

Permit # 37177  
LOG 20297

SIERRA PACIFIC POWER COMPANY  
NORTH VALMY STATION  
TEST HOLE 32

LOCATION: T33N R44E Svc 17cc

DRILLER: FITCHER DRILLING CO.

ESTIMATED GROUND LEVEL ELEVATION: 4,540 FEET  
(From topographic map, contour interval 50 feet)

DATE DRILLED: 5-76

| DRILLERS' LOG   |   | DRILL CUTTING SAMPLES                                   |
|-----------------|---|---|
| INTERVAL LOGGED | DESCRIPTION   | INTERVAL SAMPLED AND DESCRIPTION                        |
| 0               | Tan silt and silty top soil   | S-lrg gvl, vf-vc sd, silt and clay; blk-brn (*)         |
|                 | Gravelly sand   |   |
|                 | Reddish-brown sandy silt and clayey sand  | S-m gvl, vf-vc sd, silt and clay; brn blk (*)           |
|                 | Gravelly sand   |   |
|                 | Very hard lens of cemented brown sand   | Slt and clay, s-m gvl, vf-vc sd; olv gn and brn-blk (*) |
|                 | Light olive-tan silt, clayey silt and silty clay with some cemented silts   |   |
|                 | Light olive-tan clayey silt, silty clay and clay  | Slt and clay; olv gn (*)                                |
|                 | Olive-tan soft silt with some sandy silt  |   |
|                 | Olive-brown silt with traces of sandy silt  | Slt and clay; lt olv gn (*)                             |
|                 | Olive-tan silt, silty clay and clayey silt  |   |
|                 | Olive-brown silt, sandy silt and silty sand with traces of cemented sands   |   |
|                 | Olive-tan silt and clayey silt  |   |
|                 | Olive-brown silt and silty sand   | Slt and clay; lt olv gn-wh (*)                          |
|                 | Brown silty sand with fine brown sand lenses and traces of coarse sand  |   |
|                 | Light olive-tan silt and clayey silt  |   |
|                 | Brown silty sand with some cemented and traces of small (1/8") gravel   | Slt and clay; lt brn (*)                                |
|                 | Reddish-brown silt and clayey silt with some silty sand and cemented sand   | Slt and clay, v-mnr vf-m sd, v-mnr m gvl; lt brn        |
| 100             | Reddish-brown silty sand and clayey sand with small lenses of clean fine sand and occasional small gravel                                       | Slt and clay, vf-vc sd; lt brn (*)                      |
|                 | Pink and reddish brown sandy clay and silty sand with white, cemented silt and some small gravel  |   |
|                 | Reddish-brown silty clay and sandy clay   | Slt and clay; lt brn                                    |
|                 | Gray and brown silty sand   |   |
|                 | Reddish-brown silty clay, sandy clay and clay   |   |
|                 | Reddish-brown silty clay interbedded with sandy clay and clayey sand - also has occasional cemented sand and some gravel imbedded in formation  |   |
|                 | Gravelly sand lens  |   |
|                 | Medium to coarse sands in sandy clay and clayey sand  | Slt and clay, mnr vf-vc sd; brn                         |
|                 | Lens fine cemented sand   |   |
|                 | Reddish-brown sandy clay and clayey sand with interbedded sand and occasional small gravel in cemented lenses                                   |   |
| 200             | Cemented sand (medium)  | Slt and clay, vf-vc sd; brn                             |
|                 | Red-brown sandy clay and clayey sand with interbedded sands and small gravels   |   |
|                 | Larger coarse sands and small gravels in sandy clay   | Slt and clay, vf-vc sd, s-m gvl; brn                    |
|                 | Sandy brown clay  | Slt and clay, mnr vf-m sd; brn                          |
|                 | Interbedded medium sands and cemented silts in sandy brown clay   |   |
|                 | Gravelly lens in sandy brown clay   |   |
|                 | Sandy brown clay with occasional and very minor cemented silty sand   |   |
|                 | Sticky silty clay   |   |
| 300             | Grades sandier sandy brown clay with occasional cementation of silty sand with few larger gravels   | Slt and clay, vf-vc sd; brn                             |
|                 | Gravelly sand lens with brown sandy clay  |   |
|                 | Brown sandy clay  |   |
|                 | Gravelly sand lens in brown sandy clay  |   |
|                 | Brown sandy clay with occasional cemented sandy silts and sands and a few larger gravels  |   |
|                 | Begin grade wire sand/uvr   |   |
| 400             | Brown sandy clay with some silts and interbedded medium and coarse sands  | Vf-vc sd, silt and clay; brn                            |
|                 |   | Slt and clay, vf-vc sd; brn                             |
|                 | Clays become stickier, somewhat more silty  | Vf-vc sd, silt and clay; brn                            |
|                 | Gravels in brown sandy clay matrix  | Vf-vc sd, s-lrg gvl, silt and clay; brn                 |
|                 |   | S-lrg gvl, vf-vc sd, silt and clay; brn                 |
|                 | Dense hard rough gravels in unconsolidated rock with some brown sandy clay matrix   | Vf-vc sd, s-lrg gvl, silt and clay; brn                 |
| 500             | Unconsolidated rock with fewer gravels than previous formation, unconsolidated rock has tan sandy silt matrix and some sandy clay matrix        | Vf-vc sd, silt and clay; brn (*)                        |
|                 | Rock is becoming harder   | Vf-vc sd, v-mnr silt and clay; brn-blk                  |
|                 | Drills smoother and faster - more sandy silt and sandy clays with less rock   | Slt and clay, vf-vc sd, v-mnr s gvl; brn                |
|                 | Harder bed of unconsolidated rock   |   |
|                 | Brown sandy silt and sandy clay with some softer unconsolidated rock  | Vf-vc sd, silt and clay; brn                            |
|                 | Rock becoming harder again with some reddish sandy silt matrix as well as tan silty matrix  |   |
|                 | Rock grading harder with dense tan sandy silt matrix and brown sandy clay matrix, also has some coarse sand and small gravel in with the matrix | Slt and clay, vf-vc sd; brn                             |
|                 |   | Vf-vc sd, silt and clay; brn                            |
|                 | Slightly softer unconsolidated rock with more tan silt and sandy silt matrix  |   |
| 600             | T.D. 603'   |   |

(\*) Indicates effervescence in dilute hydrochloric acid.