

30-045-22834

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO  
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit SE Sec. 7 Twp 30 Rng 8

Name of Well/Wells or Pipeline Serviced HOWELL C #3A

cps 1341w

Elevation 6279' Completion Date 4/30/79 Total Depth 380' Land Type\* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/a

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

Fresh, Clear, Salty, Sulphur, Etc. 180'

Depths gas encountered: N/A

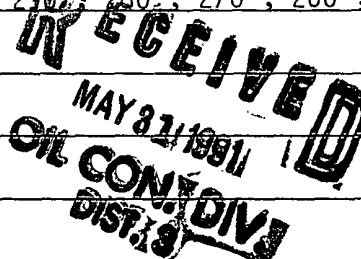
Type & amount of coke breeze used: N/A

Depths anodes placed: 340', 320', 310', 300', 290', 280', 270', 260', 225', 165'

Depths vent pipes placed: 360'

Vent pipe perforations: 200'

Remarks: gb #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

Drilling Log (Attach Hereto). ☐

CONTRACT #1  
(1 1/2" X 60" Durium)

Completion Date 4/30/79

|                                        |                         |                              |                             |                                   |                 |
|----------------------------------------|-------------------------|------------------------------|-----------------------------|-----------------------------------|-----------------|
| Well Name<br><b>Howell C #3A</b>       |                         | Location<br><b>SE 7-30-8</b> |                             | CPS No.<br><b>1341 W</b>          |                 |
| Type & Size Bit Used<br><b>6 3/4</b>   |                         |                              |                             | Work Order No.<br><b>57292-21</b> |                 |
| Anode Hole Depth<br><b>380 TD 320'</b> | Total Drilling Rig Time | Total Lbs. Coke Used         | Lost Circulation Mat'l Used | No. Sacks Mud Used                |                 |
| Anode Depth                            |                         |                              |                             |                                   |                 |
| # 1 <b>340'</b>                        | # 2 <b>320'</b>         | # 3 <b>310'</b>              | # 4 <b>300'</b>             | # 5 <b>290'</b>                   | # 6 <b>280'</b> |
| # 7 <b>270'</b>                        | # 8 <b>260'</b>         | # 9 <b>225'</b>              | # 10 <b>165'</b>            |                                   |                 |
| Anode Output (Amps)                    |                         |                              |                             |                                   |                 |
| # 1 <b>2.7</b>                         | # 2 <b>2.7</b>          | # 3 <b>3.8</b>               | # 4 <b>3.5</b>              | # 5 <b>3.3</b>                    | # 6 <b>3.3</b>  |
| # 7 <b>3.6</b>                         | # 8 <b>3.4</b>          | # 9 <b>2.4</b>               | # 10 <b>3.0</b>             |                                   |                 |
| Anode Depth                            |                         |                              |                             |                                   |                 |
| # 11                                   | # 12                    | # 13                         | # 14                        | # 15                              | # 16            |
| # 17                                   | # 18                    | # 19                         | # 20                        |                                   |                 |
| Anode Output (Amps)                    |                         |                              |                             |                                   |                 |
| # 11                                   | # 12                    | # 13                         | # 14                        | # 15                              | # 16            |
| # 17                                   | # 18                    | # 19                         | # 20                        |                                   |                 |
| Total Circuit Resistance               |                         | No. 8 C.P. Cable Used        |                             | No. 2 C.P. Cable Used             |                 |
| Volts <b>11.5</b>                      | Amps <b>15.5</b>        | Ohms <b>.74</b>              |                             |                                   |                 |

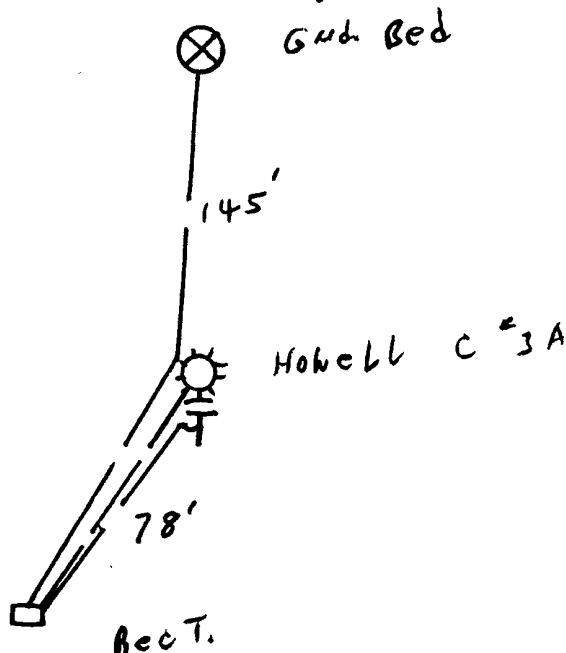
Remarks: STATIC 600' S = .90 V. DRILLER SAID WATER AT 180'.  
Approx. 2 gal./min. Drilled to 220'. WATER STANDING IN hole  
NEXT A.M. AT 160'. Did NOT have enough air to blow water  
out of hole for water sample. Drilled to 380'. Logged 320'.  
INSTALLED 360' of 1" P.V.C. VENT Pipe. Perforated 200'.

All Construction Completed

Ditch & 1 cable = 223'  
 Extra cable = 181'  
 Hole Depth - 130'

Stub Pole & 40V 16A Rect.

GROUND BED LAYOUT SKETCH



6279

EL PASO NATURAL GAS COMPANY  
DRILLING DEPARTMENT

## DAILY DRILLING REPORT

LEASE *CPS 1341 W* WELL NO. *HOWELL C 3A* CONTRACTOR RIG NO. REPORT NO. DATE *4-30-79* 19

## MORNING

## DAYLIGHT

## EVENING

| Driller <i>RAO LYNCH</i> Total Men In Crew |    |           |        |        | Driller Total Men In Crew |    |           |        |        | Driller Total Men In Crew |    |           |        |        |
|--------------------------------------------|----|-----------|--------|--------|---------------------------|----|-----------|--------|--------|---------------------------|----|-----------|--------|--------|
| FROM                                       | TO | FORMATION | WT-BIT | R.P.M. | FROM                      | TO | FORMATION | WT-BIT | R.P.M. | FROM                      | TO | FORMATION | WT-BIT | R.P.M. |
|                                            |    |           |        |        |                           |    |           |        |        |                           |    |           |        |        |
|                                            |    |           |        |        |                           |    |           |        |        |                           |    |           |        |        |
|                                            |    |           |        |        |                           |    |           |        |        |                           |    |           |        |        |
|                                            |    |           |        |        |                           |    |           |        |        |                           |    |           |        |        |

|                   |  |               |      |       |          |  |               |      |       |          |  |               |      |       |
|-------------------|--|---------------|------|-------|----------|--|---------------|------|-------|----------|--|---------------|------|-------|
| BIT NO.           |  | NO. DC        | SIZE | LENG. | BIT NO.  |  | NO. DC        | SIZE | LENG. | BIT NO.  |  | NO. DC        | SIZE | LENG. |
| SER. NO.          |  | STANDS        |      |       | SER. NO. |  | STANDS        |      |       | SER. NO. |  | STANDS        |      |       |
| SIZE <i>6 3/4</i> |  | SINGLES       |      |       | SIZE     |  | SINGLES       |      |       | SIZE     |  | SINGLES       |      |       |
| TYPE              |  | DOWN ON KELLY |      |       | TYPE     |  | DOWN ON KELLY |      |       | TYPE     |  | DOWN ON KELLY |      |       |
| MAKE              |  | TOTAL DEPTH   |      |       | MAKE     |  | TOTAL DEPTH   |      |       | MAKE     |  | TOTAL DEPTH   |      |       |

| MUD RECORD |     |      | MUD, ADDITIVES USED AND RECEIVED |     |      | MUD RECORD |     |      | MUD, ADDITIVES USED AND RECEIVED |     |      | MUD RECORD |     |      | MUD, ADDITIVES USED AND RECEIVED |     |      |
|------------|-----|------|----------------------------------|-----|------|------------|-----|------|----------------------------------|-----|------|------------|-----|------|----------------------------------|-----|------|
| Time       | Wt. | Vis. | Time                             | Wt. | Vis. | Time       | Wt. | Vis. | Time                             | Wt. | Vis. | Time       | Wt. | Vis. | Time                             | Wt. | Vis. |
|            |     |      |                                  |     |      |            |     |      |                                  |     |      |            |     |      |                                  |     |      |
|            |     |      |                                  |     |      |            |     |      |                                  |     |      |            |     |      |                                  |     |      |
|            |     |      |                                  |     |      |            |     |      |                                  |     |      |            |     |      |                                  |     |      |
|            |     |      |                                  |     |      |            |     |      |                                  |     |      |            |     |      |                                  |     |      |

| FROM | TO | TIME BREAKDOWN | FROM | TO | TIME BREAKDOWN | FROM | TO | TIME BREAKDOWN |
|------|----|----------------|------|----|----------------|------|----|----------------|
|      |    |                |      |    |                |      |    |                |
|      |    |                |      |    |                |      |    |                |
|      |    |                |      |    |                |      |    |                |
|      |    |                |      |    |                |      |    |                |
|      |    |                |      |    |                |      |    |                |

| REMARKS -                  | REMARKS -                    | REMARKS -                                |
|----------------------------|------------------------------|------------------------------------------|
| <i>0-60 SAND STONE</i>     | <i>500-260 - BLUE SAND</i>   | <i>180' WATER APPROX. 2 gal per min.</i> |
| <i>60-100 BLUE SHALE</i>   | <i>260-300 - BLUE SHALE</i>  |                                          |
| <i>100-110 SANDY SHALE</i> | <i>300-320 - SAND</i>        |                                          |
| <i>110-145 BLUE SHALE</i>  | <i>320-340 - SANDY SHALE</i> | <i>HOLE TD</i>                           |
| <i>145-160 SANDY SHALE</i> | <i>340-380 - SAND</i>        | <i>370'</i>                              |
| <i>160-175 YELLOW SAND</i> |                              |                                          |
| <i>175-200 BLUE SHALE</i>  |                              |                                          |

SIGNED: Toolpusher

Company Supervisor

CPS # 1341-W

Howell C\* 2A

SE 7-30-8

W.O. 57292-21

| 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>2</sup> | 9.64     |
| 42.08  | C3 <sup>2</sup> | 9.67     |

| 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     |

160 - 1.5  
1.9 - ⑩

20 - 1.7

1.6

80 - 1.5

1.1

90 - 1.1

1.0

200 - 1.0

1.0

10 - 1.0

1.2

20 - 1.6

1.6 - ⑨

30 - 1.1

1.0

40 - 1.9

1.8

50 - 1.6

1.8

60 - 2.0 - ⑧

2.0

70 - 2.0 - ⑦

1.8

80 - 1.9 - ⑥

1.8

90 - 2.1 - ⑤

2.1

300 - 2.0 - ④

2.1

10 - 2.1 - ③

2.0

20 - 1.5 - ②

1.2

30 - 1.1

1.4

40 - 1.6 - ①

1.4

50 - 1.9

1.5

60 - 1.5

1.0

370 - 1.0 T.D

380- Drilled To

Driller SAID WATER AT 180'. Approx. 2 GAL./MIN. Drilled To 220. WATER STANDING IN hole NEXT A.M. AT 160'. Did NOT have enough Air To BLOW WATER out of hole for WATER sample. Drilled To 380 Logged 370'. Installed 360' of 1" P.V.C VENT Pipe Perforated 200'.

$$11.5V \quad 15.5A = .74 \Omega$$

4/30/79

JL

- 1 = 340 - 2.0 - 2.7
- 2 = 320 - 2.2 - 2.7
- 3 = 310 - 2.8 - 3.8
- 4 = 300 - 2.7 - 3.5
- 5 = 290 - 2.4 - 3.3
- 6 = 280 - 2.4 - 3.3
- 7 = 270 - 2.7 - 3.6
- 8 = 260 - 2.5 - 3.4
- 9 = 225 - 1.8 - 2.4
- 10 = 165 - 2.3 - 3.0

1/14

8 Pgs. 3 O.T.