

1120 #128 30-045-06172  
#257 30-045-21408

E

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. 36 Twp 27 Rng 19

Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #257, #128

cps 1740w

Elevation 6515' Completion Date 11/6/84 Total Depth 340' Land Type\* N/A

Casing, Sizes, Types & Depths 18' OF 8" PVC CASING

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. 120'

Depths gas encountered: N/A

Type & amount of coke breeze used: 3390 lbs.

Depths anodes placed: 310', 290', 280', 270', 260', 195', 185', 175', 155', 145'

Depths vent pipes placed: 340'

Vent pipe perforations: 240'

Remarks: gb-#1-

**RECEIVED**  
MAY 31 1991  
OIL CON. DIV  
DIST. 3

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 LOGDrilling Log (Attach Hereto) ☒

Completion Date 11-6-84

|                          |                          |                                  |                        |                                                                                                       |
|--------------------------|--------------------------|----------------------------------|------------------------|-------------------------------------------------------------------------------------------------------|
| CPS #                    | Well Name, Line or Plant | Work Order #                     | Static                 | Ins-Union Check                                                                                       |
| 1740-W                   | Huerfano #257<br>#128    | 55606-21-50-20<br>54172-19-50-20 | -78 600 N<br>-78 600 N | <input checked="" type="checkbox"/> Good <input type="checkbox"/> Bad<br>113 mo = 957<br>142 mo = 128 |
| Location                 | Anode Size               | Anode Type                       | Size Bit               |                                                                                                       |
| NW36-27-10               | 2" X 60"                 | Duriron                          | 63/4                   |                                                                                                       |
| Depth Drilled            | Depth Logged             | Drilling Rig Time                | Total Lbs. Coke Used   | Lost Circulation Mat'l Used                                                                           |
| 340                      | 339                      |                                  | 3,390 lbs              |                                                                                                       |
| Anode Depth              |                          |                                  |                        |                                                                                                       |
| #1 310                   | #2 290                   | #3 280                           | #4 270                 | #5 260                                                                                                |
| #6 195                   | #7 185                   | #8 175                           | #9 155                 | #10 145                                                                                               |
| Anode Output (Amps)      |                          |                                  |                        |                                                                                                       |
| #1 4.00                  | #2 4.57                  | #3 4.22                          | #4 4.45                | #5 4.60                                                                                               |
| #6 3.93                  | #7 4.46                  | #8 4.20                          | #9 3.45                | #10 3.75                                                                                              |
| 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 12.1               | Amps 18.0                | Ohms .67                         |                        |                                                                                                       |

Remarks: Drilled to 120 too wet to drill with air. Set 18' of 8" P.V.C. casing to hold gravel at Top Hole. Found good shale at 140' to 200'. Found good shale from 250' to bottom of hole. Installed 340' of 1" P.V.C. vent pipe. 240' with perforations. Slurried approx. 3,390 lbs Coke down hole.

1 hr to set casing

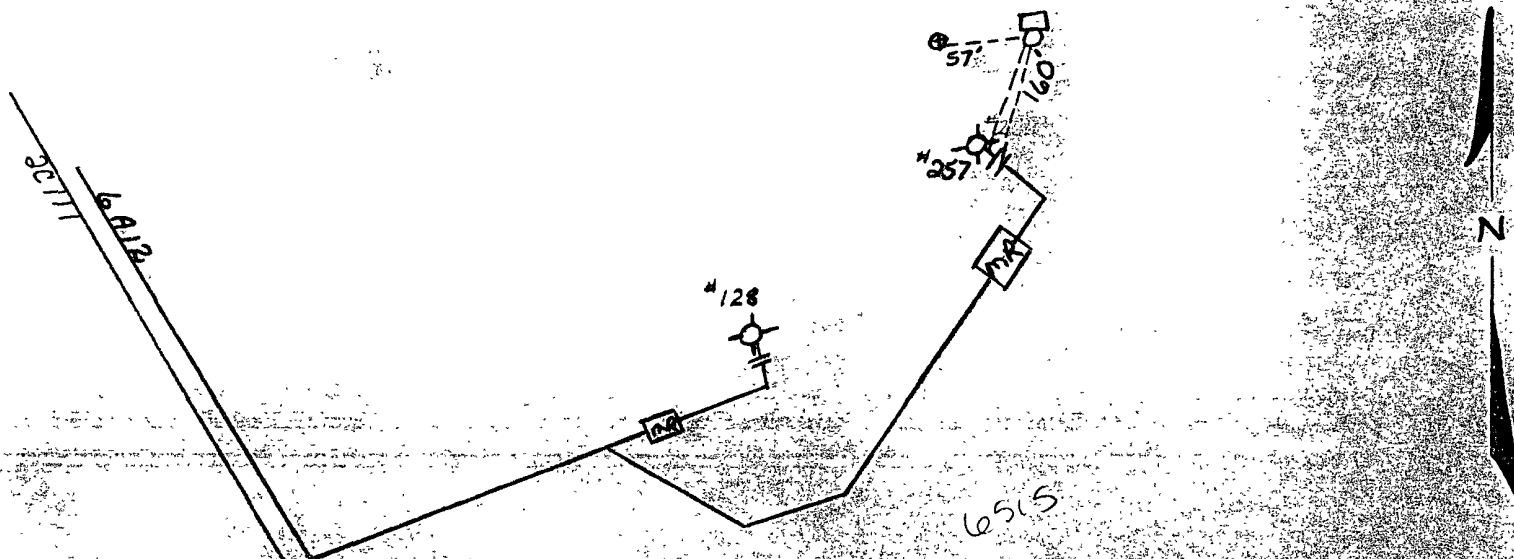
Rectifier Size: 60 V 30 A  
 Addn'l Depth:           
 Depth Credit: 161' ✓  
 Extra Cable: 180' ✓  
 Ditch & 1 Cable: 217' ✓  
 25' Meter Pole:           
 20' Meter Pole: 1 ✓  
 10' Stub Pole:         

Overtime = 1 ✓  
 Req. Time = 8 ✓

All Construction Completed

C.W. Donohue  
 (Signature)

## GROUND BED LAYOUT SKETCH



## CONSTRUCTION LOGGING READINGS

CPS #: 1740-LW WELL NAME: *Huerfano #257+128* LOCATION: NW36-27-10 DATE: 11-6-84

TOTAL VOLTS: 12.1 TOTAL AMPS: 18.0

OHMS RESISTANCE: .67

Readings Thru 1,350' spool

*Drilled 340 Logged 339*

|      |           |           |      |           |           |      |           |           |      |           |           | ANODE READINGS |       |         |           |
|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|----------------|-------|---------|-----------|
| DEEP | LOG ANODE | ANODE NO. | DEEP | LOG ANODE | ANODE NO. | DEEP | LOG ANODE | ANODE NO. | DEEP | LOG ANODE | ANODE NO. | NO.            | DEPTH | NO COKE | WITH COKE |
| 5    |           |           | 185  | 2.13      | ⑦         | 365  |           |           | 545  |           |           | 1              | 310   | 2.37    | 4.00      |
| 10   |           |           | 190  | 2.06      |           | 370  |           |           | 550  |           |           | 2              | 290   | 2.41    | 4.57      |
| 15   |           |           | 195  | 1.95      | ⑥         | 375  |           |           | 555  |           |           | 3              | 280   | 2.27    | 4.22      |
| 20   |           |           | 200  | 1.70      |           | 380  |           |           | 560  |           |           | 4              | 270   | 2.22    | 4.45      |
| 25   |           |           | 205  | 1.11      |           | 385  |           |           | 565  |           |           | 5              | 260   | 2.19    | 4.60      |
| 30   |           |           | 210  | .97       |           | 390  |           |           | 570  |           |           | 6              | 195   | 2.20    | 3.93      |
| 35   |           |           | 215  | .84       |           | 395  |           |           | 575  |           |           | 7              | 185   | 2.27    | 4.46      |
| 40   |           |           | 220  | 1.07      |           | 400  |           |           | 580  |           |           | 8              | 175   | 2.20    | 4.20      |
| 45   |           |           | 225  | 1.14      |           | 405  |           |           | 585  |           |           | 9              | 155   | 2.00    | 3.45      |
| 50   |           |           | 230  | 1.26      |           | 410  |           |           | 590  |           |           | 10             | 145   | 2.25    | 3.75      |
| 55   |           |           | 235  | 1.42      |           | 415  |           |           | 595  |           |           |                |       |         |           |
| 60   |           |           | 240  | 1.27      |           | 420  |           |           | 600  |           |           |                |       |         |           |
| 65   |           |           | 245  | .98       |           | 425  |           |           | 605  |           |           |                |       |         |           |
| 70   |           |           | 250  | 1.15      |           | 430  |           |           | 610  |           |           |                |       |         |           |
| 75   |           |           | 255  | 1.54      |           | 435  |           |           | 615  |           |           |                |       |         |           |
| 80   |           |           | 260  | 1.81      | ③         | 440  |           |           | 620  |           |           |                |       |         |           |
| 85   |           |           | 265  | 2.01      |           | 445  |           |           | 625  |           |           |                |       |         |           |
| 90   |           |           | 270  | 1.99      | ④         | 450  |           |           | 630  |           |           |                |       |         |           |
| 95   |           |           | 275  | 2.04      |           | 455  |           |           | 635  |           |           |                |       |         |           |
| 100  | .85       |           | 280  | 1.97      | ③         | 460  |           |           | 640  |           |           |                |       |         |           |
| 105  | .86       |           | 285  | 1.99      |           | 465  |           |           | 645  |           |           |                |       |         |           |
| 110  | 1.02      |           | 290  | 2.08      | ②         | 470  |           |           | 650  |           |           |                |       |         |           |
| 115  | 1.09      |           | 295  | 2.13      |           | 475  |           |           | 655  |           |           |                |       |         |           |
| 120  | .86       |           | 300  | 2.12      |           | 480  |           |           | 660  |           |           |                |       |         |           |
| 125  | .80       |           | 305  | 2.02      |           | 485  |           |           | 665  |           |           |                |       |         |           |
| 130  | 1.48      |           | 310  | 1.92      | ①         | 490  |           |           | 670  |           |           |                |       |         |           |
| 135  | 1.87      |           | 315  | 1.64      |           | 495  |           |           | 675  |           |           |                |       |         |           |
| 140  | 2.06      |           | 320  | 1.60      |           | 500  |           |           | 680  |           |           |                |       |         |           |
| 145  | 1.98      | ⑩         | 325  | 1.37      |           | 505  |           |           | 685  |           |           |                |       |         |           |
| 150  | 1.85      |           | 330  | 1.41      |           | 510  |           |           | 690  |           |           |                |       |         |           |
| 155  | 1.86      | ⑨         | 335  | 3.39      | TD        | 515  |           |           | 695  |           |           |                |       |         |           |
| 160  | 1.78      |           | 340  |           |           | 520  |           |           | 700  |           |           |                |       |         |           |
| 165  | 1.76      |           | 345  |           |           | 525  |           |           | 705  |           |           |                |       |         |           |
| 170  | 1.71      |           | 350  |           |           | 530  |           |           | 710  |           |           |                |       |         |           |
| 175  | 1.83      | ⑧         | 355  |           |           | 535  |           |           | 715  |           |           |                |       |         |           |
| 180  | 1.96      |           | 360  |           |           | 540  |           |           | 720  |           |           |                |       |         |           |

water zone

REMARKS: Drilled to 120', found water. Set 12' of 8" pvc casing to hold top of hole. Found good shale 140' to 200'. Found good shale from 250' to bottom of hole. Installed 340' of 1" pvc vent pipe, 240' with perforations. Slurried approx. 3,390 lbs coke down hole.

LEASE HUERFANO WELL NO. 257 CONTRACTOR CORR. CONTROL RIG NO. 102 REPORT NO. \_\_\_\_\_ DATE Nov 6 1984

| MORNING                                                   |     |              |        |        |  | DAYLIGHT                              |     |                         |        |        |  | EVENING                               |    |           |        |        |  |
|-----------------------------------------------------------|-----|--------------|--------|--------|--|---------------------------------------|-----|-------------------------|--------|--------|--|---------------------------------------|----|-----------|--------|--------|--|
| Driller <u>TERENCE LARGENT</u> Total Men In Crew <u>3</u> |     |              |        |        |  | 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. |  |
| 0                                                         | 20  | CASING       |        |        |  | 120                                   | 200 | SHALE                   |        |        |  |                                       |    |           |        |        |  |
| 20                                                        | 60  | SHALE & CLAY |        |        |  | 200                                   | 260 | SAND & BENTONITE STRMS. |        |        |  |                                       |    |           |        |        |  |
| 60                                                        | 100 | SANDSTONE    |        |        |  | 260                                   | 320 | SANDY SHALE             |        |        |  |                                       |    |           |        |        |  |
| 100                                                       | 120 | SAND (WATER) |        |        |  | 320                                   | 340 | BENTONITE & SAND        |        |        |  |                                       |    |           |        |        |  |

|                 |  |                                     |                  |  |                                     |                  |  |                                     |                  |  |                                     |
|-----------------|--|-------------------------------------|------------------|--|-------------------------------------|------------------|--|-------------------------------------|------------------|--|-------------------------------------|
| BIT NO. _____   |  | NO. DC _____ SIZE _____ LENG. _____ | BIT NO. _____    |  | NO. DC _____ SIZE _____ LENG. _____ | BIT NO. _____    |  | NO. DC _____ SIZE _____ LENG. _____ | BIT NO. _____    |  | NO. DC _____ SIZE _____ LENG. _____ |
| S. L. NO. _____ |  | STANDS _____                        | SERIAL NO. _____ |  | STANDS _____                        | SERIAL NO. _____ |  | STANDS _____                        | SERIAL NO. _____ |  | STANDS _____                        |
| SIZE _____      |  | SINGLES _____                       | SIZE _____       |  | SINGLES _____                       | SIZE _____       |  | SINGLES _____                       | SIZE _____       |  | SINGLES _____                       |
| TYPE _____      |  | DOWN ON KELLY _____                 | TYPE _____       |  | DOWN ON KELLY _____                 | TYPE _____       |  | DOWN ON KELLY _____                 | TYPE _____       |  | DOWN ON KELLY _____                 |
| MAKE _____      |  | TOTAL DEPTH _____                   | 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. |                                  |  |  |
|            |     |      |                                  |  |  |            |     |      |                                  |  |  |            |     |      |                                  |  |  |
|            |     |      |                                  |  |  |            |     |      |                                  |  |  |            |     |      |                                  |  |  |
|            |     |      |                                  |  |  |            |     |      |                                  |  |  |            |     |      |                                  |  |  |
|            |     |      |                                  |  |  |            |     |      |                                  |  |  |            |     |      |                                  |  |  |

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

|           |                                                                                                                                                                                                                                                                      |           |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| REMARKS - | REMARKS - <u>DRILLED TO 115' ON</u><br><u>11-5-84, NEXT MORNING SET</u><br><u>CASING TO HOLD GRAVEL</u><br><u>AT 15 FEET, SET CASING</u><br><u>STRATED DRILLING WITH</u><br><u>WATER, NOTICE MAKING</u><br><u>3705 GPM PER MINUTE BETWEEN</u><br><u>CONNECTIONS.</u> | REMARKS - |
|           |                                                                                                                                                                                                                                                                      |           |
|           |                                                                                                                                                                                                                                                                      |           |
|           |                                                                                                                                                                                                                                                                      |           |
|           |                                                                                                                                                                                                                                                                      |           |
|           |                                                                                                                                                                                                                                                                      |           |
|           |                                                                                                                                                                                                                                                                      |           |
|           |                                                                                                                                                                                                                                                                      |           |

SIGNED: Toolpusher

Terence Largent

Company Supervisor

C.W. Donohue