                          | DATE DRILLED         3/4/11         BORING NO.         B-25   |
|--------------|----------------|--------------|-------------------|--------|----------------------------|---|
| DEPTH (feet) | iven SA        | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION 465' ± (MSL)       SHEET 2       OF 2         METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)                                     |
| DEP          | Driven<br>BLOW | LSION        | Y DEN             | S∖     | _ASSI<br>U.8               | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"  |
|              | ā              |              | DR                |        | 0                          | SAMPLED BY MBG LOGGED BY MBG REVIEWED BY GTF<br>DESCRIPTION/INTERPRETATION  |
| 20           | 13             |              |                   |        | SM                         | ALLUVIUM: (Continued)<br>Gray, damp, medium dense, silty fine SAND.   |
| 25           | 6              |              |                   |        | ML                         | Brown, moist, medium dense, fine sandy SILT.  |
|              |                |              |                   |        |                            | Total Depth = 26.5 feet.<br>Groundwater not encountered.  |
|              |                |              |                   |        |                            | Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on $3/4/11$ .  |
|              |                |              |                   |        |                            | Note:   |
|              |                |              |                   |        |                            | Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the |
| 30 —         |                |              |                   |        |                            | report.   |
| -            |                |              |                   |        |                            |   |
| _            |                |              |                   |        |                            |   |
|              |                |              |                   |        |                            |   |
|              |                |              |                   |        |                            |   |
|              |                |              |                   |        |                            |   |
| 35 —         |                |              |                   |        |                            |   |
| +            |                |              |                   |        |                            |   |
| +            |                |              |                   |        |                            |   |
|              |                |              |                   |        |                            |   |
|              |                |              |                   |        |                            |   |
| 40           |                |              |                   |        |                            |   |
|              |                |              |                   |        |                            | BORING LOG<br>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER  |
|              | <b>//</b>      | ЦĻ           | μυ                | × /    |                            | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE   |
|              | V              |              |                   |        | <b>y</b>                   | 106200005 7/11 4-86   |

| LES                                  |            |              |                   |        |                            | DATE DRILLED                            |             | 3/4/11                    | BORIN     | g NO.         |      | B-26     |     |
|--------------------------------------|------------|--------------|-------------------|--------|----------------------------|---|-------------|---------------------------|-----------|---------------|------|----------|-----|
| et)<br>SAMPLES                       | Ы          | (%)          | (PCF              |        | NO                         | -<br>GROUND ELEVA                       |             |                           |           |               |      |          | 6   |
| H (fee                               | S/FO       | URE          | SITY              | SYMBOL | FICAT<br>.C.S.             | METHOD OF DRI                           |             |                           |           | -             |      |          |     |
| DEPTH (feet)<br>Bulk SA<br>Driven SA | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYN    | CLASSIFICATION<br>U.S.C.S. | DRIVE WEIGHT                            | _           |                           |           | DROP          |      | 30"      |     |
|                                      | ш          | Σ            | DRY               |        | CL                         | SAMPLED BY                              | MBG         | LOGGED BY                 |           | REVIEWE       | D BY |          |     |
| 0                                    |            |              |                   |        | N 41                       |   |             | DESCRIPTION/I             |           |               |      |          |     |
|                                      |            |              |                   |        | ML                         | <u>ALLUVIUM</u> :<br>Brown, moist, loos | se, fine sa | ndy SILT.                 |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
| 5                                    |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        | <br>                       | Brown, moist, loos                      | se to med   | ium dense silty           | fine SAN  | <u></u>       |      |          |     |
|                                      |            |              |                   |        | SIVI                       | biown, moist, root                      | se to med   | luin dense, sinty         |           | D.            |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
| 10                                   |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
| 15                                   |            |              |                   |        |                            | Trace coarse sand.                      |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
| 20                                   |            |              |                   |        |                            |   |             |                           |           |               |      |          |     |
|                                      |            | -            | -                 |        |                            |   |             |                           |           |               |      | DOIDIDWY | TEP |
|                                      | V/         | Цļ           |                   | £      | Mg                         | ore                                     |             | EL MONTE VALLEY<br>RECHAR |           | , LAKESIDE, O |      |          |     |
|                                      | V          |              |                   |        | V                          |   |             | 06200005                  | DA<br>7/1 |               |      | A-87     | -   |

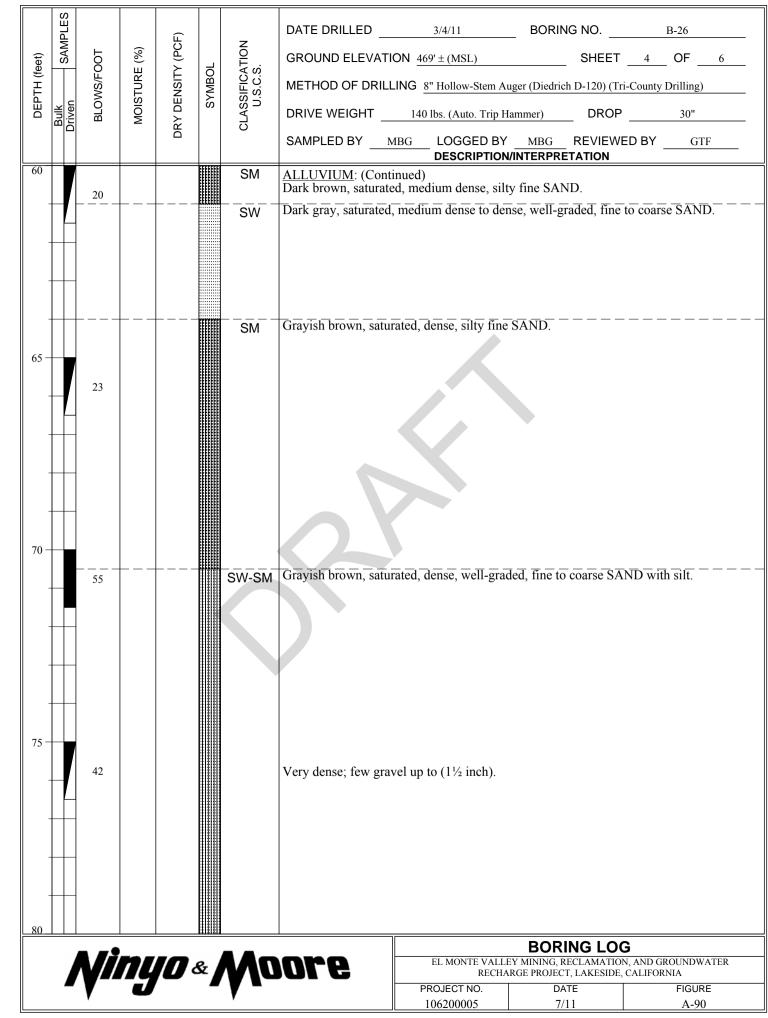
| DEPTH (feet)<br>Bulk SAMPLES<br>Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       3/4/11       BORING NO.       B-26         GROUND ELEVATION       469' ± (MSL)       SHEET       2       OF       6         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)       DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--|------------|--------------|-------------------|--------|----------------------------|---|
|  |            |              |                   |        | SM                         | ALLUVIUM: (Continued)<br>Light brown, moist, loose to medium dense, silty fine SAND; few coarse sand.<br>Medium dense.<br>Silty fine to medium sand.<br>Some coarse sand.<br>Some coarse sand.  |
|  |            | 3            |                   |        |                            | BORING LOG         EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER         RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.         DATE         106200005         7/11  |

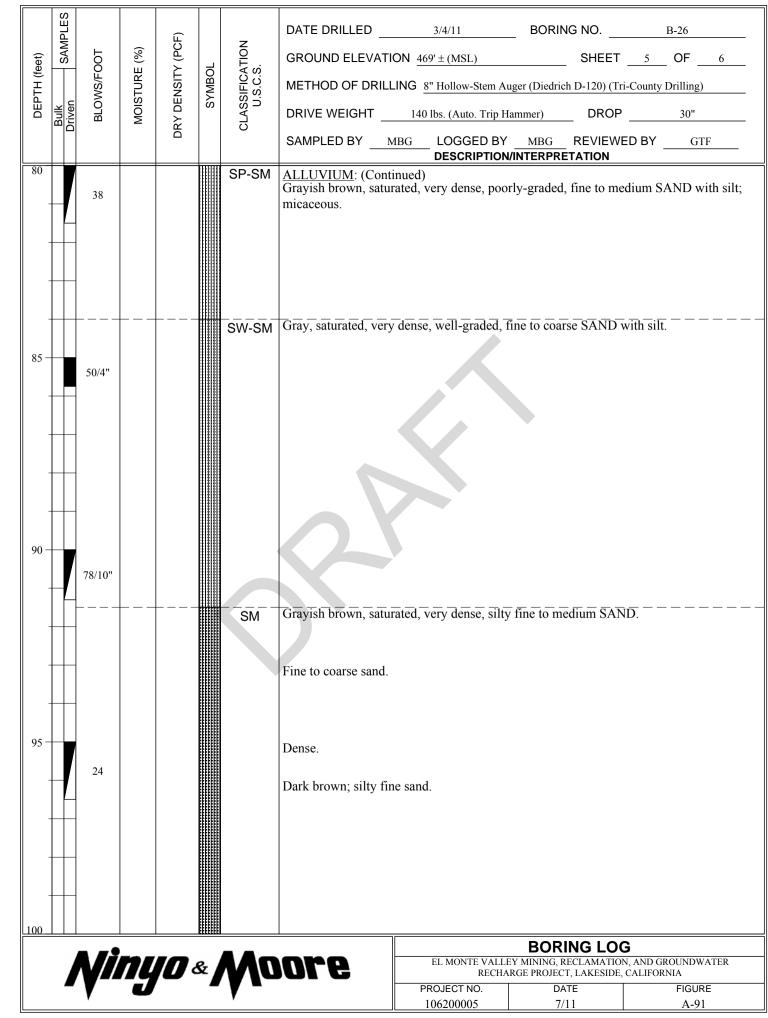
| 40       SM       ALLLVULY: (Continued)<br>Brown, wei, medium dense, silty fine to coarse SAND.         45       ∓       Saturated; micaceous.         45       F       Saturated; micaceous.         50       Trace gravel (up to ½ inch).         51       Sitty fine sand; trace coarse sand.         55       ML         0       ML         0       Dark brown, saturated, dense, fine sandy SiL*I.".         0       BORING LOG         0       Dark brown, saturated, dense, fine sandy SiL*I.".         0       BORING LOG         10       Dark brown, saturated, dense, fine sandy SiL*I.". | DEPTH (feet)<br>Bulk SAMPLES | BLOWS/FOOT  | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION<br>METHOD OF DRILL<br>DRIVE WEIGHT<br>SAMPLED BYM   | 3/4/11<br>ON <u>469' ± (MSL)</u><br>ING <u>8" Hollow-Stem Au</u><br>140 lbs. (Auto. Trip H<br>1BG LOGGED BY<br>DESCRIPTION | uger (Diedrich<br>ammer)<br>MBG | h D-120) (Tr<br>_ DROP<br>_ REVIEWI | 3<br>i-County | OF<br>Drilling)<br>30" |  |
|--|------------------------------|-------------|--------------|-------------------|--------|----------------------------|--|--|---------------------------------|-------------------------------------|---------------|------------------------|--|
| EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER         RECHARGE PROJECT, LAKESIDE, CALIFORNIA         PROJECT NO.       DATE   |                              |             |              |                   |        |                            | Brown, wet, medium<br>Saturated; micaceous<br>Trace gravel (up to <sup>1</sup> /<br>Silty fine sand; trace<br>Dark brown, saturate | s.<br>s.<br>2 inch).<br>ed, dense, fine sandy S  | Darse SANI                      | D.<br>NG LOO                        |               |                        |  |
|  |                              | <b>\</b> // | Ŋ            |                   | £      | Ma                         | ore  | RECHA  | RGE PROJECT                     | Γ, LAKESIDE,                        |               | NIA                    |  |

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7/11

A-89





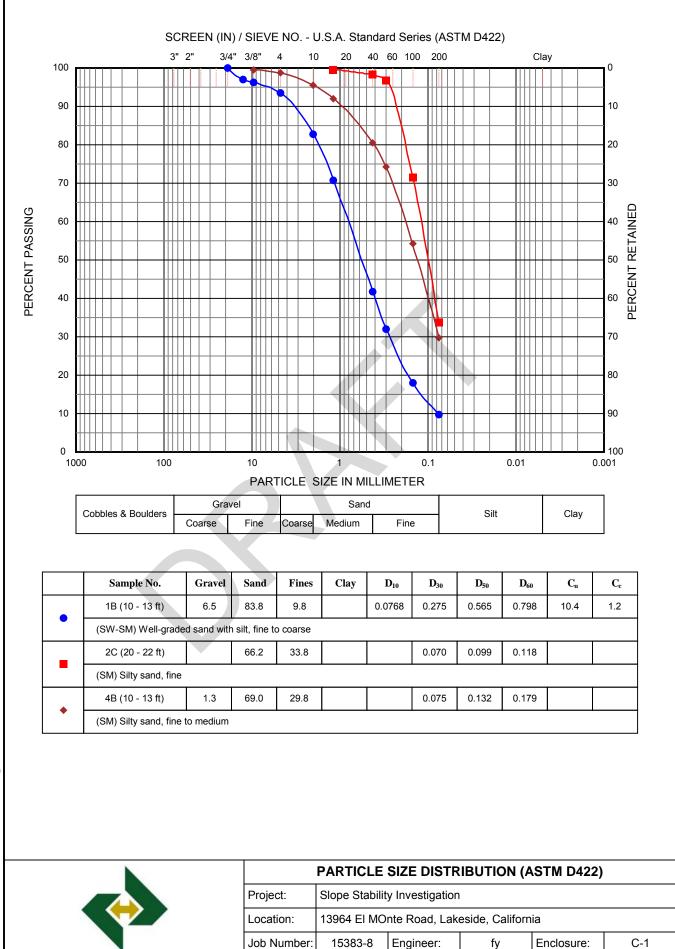
|              |   | S<br>Ц    |            |              |                   |        |                            |  | 3/4/11   | BORING NO.                                       | D 24  |
|--------------|---|-----------|------------|--------------|-------------------|--------|----------------------------|--|--|--|---|
| <b>f</b>     |   | SAMPLES   | Т          | (%           | PCF)              |        | NO                         |  | ON $469' \pm (MSL)$                              |  | 6 OF 6                                      |
| DEPTH (feet) |   |           | S/FOC      | URE (        | SITY              | SYMBOL | FICAT<br>.C.S.             |  | ING 8" Hollow-Stem A                             |  |   |
| DEPT         | k | Driven    | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYN    | CLASSIFICATION<br>U.S.C.S. |  | 140 lbs. (Auto. Trip H                           |  | 30"   |
|              | ľ | ٦         | -          | ~            | DR                |        | Ū                          | SAMPLED BY                                     |  | MBG REVIEW                                       | ED BYGTF                                    |
| 100          | - |           | 50/3"      |              |                   |        | SM                         | ALLUVIUM: (Conti                               | inued)   | /INTERPRETATION                                  |   |
|              | _ |           | 50/5       |              |                   |        |                            | Dark brown, saturate<br>Refusal to further dri | ed, very dense, silty find                       | ne SAND; some grav                               | el (up to 2 inches).                        |
|              |   |           |            |              |                   |        |                            |  | tered at approximatel                            |  |   |
|              |   |           |            |              |                   |        |                            | Backfilled with appro $3/4/11$ .               | oximately 35 cubic fe                            | et of bentonite grout                            | shortly after drilling on                   |
|              |   |           |            |              |                   |        |                            | Note:  |  |  |   |
|              | + | +         |            |              |                   |        |                            | Groundwater may ris                            | se to a level higher that ation and several othe | an that measured in b<br>er factors as discussed | orehole due to seasonal<br>l in the report. |
| 105          | + | $\square$ |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
|              | T |           |            |              |                   |        |                            |  |  |  |   |
|              | + |           |            |              |                   |        |                            |  |  |  |   |
|              | + |           |            |              |                   |        |                            |  |  |  |   |
| 110          |   |           |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
|              | T |           |            |              |                   |        |                            |  |  |  |   |
|              | + | -         |            |              |                   |        |                            |  |  |  |   |
|              | - |           |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
| 115          | + |           |            |              |                   |        |                            |  |  |  |   |
|              | + | +         |            |              |                   |        |                            |  |  |  |   |
|              | + |           |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
|              |   |           |            |              |                   |        |                            |  |  |  |   |
|              | + | $\square$ |            |              |                   |        |                            |  |  |  |   |
| 120          |   |           |            |              |                   |        |                            | ]  |  | BORING LO  | G   |
|              |   |           | Mi         |              |                   | &      |                            | ore  |  | EY MINING, RECLAMATIO<br>RGE PROJECT, LAKESIDE   | N, AND GROUNDWATER                          |
|              |   |           |            | J            |                   |        |                            |  | PROJECT NO.<br>106200005                         | DATE<br>7/11                                     | FIGURE<br>A-92                              |

| et)<br>SAMPLES         |            |              | CE)               |        | z                          | DATE DRILLED         2/25/11         BORING NO.         B-27   |
|------------------------|------------|--------------|-------------------|--------|----------------------------|--|
| (feet)                 | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SOL    | CLASSIFICATION<br>U.S.C.S. | GROUND ELEVATION         477' ± (MSL)         SHEET         1         OF         2   |
| DEPTH (feet)<br>ulk SA | /SMO       | INSTUI       | DENSI             | SYMBOL | SSIFIC<br>U.S.O            | METHOD OF DRILLING 8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)   |
| DEP<br>Bulk<br>Driven  | BL         | MO           | DRYI              |        | CLA                        | DRIVE WEIGHT 140 lbs. (Auto. Trip Hammer) DROP 30"   |
|                        |            |              |                   |        |                            | SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF         DESCRIPTION/INTERPRETATION  |
|                        | 52         | 6.0          | 121.2             |        | SM                         | DESCRIPTION/INTERPRETATION         ALLUVIUM:         Brown, damp, medium dense, silty SAND.         Scattered gravel (up to 1 inch).         Dense; trace gravel (up to 1 inch).         Medium dense to dense; trace roots; few gravel. |
|                        | 34         |              |                   |        |                            | Medium dense.  |
|                        |            |              |                   | & /    |                            | BORING LOG           EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER           RECHARGE PROJECT, LAKESIDE, CALIFORNIA           PROJECT NO.         DATE           FIGURE   |
|                        |            | 7            |                   |        |                            | PROJECT NO. DATE FIGURE<br>106200005 7/11 A-93   |

| 24       3.1       103.1       ON       SM       Gray dry to damp, medium dense, well-graded, fine to coarse SAND.         25       22       SM       Gray ish brown, damp, dense, silty fine to coarse SAND.         25       22       Total Depth = 26.5 feet.       Groundwater not encountered.         Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 2/25/11.       Note:         30       Groundwater, though not encountered at the time of drilling, may rise to a higher leve due to seasonal variations in precipitation and several other factors as discussed in the report.         30       Four the seasonal variations in precipitation and several other factors as discussed in the report.         30       Four the seasonal variations in precipitation and several other factors as discussed in the report.         31       Status of the seasonal variations in precipitation and several other factors as discussed in the report.         32       Status of the seasonal variations in precipitation and several other factors as discussed in the report.         33       Status of the seasonal variations in precipitation and several other factors as discussed in the report.         34       Status of the seasonal variations in precipitation and several other factors as discussed in the report.         35       Status of the seasonal variations in precipitation and several other factors as discussed in the report.         36       Status of the seasonal variations in preci |    | Bulk SAMPLES | <b>BLOWS/FOOT</b> | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION<br>U.S.C.S. | DATE DRILLED       2/25/11       BORING NO.       B-27         GROUND ELEVATION 477' ± (MSL)       SHEET       2       OF       2         METHOD OF DRILLING       8" Hollow-Stem Auger (Diedrich D-120) (Tri-County Drilling)         DRIVE WEIGHT       140 lbs. (Auto. Trip Hammer)       DROP       30"         SAMPLED BY       MBG       LOGGED BY       MBG       REVIEWED BY       GTF |
|--|----|--------------|-------------------|--------------|-------------------|--------|----------------------------|--|
| 25       22         Total Depth = 26.5 feet.<br>Groundwater not encountered.<br>Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 2/25/11.         Note:         30         30         30         31         32         33         34         35         35         36         37         38         39         30         31         32         33         34         35         36         37         38         39         30         31         32         33         34         35         35         36         37         38         39         39         30         31         32         33         34         35         35         36         37         38         39         39  | 20 |              | 24                | 3.1          | 103.1             |        | SW                         | ALLUVIUM: (Continued)<br>Gray, dry to damp, medium dense, well-graded, fine to coarse SAND.  |
| Groundwater not encountered.<br>Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 2/25/11.<br>Note:<br>Groundwater, though not encountered at the time of drilling, may rise to a higher leve<br>due to seasonal variations in precipitation and several other factors as discussed in the<br>report.  | 25 |              | 22                |              |                   |        | SM                         |  |
|  | 30 |              |                   |              |                   | ~      |                            | Groundwater not encountered.<br>Backfilled with approximately 9 cubic feet of bentonite grout shortly after drilling on 2/25/11.<br><u>Note</u> :<br>Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the   |
| <b>BORING LOG</b><br><b>EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER</b><br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br><b>PROJECT NO</b> DATE FIGURE  | -  |              |                   |              |                   |        |                            |  |
| 106200005 7/11 A-94  |    |              | Vi                | ny           | <b> </b> 0        | Sz 🖌   | Ma                         | EL MONTE VALLEY MINING, RECLAMATION, AND GROUNDWATER<br>RECHARGE PROJECT, LAKESIDE, CALIFORNIA<br>PROJECT NO. DATE FIGURE  |

## APPENDIX C

## LABORATORY TEST RESULTS



15383-8 El Monte NP - EM Sand Mine - LakesideVab\LabSuite\_ 15383-5

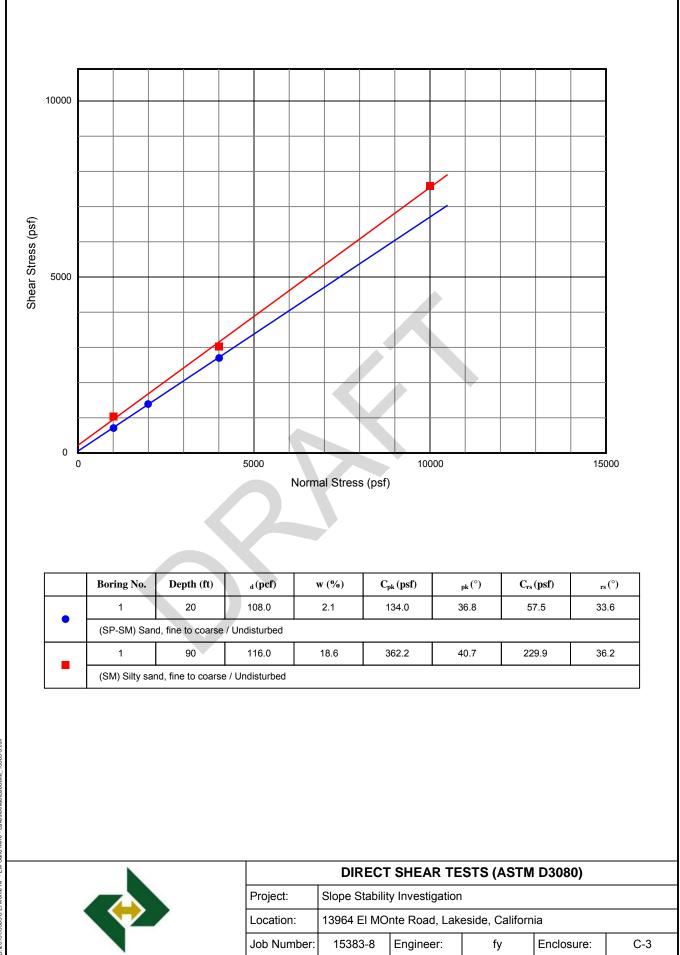
LabSuite® Version 4.0.3.26. Developed by Fred Yi, PhD, PE, GE Copyright® 2002 - 2015 GeoAdvanced TM. All rights reserved \_Commercial Copy

| Boring No.             | 3       | 3       | 3       | 3       | 3       |
|------------------------|---------|---------|---------|---------|---------|
| Depth (ft)             | 0 - 5   | 5 - 25  | 25 - 30 | 30 - 35 | 35 - 40 |
| Original Dry Mass      | 189.9   | 195.8   | 165.4   | 197.2   | 153.1   |
| Dry Mass after Washing | 122.1   | 189.3   | 78.9    | 190.2   | 48.1    |
| Fine Contents (%)      | 35.7    | 3.3     | 52.3    | 3.5     | 68.6    |
| Classification         | SM      | SP      | ML      | SP      | ML      |
| Boring No.             | 3       | 3       | 3       | 3       | 3       |
| Depth (ft)             | 40 - 45 | 45 - 60 | 60 - 65 | 65 - 87 | 87 - 95 |
| Original Dry Mass      | 158.7   | 158.2   | 151.2   | 168.8   | 166     |
| Dry Mass after Washing | 76.7    | 118.6   | 90.9    | 156.8   | 129.7   |
| Fine Contents (%)      | 51.7    | 25.0    | 39.9    | 7.1     | 21.9    |
| Classification         | ML      | SM      | SM      | SP-SM   | SM      |

#### FINES CONTENT (ASTM C117)

|             |                | TEST DATA       | SUMMARY         | /          |     |
|-------------|----------------|-----------------|-----------------|------------|-----|
| Project:    | Slope Stabilit | y Investigation |                 |            |     |
| Location:   | 13964 EI MO    | nte Road, Lak   | eside, Californ | ia         |     |
| Job Number: | 15383-8        | Engineer:       | fy              | Enclosure: | C-2 |

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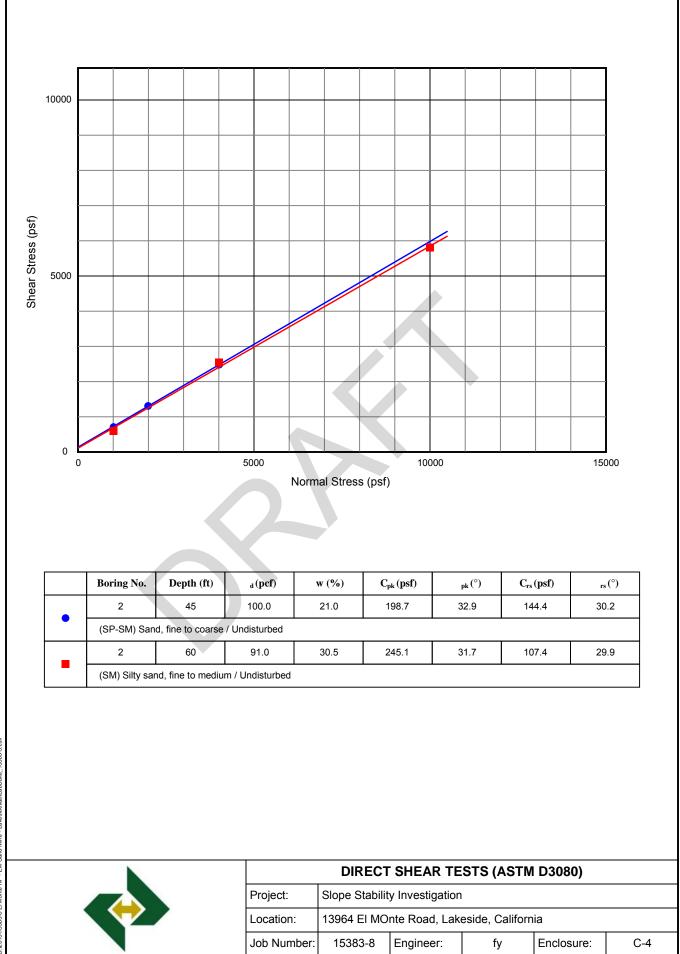


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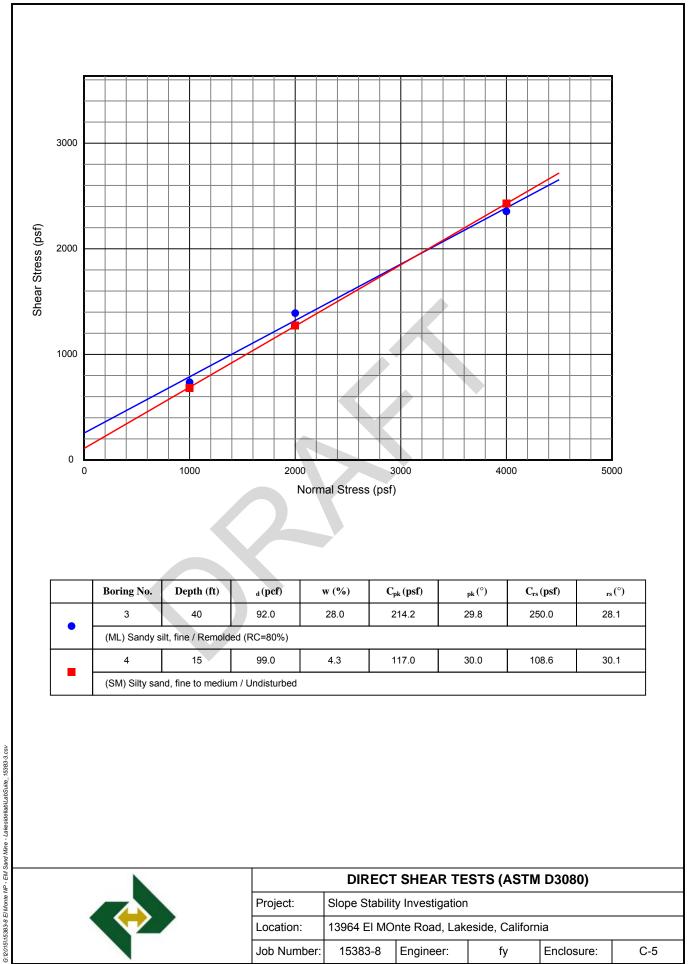
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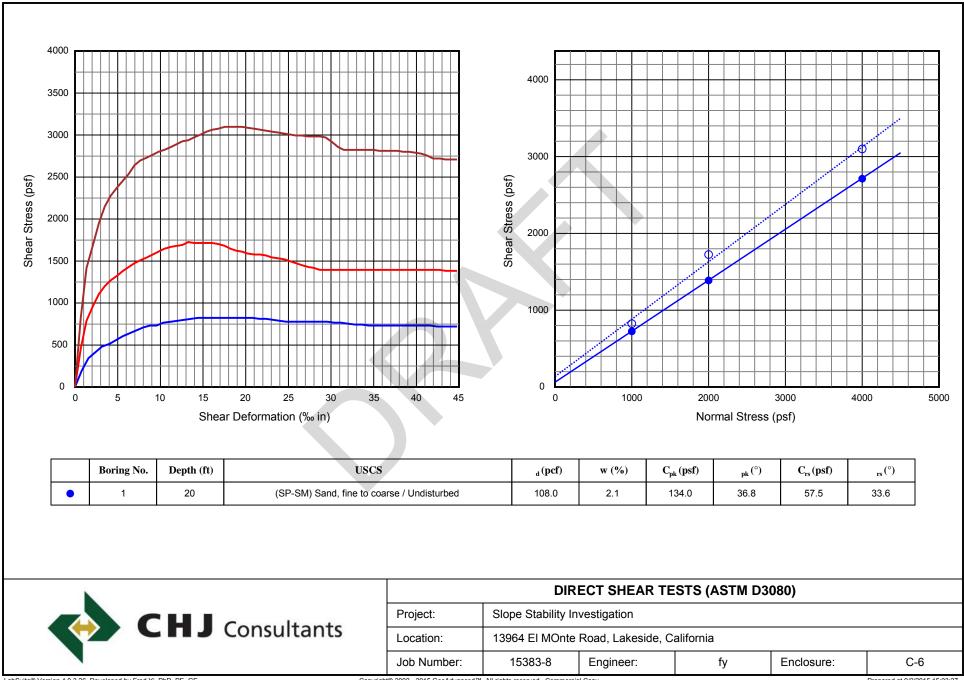
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5383-3.

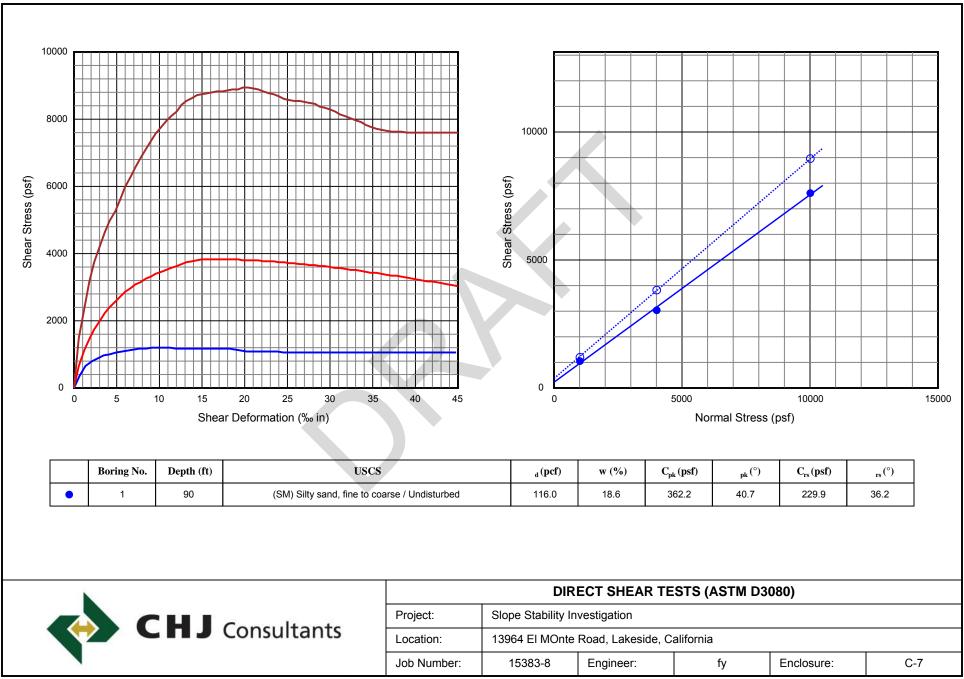
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EM Sand Mine - Lake

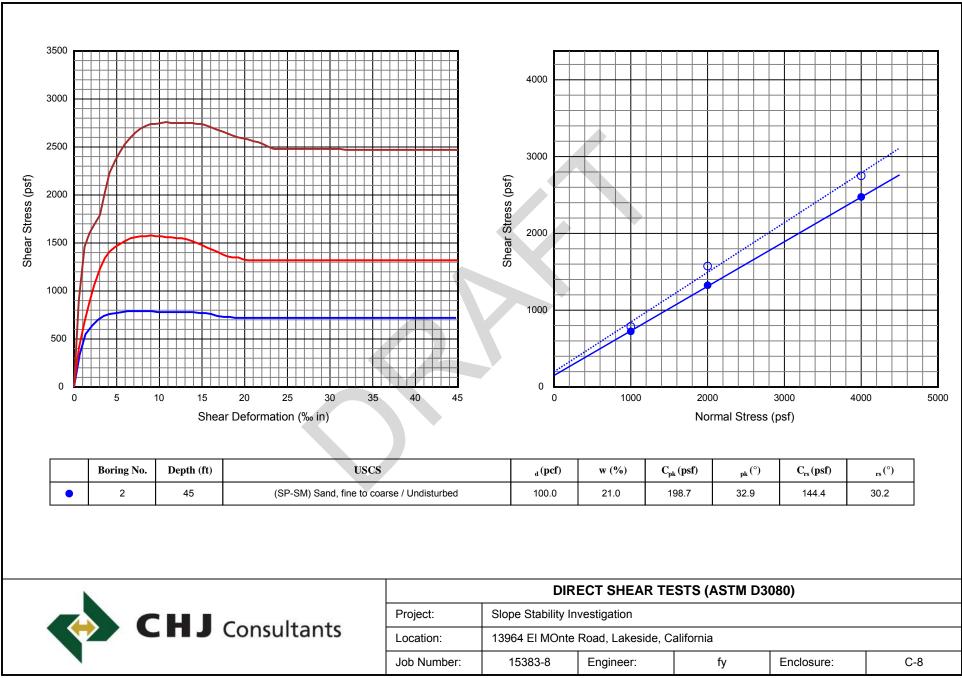
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El Monte

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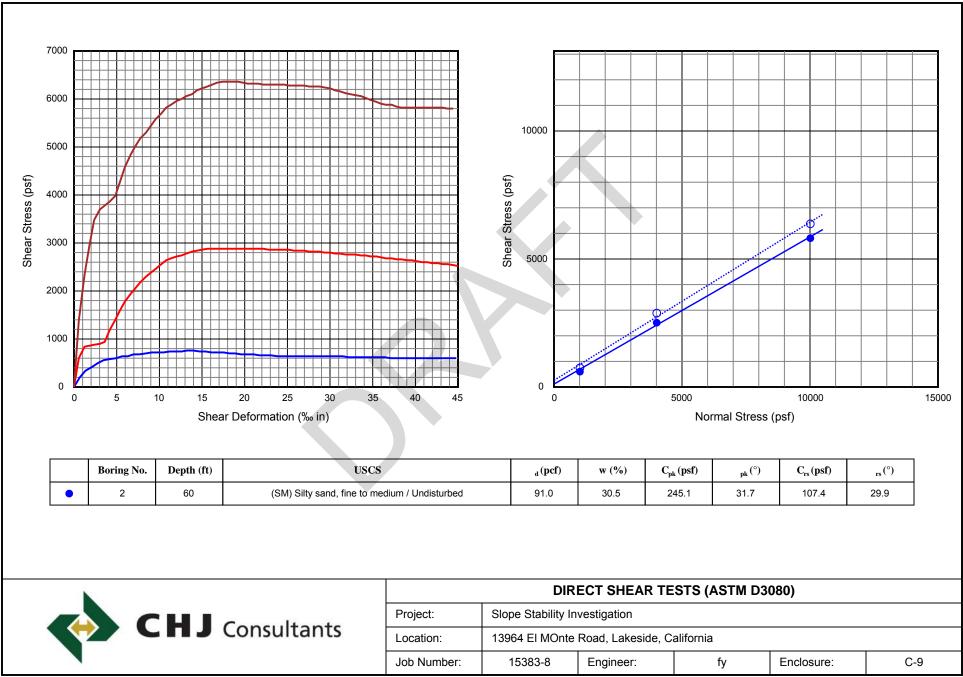


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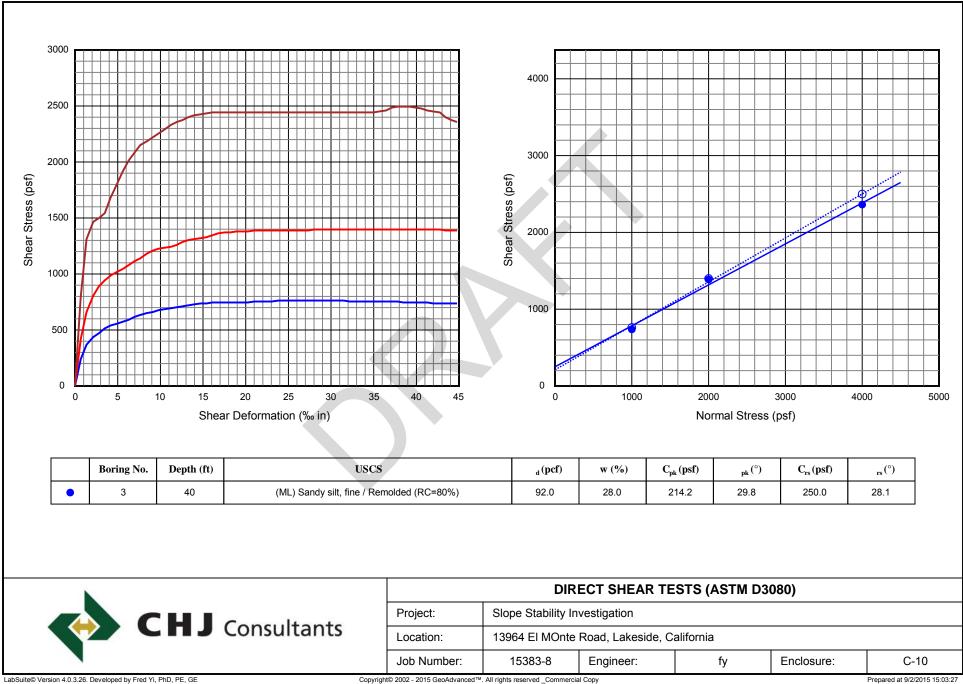


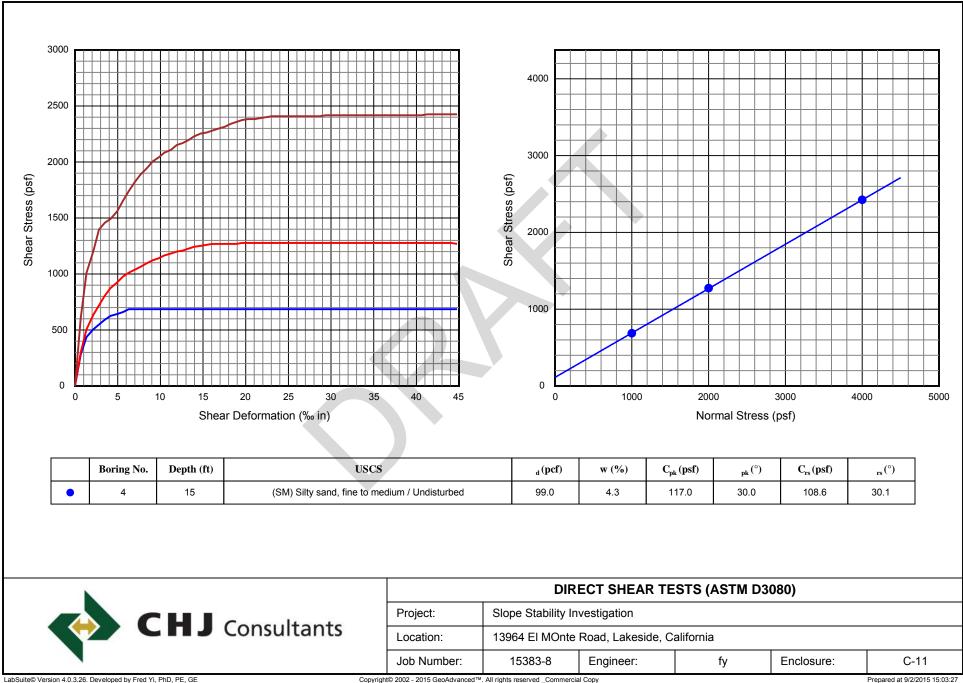
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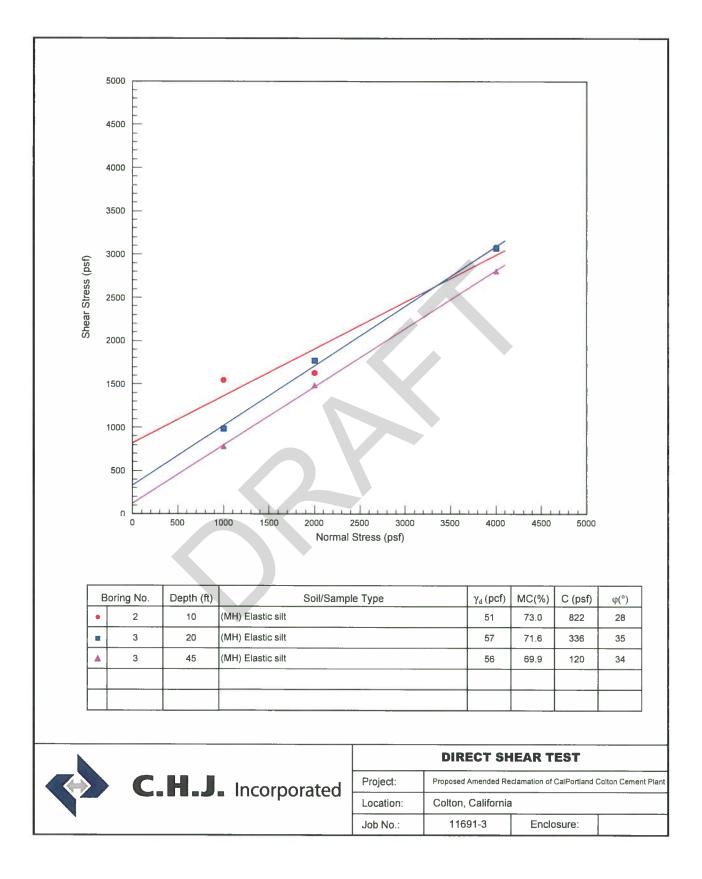
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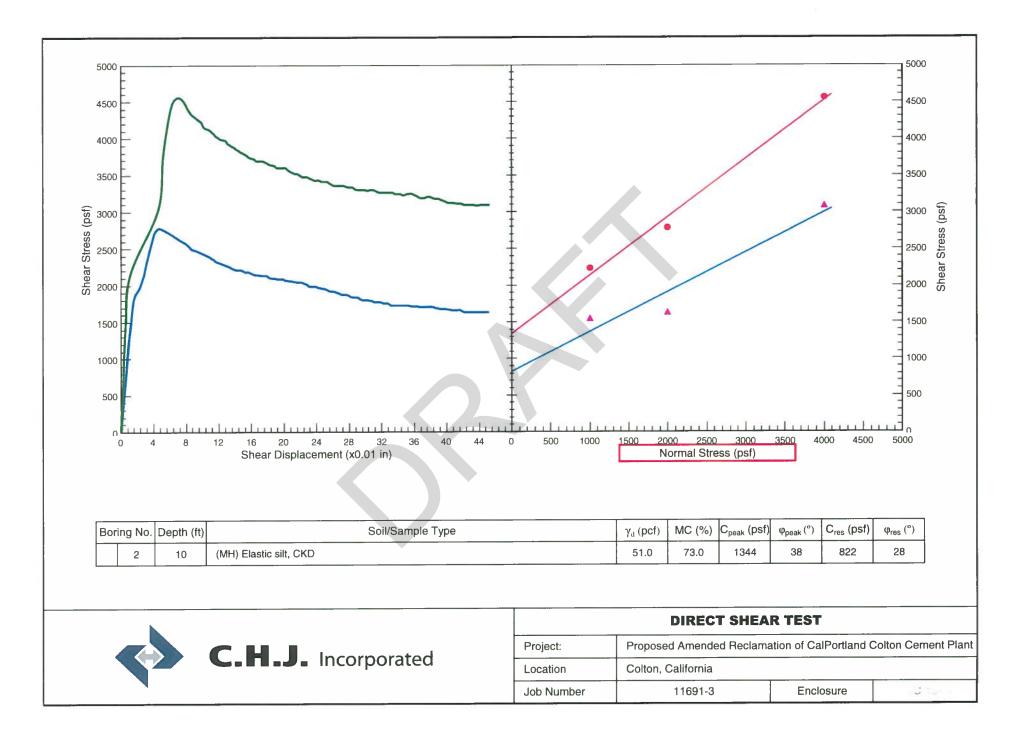
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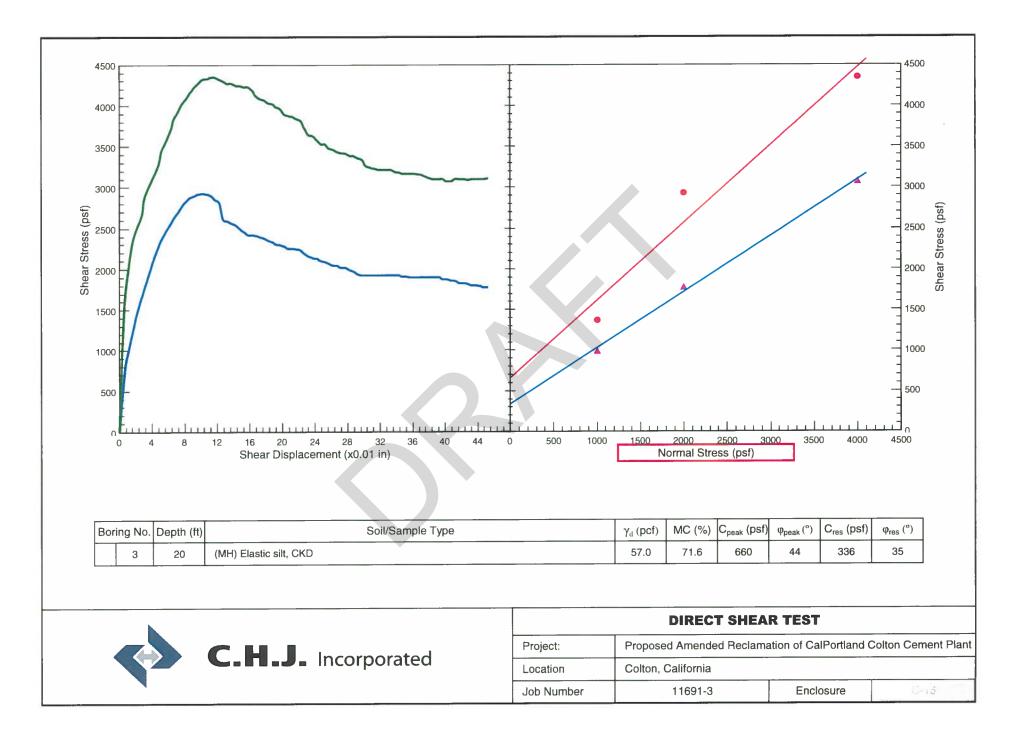


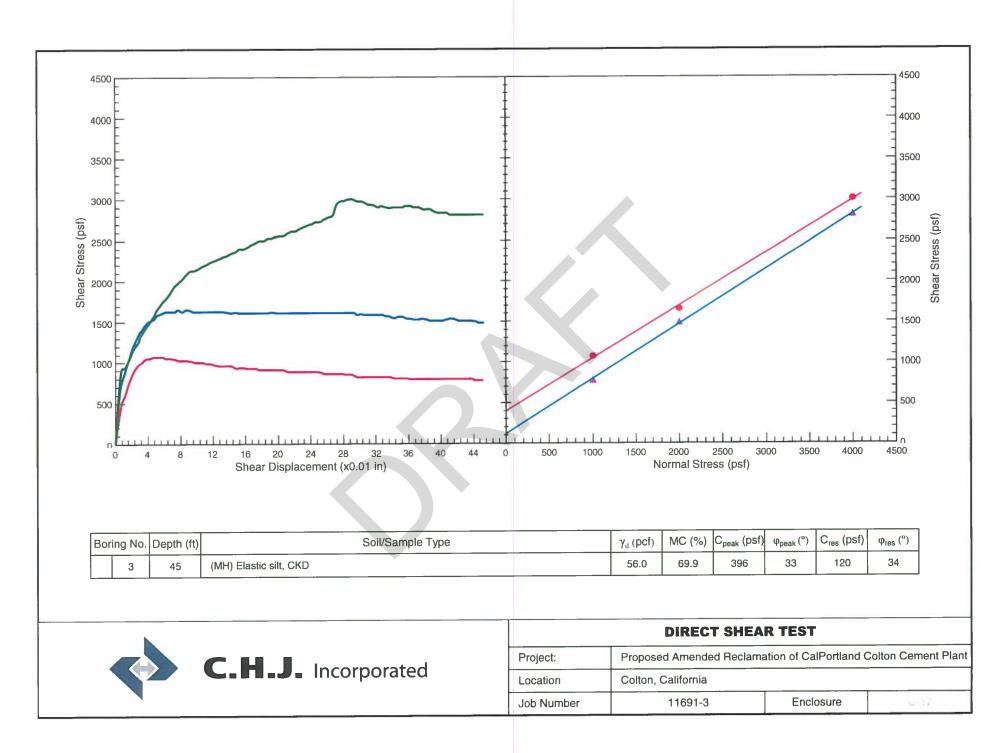


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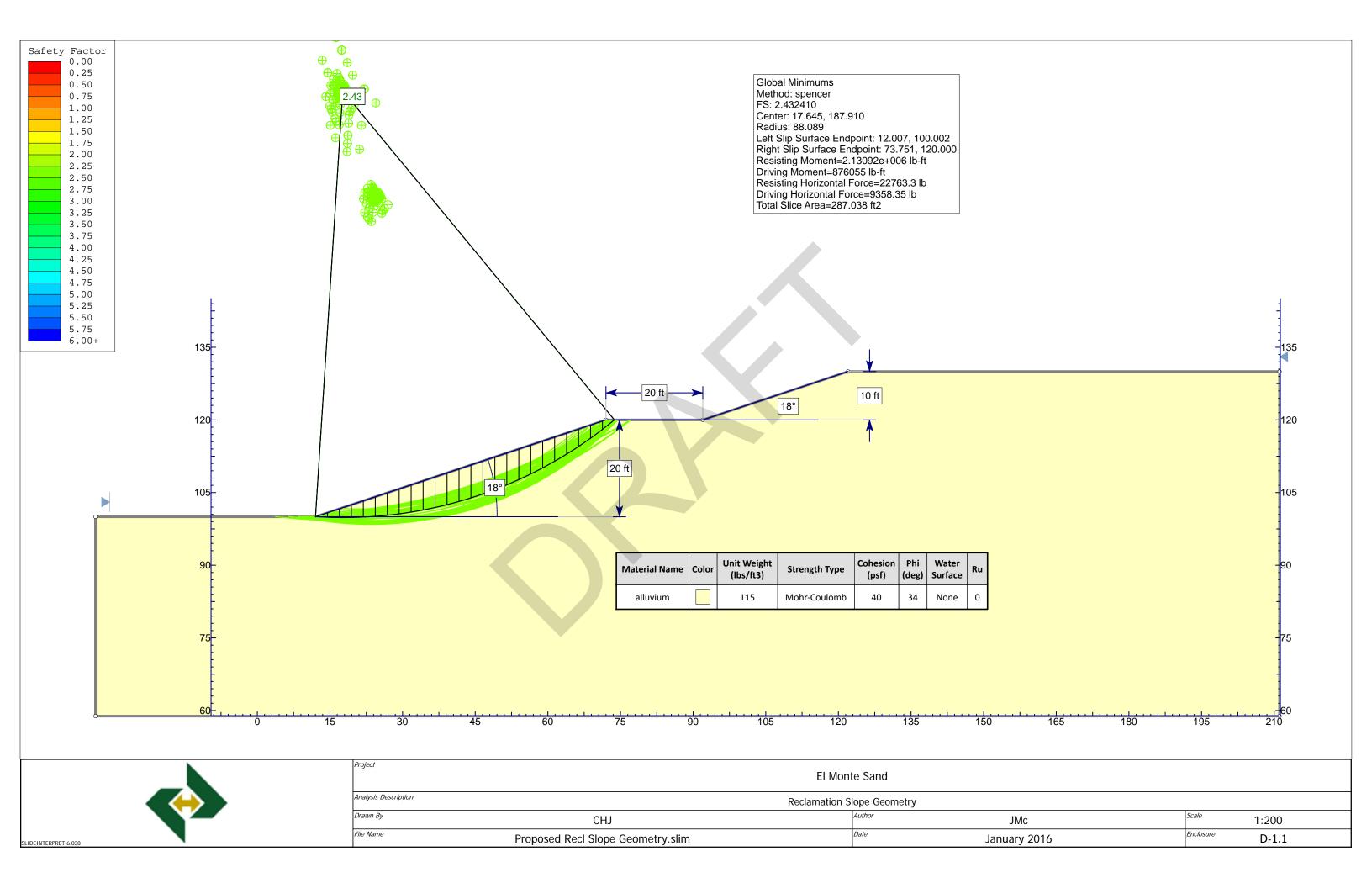


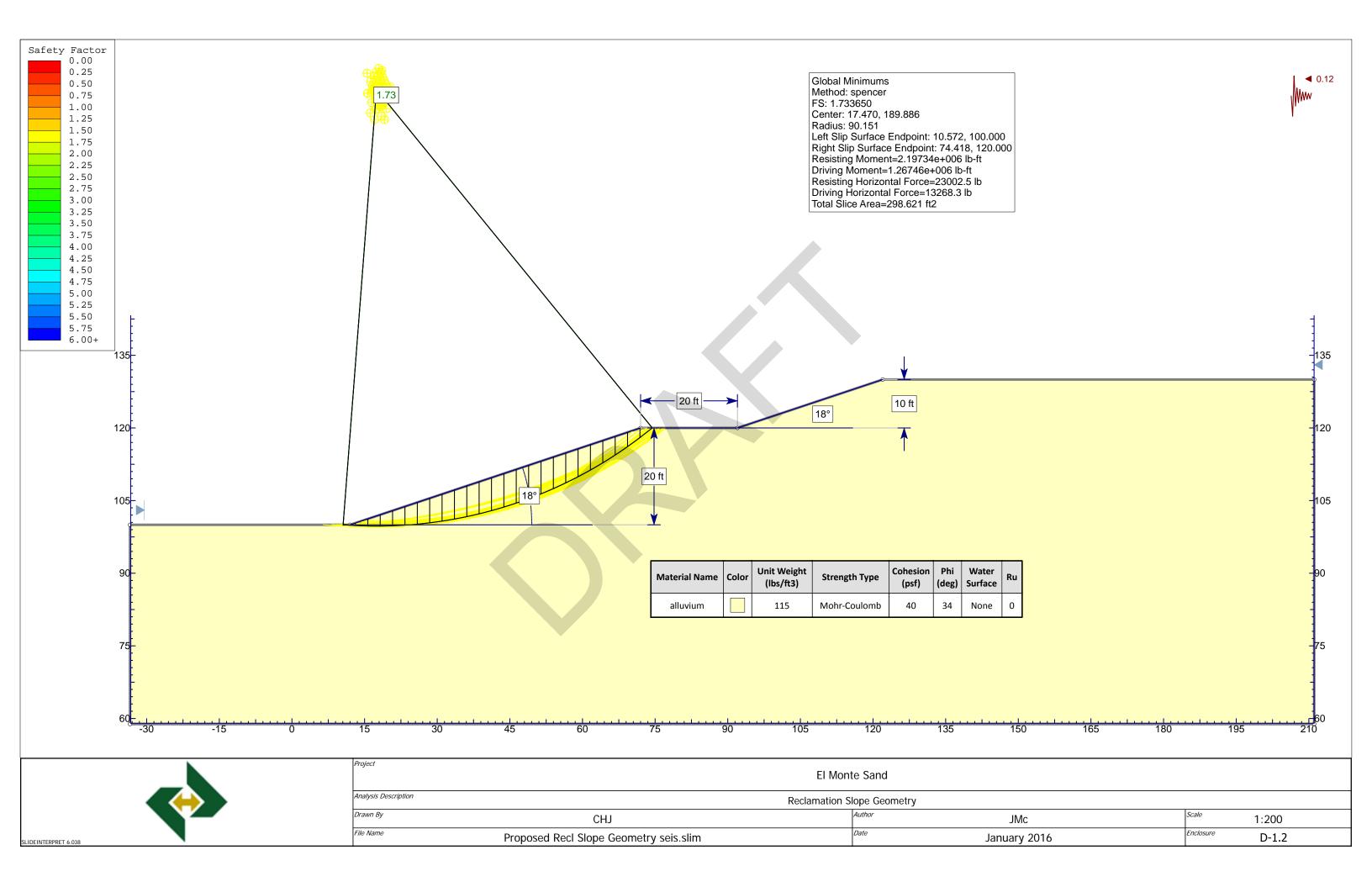


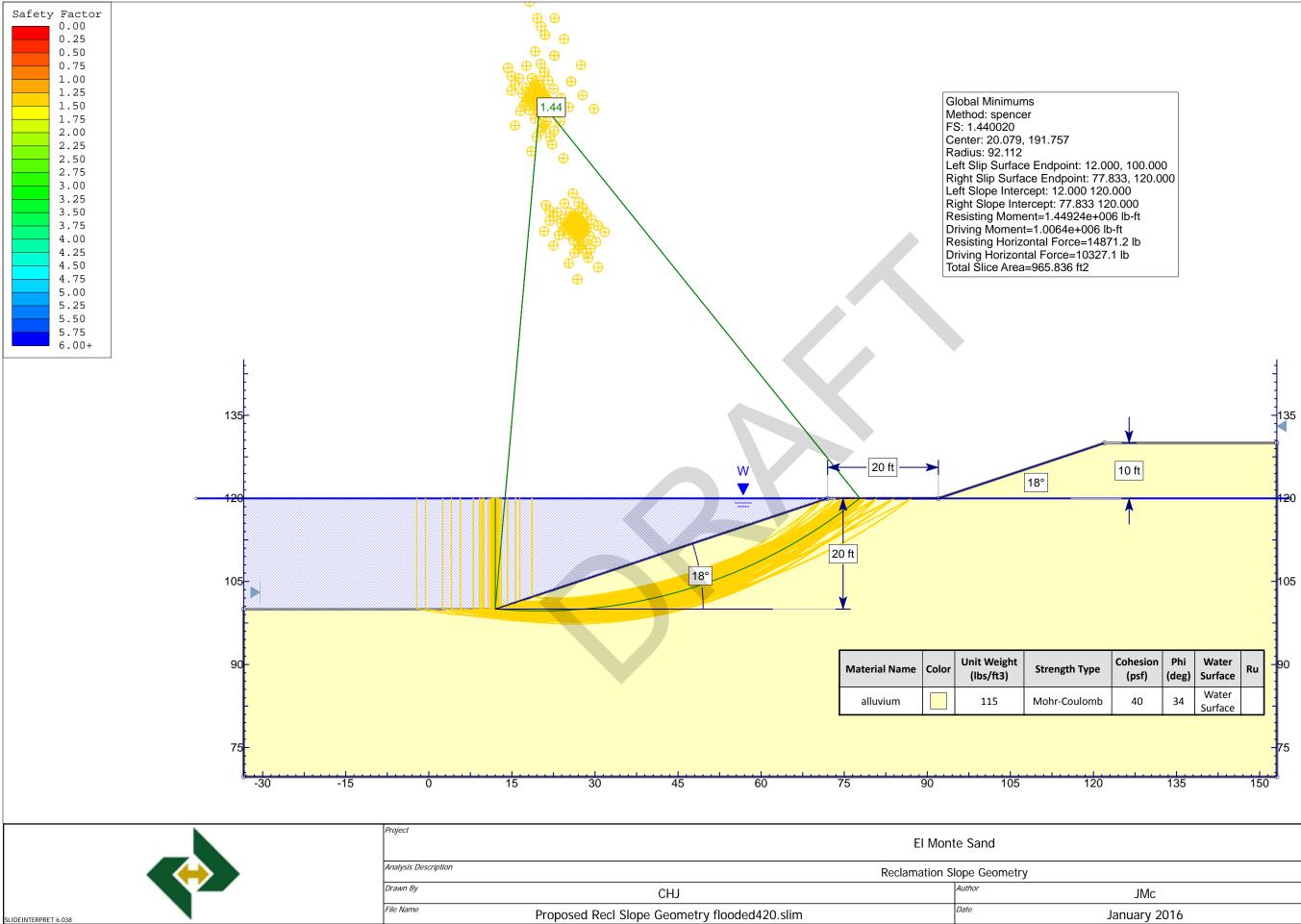


### APPENDIX D

## **GLOBAL STABILITY CALCULATIONS**







| JMc       | <sup>Scale</sup> 1:200 |
|-----------|------------------------|
| uary 2016 | Enclosure D-1.3        |
|           | -                      |

◀ 0.12

| D:                     |      | ft          |                                |   |      |
|------------------------|------|-------------|--------------------------------|---|------|
| z <sub>w</sub> :<br>γ: |      | ft<br>pcf   |                                | ς, Φ, γ   |      |
| $\gamma_{w}$ :         | 62.4 |             |                                | D   | -    |
| slope, α               | 26.5 |             |                                |   |      |
| Friction Angle, Φ'     | 30   | °           | Zw                             | Failure surface   |      |
| Cohesion, c'           | 117  | psf         | Τα                             |   |      |
| Factor of Safety, F:   | 1.17 |             | $c' + [\gamma D - \gamma]_{u}$ | $z_w ]\cos^2 \alpha \tan \phi'$   |      |
|                        |      |             |                                |   |      |
|                        |      |             | Sı                             | urficial Stability Analys   | sis  |
|                        |      |             |                                | Irficial Stability Analys   |      |
| <b>c</b>               | HJ   | Consultants | Su<br>Project:<br>Location:    | <b>Irficial Stability Analys</b><br>El Monte Sand Reclamation Slo<br>Lakeside Area, San Diego Cou | opes |

### APPENDIX E

# GEOTECHNICAL CALCULATIONS



