

36-30-045-05787
135-30-045-05770
240-30-045-21220

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. 23 Twp 26 Rng 9

Name of Well/Wells or Pipeline Serviced HUFREANO UNIT #36, #135, #240

cps 882w

Elevation 6387' Completion Date 7/2/71 Total Depth 360' 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. N/A

Depths gas encountered: N/A

Type & amount of coke breeze used: 7800 lbs.

Depths anodes placed: 305', 295', 285', 255', 245', 235', 225', 195', 175'

Depths vent pipes placed: 305'

Vent pipe perforations: 250'

Remarks: gb #1

RECEIVED

MAY 31 1991

OIL CON. DIV.

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

[Handwritten Signature]

Drilling Log (Attach Hereto)

Completion Date 7/2/71

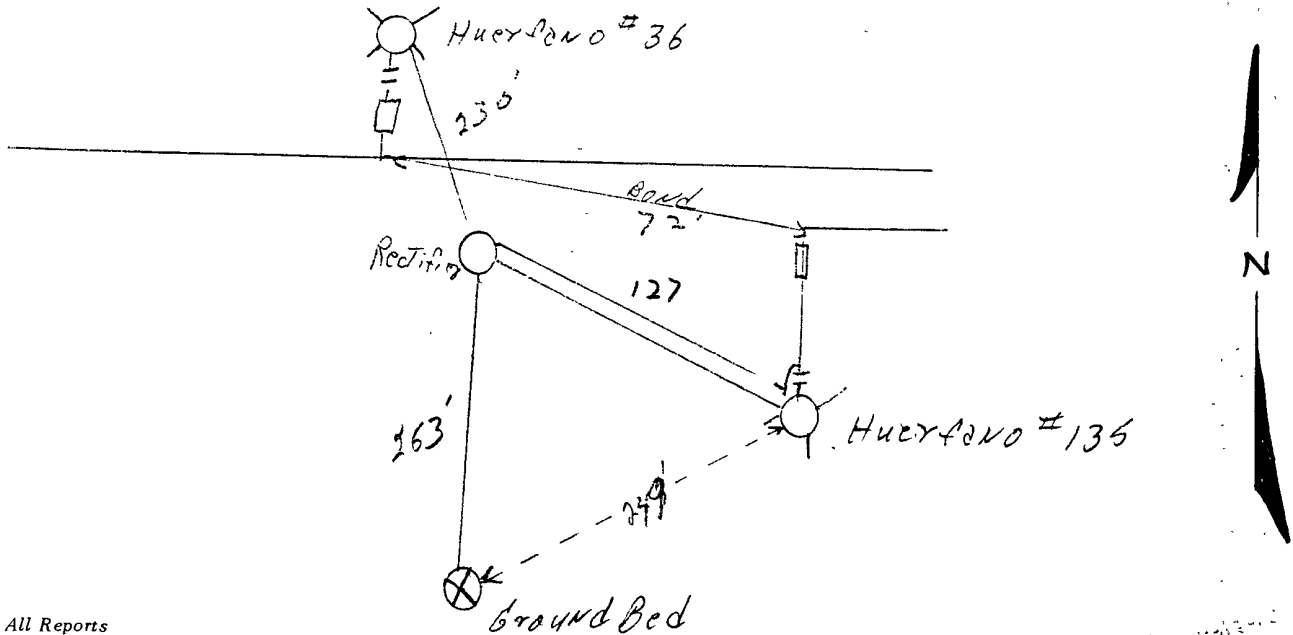
| | | | | | |
|---|-----------------------------------|----------------------------------|-----------------------------|---|------------------|
| Well Name <u>Huerfano # 135</u> <u>Huerfano # 36</u> | | Location <u>NW 23-26-9W</u> | | CPS No. <u>882W</u> | |
| Type & Size Bit Used <u>6 3/4</u> | | | | Work Order No. <u>184-54295-19-50-</u> <u>194-20146-19-50-</u> | |
| Anode Hole Depth <u>360</u> | Total Drilling Rig Time | Total Lbs. Coke Used <u>7800</u> | Lost Circulation Mat'l Used | No. Sacks Mud Used | |
| Anode Depth | # 1 <u>305'</u> | # 2 <u>295'</u> | # 3 <u>285'</u> | # 4 <u>255'</u> | # 5 <u>245'</u> |
| Anode Output (Amps) | # 1 <u>4.6</u> | # 2 <u>5.6</u> | # 3 <u>5.2</u> | # 4 <u>3.4</u> | # 5 <u>5.5</u> |
| Anode Depth | # 6 <u>235'</u> | # 7 <u>225'</u> | # 8 <u>195'</u> | # 9 <u>185'</u> | # 10 <u>175'</u> |
| Anode Output (Amps) | # 6 <u>5.8</u> | # 7 <u>4.8</u> | # 8 <u>4.4</u> | # 9 <u>5.9</u> | # 10 <u>4.0</u> |
| Anode Depth | # 11 | # 12 | # 13 | # 14 | # 15 |
| Anode Output (Amps) | # 11 | # 12 | # 13 | # 14 | # 15 |
| Total Circuit Resistance | Volts <u>12</u> | | Amps <u>19.2</u> | | Ohms <u>.624</u> |
| | No. 8 C.P. Cable Used <u>890'</u> | | No. 2 C.P. Cable Used | | |

Remarks: Huerfano # 135 STATIC 9/8 600' SE = .76 vent hose perforated &
Huerfano # 36 STATIC 9/8 600' NE = .74 TO # 1 ANODE
 Pumping hose plugged once AT 200'
 Drilled with AIR WATER standing in morning @ 90'
 Pumped to 50' completed by slurry
 Wires marked 1 NOTCH = Huerfano # 135
 2 NOTCHES = Flowline
 3 NOTCHES = Huerfano # 36

All Construction Completed

[Handwritten Signature]
(Signature)

GROUND BED LAYOUT SKETCH



~~136~~ ¹³⁷ and

LEASE _____ WELL NO. ^{882W} 882W CONTRACTOR *Joe Mervan* RIG NO. *1* REPORT NO. _____ DATE *7-1* 1971

MORNING

DAYLIGHT

EVENING

| MORNING | | | | | DAYLIGHT | | | | | EVENING | | | | |
|-----------------------|----|----------------------------------|--------|--------|----------|-----|-------------------|--------|--------|---------|-----|-------------------|--------|--------|
| Driller <i>Mervan</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. |
| 0 | 10 | surface sand | | | 85 | 90 | shale | | | 160 | 195 | shaly sand | | |
| 10 | 40 | loose gravel and quartz boulders | | | | | | | | 195 | 210 | sand water | | |
| 40 | 60 | shale | | | 90 | 110 | wet sand | | | 210 | 255 | shale | | |
| 60 | 85 | sand | | | 110 | 180 | shale | | | 255 | 280 | sand | | |

| BIT NO. <i>1</i> | | NO. DC | SIZE | LENG. | BIT NO. | | NO. DC | SIZE | LENG. | BIT NO. <i>2745</i> | | NO. DC | SIZE | LENG. |
|-------------------|--|---------------|------|-------|------------|--|---------------|------|-------|---------------------|--|---------------|------|-------|
| SERIAL NO. | | STANDS | | | SERIAL NO. | | STANDS | | | SERIAL NO. | | STANDS | | |
| SIZE <i>6 3/4</i> | | SINGLES | | | SIZE | | SINGLES | | | SIZE | | SINGLES | | |
| TYPE <i>retip</i> | | 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 |
|-------|-------|--|------|----|----------------|------|----|----------------|
| 9:00 | 9:00 | went back in hole on #136, re-mixed hole, flushed and pulled back out | | | | | | |
| 9:00 | 11:30 | stand by while Cap's Log and wire are ordered | | | | | | |
| 11:30 | 12:30 | moved to Cap's # 882 in rig and drilled to 30 ft. hole covering gravel and quartz boulders | | | | | | |
| 12:30 | 3:30 | spudded hole drilled to 60 ft. cleaned hole dry again started back by air | | | | | | |
| 3:30 | 7:00 | drilled to 300 ft. | | | | | | |

| REMARKS - | REMARKS - | REMARKS - |
|-----------|-----------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |

SIGNED: Toolpusher *Joe Mervan* Company Supervisor _____

LEASE

CPS

WELL NO. *882W* CONTRACTOR *Joe Maxwell*

RIG NO. *1*

REPORT NO.

DATE *7-2*

1971

| MORNING | | | | | DAYLIGHT | | | | | EVENING | | | | | | | | | | |
|--|--------------|---|---------|--------|----------------------------------|------|---------|-----------|-------------------|------------|--|------|------|-----------|----------------------------------|-------------------|-----|------|--|--|
| Driller <i>Maxwell</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. | | | | |
| NO. DC _____ SIZE _____ LENG. _____ NO. DC _____ SIZE _____ LENG. _____ NO. DC _____ SIZE _____ LENG. _____ STANDS _____ STANDS _____ STANDS _____ SINGLES _____ SINGLES _____ SINGLES _____ DOWN ON KELLY _____ DOWN ON KELLY _____ DOWN ON KELLY _____ TOTAL DEPTH _____ TOTAL DEPTH _____ TOTAL DEPTH _____ | | | | | | | | | | | | | | | | | | | | |
| 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. | | |
| <i>7:30</i> | | | | | <i>7:30</i> | | | | | | | | | | | | | | | |
| FROM | TO | TIME BREAKDOWN | | | | | FROM | TO | TIME BREAKDOWN | | | | | FROM | TO | TIME BREAKDOWN | | | | |
| <i>7:30</i> | <i>9:00</i> | <i>pulled out of hole wait on C.P.S. To log hole</i> | | | | | | | | | | | | | | | | | | |
| <i>9:00</i> | <i>11:00</i> | <i>moved off hole stand by while C.P.S. logged and now approx 4 1/2 ft.</i> | | | | | | | | | | | | | | | | | | |

REMARKS -

REMARKS -

REMARKS -

SIGNED: Toolpusher

Joe Maxwell

Company Supervisor

Huerfano #135
CPS 882W

| MW | gal/mol |
|-----|---------|
| 16 | 6.4 |
| 30 | 9.56 |
| 44 | 10.42 |
| 58 | 12.38 |
| 72 | 13.85 |
| 86 | 15.50 |
| 100 | 17.2 |
| 114 | 19.46 |
| 128 | 21.84 |
| 142 | 24.67 |

| MW | gal/mol |
|----|---------|
| 44 | 5.18 |
| 34 | 5.17 |
| 28 | 4.16 |
| 2 | 3.38 |

| | | | | | | Anodes in series | |
|-----|------|-----|--------|-------|-------|--------------------|-------|
| | | | | Depth | Water | CO ₂ | |
| 90 | 2.2 | 60 | 1.10 | | | | |
| | 2.0 | | .87 | 1 | 305 | 2.2 | 4.6 |
| 100 | 1.62 | 70 | .96 | 2 | 295 | 2.4 | 5.6 |
| | 1.07 | | 1.04 | 3 | 285 | 2.3 | 5.2 |
| 10 | 1.53 | 80 | 1.38 | 4 | 255 | 2.0 | 3.4 |
| | 2.2 | | 2.1 | 5 | 245 | 2.6 | 5.5 |
| 20 | 2.4 | 90 | 2.2 | 6 | 235 | 2.6 | 5.8 |
| | 2.4 | | 2.2 | 7 | 225 | 2.5 | 4.8 |
| 30 | 2.4 | 300 | 2.3 | 8 | 195 | 2.3 | 4.4 |
| | 2.3 | | 2.2 | 9 | 185 | 2.6 | 5.4 |
| 40 | 2.3 | 10 | 1.79 | 10 | 175 | 2.6 | 4.0 |
| | 2.3 | | .99 | | | 12V | 19.2A |
| 50 | 2.3 | 20 | .92 | | | Anodes in Parallel | |
| | 2.1 | | .99 | | | 12V | 19.2A |
| 60 | 2.1 | 30 | 1.06 | | | | |
| | 2.3 | | .90 | 1 | 1.8 | | |
| 70 | 2.3 | 40 | .78 | 2 | 2.2 | | |
| | 2.3 | | .64 | 3 | 2.1 | | |
| 80 | 2.4 | 50 | .83 | 4 | 1.22 | | |
| | 2.4 | | 1.85 | 5 | 1.2 | | |
| 90 | 2.5 | 60 | BOTTOM | 6 | 2.2 | | |
| | 2.1 | | | 7 | 1.8 | | |
| 200 | 1.73 | | | 8 | 1.75 | | |
| | 1.26 | | | 9 | 2.5 | | |
| 10 | 1.12 | | | 10 | 1.5 | | |
| | 1.58 | | | | | | |
| 20 | 1.80 | | | | | | |
| | 2.3 | | | | | | |
| 30 | 2.3 | | | | | | |
| | 2.4 | | | | | | |
| 40 | 2.4 | | | | | | |
| | 2.4 | | | | | | |
| 50 | 2.1 | | | | | | |
| | 1.80 | | | | | | |

BOTTOM ANODE + 20 = 330'
DITCH = 592' @ 20'/47' = 11840
= 79'

Pay Total 409'
Credit EPUB 91'