

746

E

3A - 30-045-217 30

4 - 30-045-20346

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO

(Submit 3 copies to OCD Aztec Office)

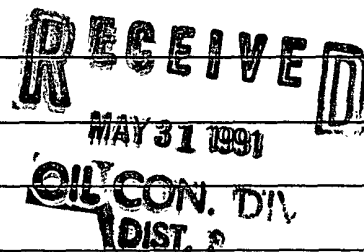
Operator MERIDIAN OIL Location: Unit NW Sec. 4 Twp 30 Rng 8Name of Well/Wells or Pipeline Serviced HOWELL A #3A, #4cps 1050wElevation 6252' Completion Date 8/6/76 Total Depth 406' Land Type\* N/ACasing, Sizes, Types & Depths N/AIf Casing is cemented, show amounts & types used N/AIf Cement or Bentonite Plugs have been placed, show depths & amounts used  
N/A

Depths &amp; thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 80'Depths gas encountered: N/AType & amount of coke breeze used: 41 SACKSDepths anodes placed: 360', 350', 340', 215', 195', 185', 175', 165', 155', 145'Depths vent pipes placed: N/AVent pipe perforations: 292'Remarks: qb #1

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

\*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
If Federal or Indian, add Lease Number.



WELL CASING  
CATHODIC PROTECTION CONSTRUCTION REPORT  
DAILY LOG

*Log 22*

Drilling Log (Attach Hereto). ☐

# 4

Completion Date 8-6-76

|                                      |                         |                                     |                             |                                |                |
|--------------------------------------|-------------------------|-------------------------------------|-----------------------------|--------------------------------|----------------|
| Well Name<br><b>Howell A #3A</b>     |                         | Location<br><b>NW 4-30-8</b>        |                             | CPS No.<br><b>1050W</b>        |                |
| Type & Size Bit Used<br><b>6 3/4</b> |                         |                                     |                             | Work Order No.<br><b>57023</b> |                |
| Anode Hole Depth<br><b>Log 406</b>   | Total Drilling Rig Time | Total Lbs. Coke Used<br><b>3841</b> | Lost Circulation Mat'l Used | No. Sacks Mud Used             |                |
| Anode Depth                          |                         |                                     |                             |                                |                |
| # 1 <b>360</b>                       | # 2 <b>350</b>          | # 3 <b>340</b>                      | # 4 <b>215</b>              | # 5 <b>195</b>                 | # 6 <b>185</b> |
| # 7 <b>175</b>                       | # 8 <b>165</b>          | # 9 <b>155</b>                      | # 10 <b>145</b>             |                                |                |
| Anode Output (Amps)                  |                         |                                     |                             |                                |                |
| # 1 <b>3.6</b>                       | # 2 <b>3.7</b>          | # 3 <b>3.8</b>                      | # 4 <b>2.9</b>              | # 5 <b>2.9</b>                 | # 6 <b>3.7</b> |
| # 7 <b>4.4</b>                       | # 8 <b>4.4</b>          | # 9 <b>3.4</b>                      | # 10 <b>3.3</b>             |                                |                |
| Anode Depth                          |                         |                                     |                             |                                |                |
| # 11                                 | # 12                    | # 13                                | # 14                        | # 15                           | # 16           |
| Anode Output (Amps)                  |                         |                                     |                             |                                |                |
| # 11                                 | # 12                    | # 13                                | # 14                        | # 15                           | # 16           |
| Total Circuit Resistance             |                         |                                     |                             |                                |                |
| Volts <b>12.2</b>                    | Amps <b>14.9</b>        | Ohms <b>0.82</b>                    | No. 8 C.P. Cable Used       | No. 2 C.P. Cable Used          |                |

Remarks: **Wet at 80' Drill to 420' Hung in Hole at 80'**  
**Next A.M. Had to use Mud Pump to Get Pipe**  
**Loose - Went Down to 120' Blew Water out.**  
**Water Back at 80' in Est. 20 Minutes**  
**Vent Perforated 292'**  
**Slurry ~~38~~ 41 Coke**

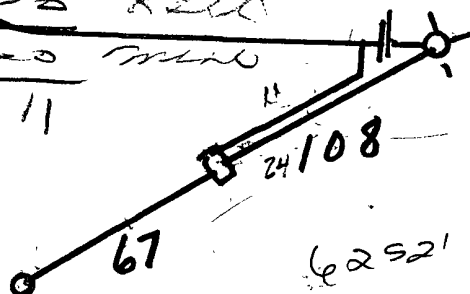
All Construction Completed

*Daniel*  
(Signature)

2248.50  
268.80 Depth  
170.00 Anode  
42.00 Cable  
102.63 Hand Wire

GROUND BED LAYOUT SKETCH

2831.43  
113.28 Tax  
2945.21  
213.40 Amp  
242.00 Cable  
194.50 Rent  
50.00 Misc  
3649.11



LEASE

CPS # 1050. W  
Hewell/A WELL NO. # 3.4

WELL NO. ~~7~~

CONTRACTOR

Mortou

RIG NO.

38

REPORT NO.

DATE \_\_\_\_\_

8/6

19 7/10-57

MORNING

DAYLIGHT

## EVENING

[illegible]

SIGNED: Toolpusher

\_\_\_\_ Company Supervisor

El Paso Natural Gas Company  
ENGINEERING CALCULATION

Sheet: \_\_\_\_\_ of \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_

File: \_\_\_\_\_

NW 4-30-8

57023.19-50-20

Howell A #3A

| MW     |                 | gals/mol |
|--------|-----------------|----------|
| 16.04  | C1              | 6.4      |
| 30.07  | C2              | 10.12    |
| 44.10  | C3              | 10.42    |
| 58.12  | iC4             | 12.38    |
| 58.12  | nC4             | 11.93    |
| 72.15  | iC5             | 13.85    |
| 72.15  | nC5             | 13.71    |
| 86.18  | iC6             | 15.50    |
| 86.18  | C6              | 15.57    |
| 100.21 | iC7             | 17.2     |
| 100.21 | C7              | 17.46    |
| 114.23 | C8              | 19.39    |
| 28.05  | C2 <sup>+</sup> | 9.64     |
| 42.08  | C3 <sup>+</sup> | 9.67     |

|     |     |     |            |                                                                                                                                                |             |
|-----|-----|-----|------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 80  | .8  | 305 | 1.4        | Wet at 80' - Drill to 420' - Hung in Hole at 80' on way out - Use Pump to Get out. Next AM. Blew water out to 120 - Wt. Back at 80' in 20 Min. |             |
|     | 1.5 | 10  | 1.4        |                                                                                                                                                |             |
| 90  | 2.7 |     | 1.2        |                                                                                                                                                |             |
|     | 3.2 | 20  | 9          |                                                                                                                                                |             |
| 100 | 2.9 |     | 1.0        |                                                                                                                                                |             |
|     | 2.6 | 30  | 1.6        |                                                                                                                                                |             |
| 10  | 2.4 |     | 2.3        |                                                                                                                                                |             |
|     | 2.1 | 40  | 2.7        |                                                                                                                                                |             |
| 20  | 1.6 |     | 2.7        |                                                                                                                                                |             |
|     | 1.5 | 50  | 2.6        |                                                                                                                                                |             |
| 30  | 1.8 |     | 2.4        | Vent Perf. 292'                                                                                                                                |             |
|     | 1.8 | 60  | 2.4        |                                                                                                                                                |             |
| 40  | 1.9 |     | 1.1        |                                                                                                                                                |             |
|     | 2.2 | 70  | 1.0        |                                                                                                                                                |             |
| 50  | 2.6 |     | 1.2        |                                                                                                                                                |             |
|     | 2.7 | 80  | .8         |                                                                                                                                                |             |
| 60  | 3.1 |     | .6         |                                                                                                                                                |             |
|     | 3.6 | 90  | 1.3        |                                                                                                                                                |             |
| 70  | 3.5 |     | 2.1        |                                                                                                                                                |             |
|     | 3.4 | 400 | 1.8        |                                                                                                                                                |             |
| 80  | 2.7 |     | 1.5 TD 406 | <del>38</del> coke<br>41                                                                                                                       |             |
|     | 2.7 | 10  |            |                                                                                                                                                |             |
| 90  | 2.7 |     |            |                                                                                                                                                |             |
|     | 2.0 | 20  |            |                                                                                                                                                |             |
| 200 | 1.7 |     |            |                                                                                                                                                |             |
|     | 1.5 |     |            | 1                                                                                                                                              | 360 25 36   |
| 10  | 1.5 |     |            | 2                                                                                                                                              | 350 27 37   |
|     | 2.4 |     |            | 3                                                                                                                                              | 340 28 3.8  |
| 20  | 1.3 |     |            | 4                                                                                                                                              | 215 2.4 2.9 |
|     | .6  |     |            | 5                                                                                                                                              | 195 2.1 2.9 |
| 30  | 5   |     |            | 6                                                                                                                                              | 185 2.7 3.7 |
|     | 5   |     |            | 7                                                                                                                                              | 175 3.4 4.4 |
| 40  | .6  |     |            | 8                                                                                                                                              | 165 3.5 4.4 |
|     | .6  |     |            | 9                                                                                                                                              | 155 2.7 3.4 |
| 50  | .6  |     |            | 10                                                                                                                                             | 145 2.7 3.3 |
|     | .6  |     |            |                                                                                                                                                |             |
| 60  | .6  |     |            |                                                                                                                                                |             |
|     | .6  |     |            |                                                                                                                                                |             |
| 70  | .6  |     |            |                                                                                                                                                |             |
|     | 5   |     |            |                                                                                                                                                |             |
| 80  | .6  |     |            |                                                                                                                                                |             |
|     | 7   |     |            |                                                                                                                                                |             |
| 90  | 7   |     |            |                                                                                                                                                |             |
|     | 8   |     |            |                                                                                                                                                |             |
| 300 | 1.1 |     |            |                                                                                                                                                |             |

| MW    |     | MISC. | gals/mol |
|-------|-----|-------|----------|
| 32.00 | O2  |       | 3.37     |
| 28.01 | CO  |       | 4.19     |
| 44.01 | CO2 |       | 6.38     |
| 64.06 | SO2 |       | 5.50     |
| 34.08 | H2S |       | 5.17     |
| 28.01 | N2  |       | 4.16     |
| -2.02 | H2  |       | 3.38     |

3149 12.200 149A 0.82 ~  
11.92  
280