

|                                 |                                           |                                     |                              |                                       |
|---------------------------------|-------------------------------------------|-------------------------------------|------------------------------|---------------------------------------|
| District<br>SOUTH               | Field Name<br>MV/DK COM                   | County<br>SAN JUAN                  | State/Province<br>NEW MEXICO | API / UWI<br>3004535070               |
| Original Spud Date<br>1/17/2013 | Surface Legal Location<br>028-029N-008W-K | East/West Distance (ft)<br>1,694.00 | East/West Reference<br>FWL   | North/South Distance (ft)<br>2,363.00 |
|                                 |                                           |                                     |                              | North/South Reference<br>FSL          |

Well Config: VERTICAL - Original Hole, 4/12/2013 12:03:41 PM

| ftKB (MD) | ftKB (TVD) | Schematic - Actual                               | Frm Final                   |
|-----------|------------|--------------------------------------------------|-----------------------------|
| 15        |            |                                                  |                             |
| 16        |            |                                                  |                             |
| 16        |            |                                                  |                             |
| 17        |            |                                                  |                             |
| 18        |            |                                                  |                             |
| 33        |            |                                                  |                             |
| 76        |            |                                                  |                             |
| 95        |            |                                                  |                             |
| 133       | 133        |                                                  |                             |
| 196       | 196        |                                                  |                             |
| 198       | 198        |                                                  |                             |
| 228       | 228        |                                                  |                             |
| 229       | 229        |                                                  |                             |
| 234       | 234        |                                                  |                             |
| 1,928     | 1,911      |                                                  |                             |
| 2,094     | 2,077      |                                                  |                             |
| 2,300     | 2,283      |                                                  |                             |
| 2,654     | 2,637      |                                                  |                             |
| 2,656     | 2,640      |                                                  |                             |
| 2,687     | 2,670      |                                                  |                             |
| 2,973     | 2,956      |                                                  |                             |
| 3,146     | 3,129      |                                                  |                             |
| 3,196     | 3,179      |                                                  |                             |
| 3,197     | 3,180      |                                                  |                             |
| 3,240     | 3,223      |                                                  |                             |
| 3,240     | 3,224      |                                                  |                             |
| 3,250     | 3,233      |                                                  |                             |
| 3,561     |            |                                                  |                             |
| 3,568     |            |                                                  |                             |
| 3,571     |            |                                                  |                             |
| 3,940     |            |                                                  |                             |
| 4,310     |            |                                                  |                             |
| 4,400     |            |                                                  |                             |
| 4,402     |            |                                                  |                             |
| 4,618     |            |                                                  |                             |
| 4,620     |            |                                                  |                             |
| 4,724     |            |                                                  |                             |
| 4,727     |            |                                                  |                             |
| 4,736     |            |                                                  |                             |
| 4,738     |            |                                                  |                             |
| 4,764     |            |                                                  |                             |
| 5,130     |            |                                                  |                             |
| 5,150     |            |                                                  |                             |
| 5,152     |            |                                                  |                             |
| 5,198     |            |                                                  |                             |
| 5,208     |            |                                                  |                             |
| 5,386     |            |                                                  |                             |
| 5,683     |            |                                                  |                             |
| 6,415     |            |                                                  |                             |
| 7,037     |            |                                                  |                             |
| 7,046     |            |                                                  |                             |
| 7,050     |            |                                                  |                             |
| 7,052     |            |                                                  |                             |
| 7,163     |            |                                                  |                             |
| 7,222     |            |                                                  |                             |
| 7,263     |            |                                                  |                             |
| 7,266     |            |                                                  |                             |
| 7,361     |            |                                                  |                             |
| 7,398     |            |                                                  |                             |
| 7,423     |            |                                                  |                             |
| 7,444     |            |                                                  |                             |
| 7,446     |            |                                                  |                             |
| 7,463     |            |                                                  |                             |
| 7,463     |            |                                                  |                             |
| 7,464     |            |                                                  |                             |
| 7,470     |            |                                                  |                             |
|           |            | Surface, 9 5/8, 9,001, 15, 213.7                 |                             |
|           |            |                                                  | OJO ALAMO, 1,928            |
|           |            |                                                  | KIRTLAND, 2,094             |
|           |            |                                                  | FRUITLAND, 2,687            |
|           |            |                                                  | PICTURED CLIFFS, 2,973      |
|           |            |                                                  | LEWIS, 3,146                |
|           |            | Intermediate 1, 7, 6,366, 15, 3,225.5            |                             |
|           |            |                                                  | HUERFANITO BENTONITE, 3,568 |
|           |            |                                                  | CHACRA, 3,940               |
|           |            |                                                  | UPPER CLIFF HOUSE, 4,310    |
|           |            |                                                  | MASSIVE CLIFF HOUSE, 4,618  |
|           |            | PERF - CLIFF HOUSE UPPER, 4,620-4,724, 3/22/2013 |                             |
|           |            |                                                  | MENEFEE, 4,727              |
|           |            | PERF - MENEFEE, 4,764-5,130, 3/22/2013           |                             |
|           |            | PERF - POINT LOOKOUT, 5,198-5,386, 3/22/2013     |                             |
|           |            |                                                  | POINT LOOKOUT, 5,208        |
|           |            |                                                  | MANCOS, 5,683               |
|           |            |                                                  | UPPER GALLUP, 6,415         |
|           |            |                                                  | GREENHORN, 7,163            |
|           |            |                                                  | GRANEROS, 7,222             |
|           |            |                                                  | TWO WELLS, 7,263            |
|           |            | PERF - DAKOTA, 7,266-7,444, 3/21/2013            |                             |
|           |            |                                                  | PAGUATE, 7,361              |
|           |            |                                                  | UPPER CUBERO, 7,398         |
|           |            |                                                  | LOWER CUBERO, 7,423         |
|           |            | Production 1, 4 1/2, 4,000, 15, 7,449.0          |                             |

RCVD APR 24 '13  
OIL CONS. DIV.  
DIST. 3

INTEROFFICE MEMO

TO: Records & Regulatory  
FROM: Eddie Pippin

DATE: 3/4/2013  
LOCATION: Farmington, N.M.

**Final Geologic Summary**

Well Name & No.: Hardie #2N API: 3004535070

Location: SW Section 28 Twp. 29N Rge. 8W

County & State: San Juan, NM

Elevation: GL 6399 KB 6414

Tops From: X Wireline Log X Mudlog X Correlation

|                                  |                                 |                                |
|----------------------------------|---------------------------------|--------------------------------|
| Ojo Alamo <u>1928</u>            | Chacra <u>3940</u>              | Greenhorn <u>7163</u>          |
| Kirtland <u>2094</u>             | Upper Cliff House <u>4310</u>   | Graneros <u>7222</u>           |
| Fruitland <u>2687</u>            | Massive Cliff House <u>4618</u> | Dakota (Two Wells) <u>7263</u> |
| Pictured Cliffs <u>2973</u>      | Menefee <u>4727</u>             | Paguate <u>7361</u>            |
| Lewis <u>3146</u>                | Point Lookout <u>5208</u>       | Cubero <u>7398</u>             |
| Huerfanito Bentonite <u>3568</u> | Mancos <u>5683</u>              | Lower Cubero <u>7423</u>       |
|                                  | Upper Gallup <u>6415</u>        | Oak Canyon _____               |
|                                  |                                 | Encinal _____                  |
|                                  |                                 | Burro Canyon _____             |
|                                  |                                 | Morrison _____                 |
|                                  |                                 | PBTD _____                     |
|                                  |                                 | LTD _____                      |

Electric Logs Run: GR/CCL/CBL  
\_\_\_\_\_  
\_\_\_\_\_

Well Cored? X No      Yes

Well DST'd? X No      Yes

Geologist: Eddie Pippin