

30-045-21977

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. 17 Twp 30 Rng 8

Name of Well/Wells or Pipeline Serviced HOWELL K #4A

cps 1380w

Elevation 5908 Completion Date 9/26/79 Total Depth 420' 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. 110' & 280' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: 3800 lbs.

Depths anodes placed: 390', 380', 370', 360', 350', 340', 330', 320', 310', 300'

Depths vent pipes placed: 400'

Vent pipe perforations: 320'

Remarks: gb #1

RECEIVED
MAY 31 1980
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 LOG

CONTRACT 2

Drilling Log (Attach Hereto) ☐

Completion Date 9-26-79

Well Name Howell K #4A		Location NW 17-30-8		CPS No. 1380 W	
Type & Size Bit Used 6 3/4"		2" X 60" Duriron		Work Order No. 57296.21	
Anode Hole Depth 420-420+0	Total Drilling Rig Time	Total Lbs. Coke Used 3800	Lost Circulation Mat'l Used	No. Sacks Mud Used	
Anode Depth	# 1	# 2	# 3	# 4	# 5
	390	380	370	360	350
Anode Output (Amps)	# 1	# 2	# 3	# 4	# 5
	4.1	3.9	1.9	2.0	2.0
Anode Depth	# 6	# 7	# 8	# 9	# 10
	340	330	320	310	300
Anode Output (Amps)	# 6	# 7	# 8	# 9	# 10
	2.4	2.2	2.0	2.2	2.7
Anode Depth	# 11	# 12	# 13	# 14	# 15
Anode Output (Amps)	# 11	# 12	# 13	# 14	# 15
Total Circuit Resistance	Volts		Amps		Ohms
	11.9		11.7		1.02
No. 8 C.P. Cable Used					No. 2 C.P. Cable Used

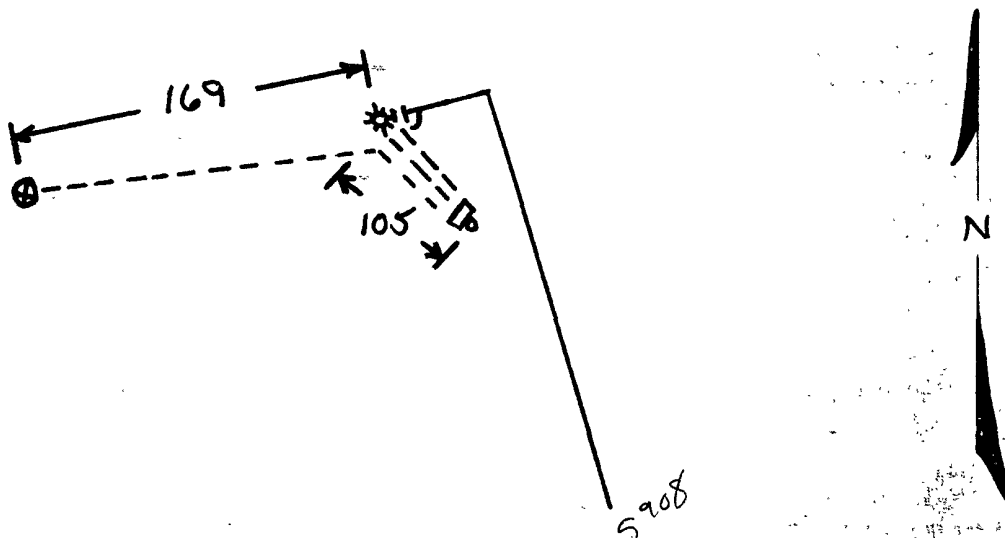
Remarks: $5\frac{1}{2}\% E = .85$ WATER AT 110 + 280 FT TOTAL WATER 3061
Drilled 420' Logged 420' INST. 400 FT OF VENT PIPE
WITH 320 FT OF PERFORATIONS SLURRIED 38 SACKS OF COKE

Hole depth = -80
METER POLE
40016A RECT
DITCH + cable = 274
EXTRA cable = 235

All Construction Completed

Robert J. Balnick
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION:

- WHITE - Division Corrosion Office
- YELLOW - Area Corrosion Office
- PINK - Originator File

C.P.S. # 1380W

Contract # 2
O'Briant

LEASE _____ WELL NO. _____ CONTRACTOR _____ RIG NO. 1 REPORT NO. _____ DATE 9-26 1979

MORNING

DAYLIGHT

EVENING

Driller _____ 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 _____		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.			
0	85		Sandstone														
85	90		Sandy Shale														
90	110		Sandstone														
110	118		Shale														

FROM	TO	TIME BREAKDOWN	FROM	TO	TIME BREAKDOWN	FROM	TO	TIME BREAKDOWN
118	145	Sand	310	325	Sandstone			
145	155	Shale	325	335	Sandy Shale			
155	190	Sandy Shale	335	385	Sandstone			
190	205	Shale	385	400	Shale			
205	297	Sandstone	400	420	Sandstone			
297	310	Shale						

REMARKS -	REMARKS -	REMARKS -
	Drilled + logged to 420 w/ 6 3/4"	
	Water @ 110 + 280	
	Estimate 30 gpm water total	

SIGNED: Toolpusher

Tom O'Briant

Company Supervisor

Kurt Westmoreland

El Paso Natural Gas Company
ENGINEERING CALCULATIONSheet: 1 of 1
Date: 9-26-79
By: RJB
File: 1380W

1380W

Howell K #4A

NW 17-30-8 -

9-26-79 = 10 hrs

57296.21

ST % E = .85

UNION = OK

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 9.64
42.08	C3 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

100	.4	325	1.0	WATER AT 110 FT + 280 FT 2-WATER ZONES TOTAL WATER APPROX 30.6 Drilled 420' Logged 420 FT INST 400 FT OF VENT PIPE with 320 FT OF PERF. Slurried 38 sacks of coke
5	.3	30	1.0 - 7	
10	.2	5	1.5	
5	.9	40	1.4 - 6	
20	1.0	5	1.5	
5	.5	50	1.3 - 5	
30	.3	5	1.1	
5	.1	60	1.1 - 4	
40	.2	5	1.2	
5	1.9	70	1.0 - 3	
50	1.8	5	1.0	Hole depth = -80 400 16A Rect meter Pole Ditch + cable = 274 EXTRA CABLE = 235
5	1.6	80	2.2 - 2	
60	1.6	5	2.3	
5	1.6	90	2.5 - 1	
70	1.3	5	2.3	
5	1.0	400	2.4	
80	1.3	5	.9	
5	1.2	10	.7	
90	1.3	5		
5	2.0	20		
200	1.6			① 390 - 2.8 - 4.1 ② 380 - 2.5 - 3.9 ③ 370 - 1.1 - 1.9 ④ 360 - 1.3 - 2.0 ⑤ 350 - 1.3 - 2.0 ⑥ 340 - 1.7 - 2.4 ⑦ 330 - 1.3 - 2.2 ⑧ 320 - 1.1 - 2.0 ⑨ 310 - 1.1 - 2.2 ⑩ 300 - 1.7 - 2.7
5	.8			
10	.6			
5	.5			
20	.5			
5	.6			
30	.6			
5	.6			
40	.6			
5	.6			
50	.8			11.9 V / 1.7 A = 1.02 ohms
5	.8			
60	.8			
5	.7			
70	.7			
5	.8			
80	.9			
5	.9			
90	.8			
5	1.0			
200	1.7 - 10			
5	1.5			
10	1.0 - 9			
6	.9			
20	1.0 - 8			

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
FARMINGTON, NEW MEXICO
PRODUCTION DEPARTMENT WATER ANALYSIS

Analysis No. 1-9789 Date 12-18-79

Operator El Paso Natural Gas Well Name Howell K #4A

Location NW 17-30-8 County San Juan State New Mexico

Field _____ Formation _____

Sampled From C.P.S. 1380 W

Date Sampled _____ By _____

Tbg. Press. _____ Csg. Press. _____ Surface Csg. Press. _____

ppm

epm

ppm

epm

Sodium 114 5

Chloride 24 .7

Calcium 546 27

Bicarbonate 185 3

Magnesium 149 12

Sulfate 1960 41

Iron _____

Carbonate 0 0

H₂S Absent

Hydroxide 0 0

cc: D.C.Adams
R.A.Ullrich
E.R.Paulek
J.W.McCarthy
A.M.Smith
W.B.Shropshire
File
C. B. O'Nan
Water at 90-110'

Total Solids Dissolved 3484

pH 7.8

Sp. Gr. .09988 at 60 °F

Resistivity 250 ohm-cm at 70 °F

Joe Barnett GCK
Chemist

