114 - 30-039-06972
170 - 30-039-06945

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

Operator Union Oil Company of California Location: Unit ___ Sec. 20 Twp 27N Rng 6W

Name of Well/Wells or Pipeline Serviced Rincon 114 PC, Rincon #170 DK and Rincon #8 MV

Elevation 6513' Completion Date _____ Total Depth 580 Land Type* F

Casing, Sizes, Types & Depths None

If Casing is cemented, show amounts & types used None

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

None

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

Fresh, Clear, Salty, Sulphur, Etc. 260' deep 20' thick

RECEIVED
MAY 09 1990
OIL CON. DIV.
DIST. 3

Depths gas encountered: NA

Type & amount of coke breeze used: Type unknown ~8600 lbs

Depths anodes placed: 335'-560'

Depths vent pipes placed: 560'

Vent pipe perforations: 420'

Remarks: El Paso Natural Gas was operator at the time this ground bed was installed. Second ground bed installed on this location.

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.

El Paso Natural Gas Company
Form 7-238 (Rev. 1-69)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Note — Redrill From 1970 Contract By CPS

Drilling Log (Attach Hereto). ☐

Completion Date 12-6-71

Well Name	Location	CPS No.
Kincow #8, #114 & 170	SW 20-27-6	691 W

Type & Size Bit Used	Work Order No.
6 3/4	Re-Drill From 1970

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
600-5??		8600		

Anode Depth									
# 1 545	# 2 500	# 3 490	# 4 482	# 5 474	# 6 466	# 7 438	# 8 430	# 9 422	# 10 414
Anode Output (Amps)									
# 1 3.3	# 2 1.88	# 3 2.1	# 4 2.1	# 5 2.7	# 6 2.5	# 7 2.4	# 8 3.2	# 9 3.2	# 10 2.4
Anode Depth									
# 11 305	# 12 297	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20
Anode Output (Amps)									
# 11 2.0	# 12 2.0	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20

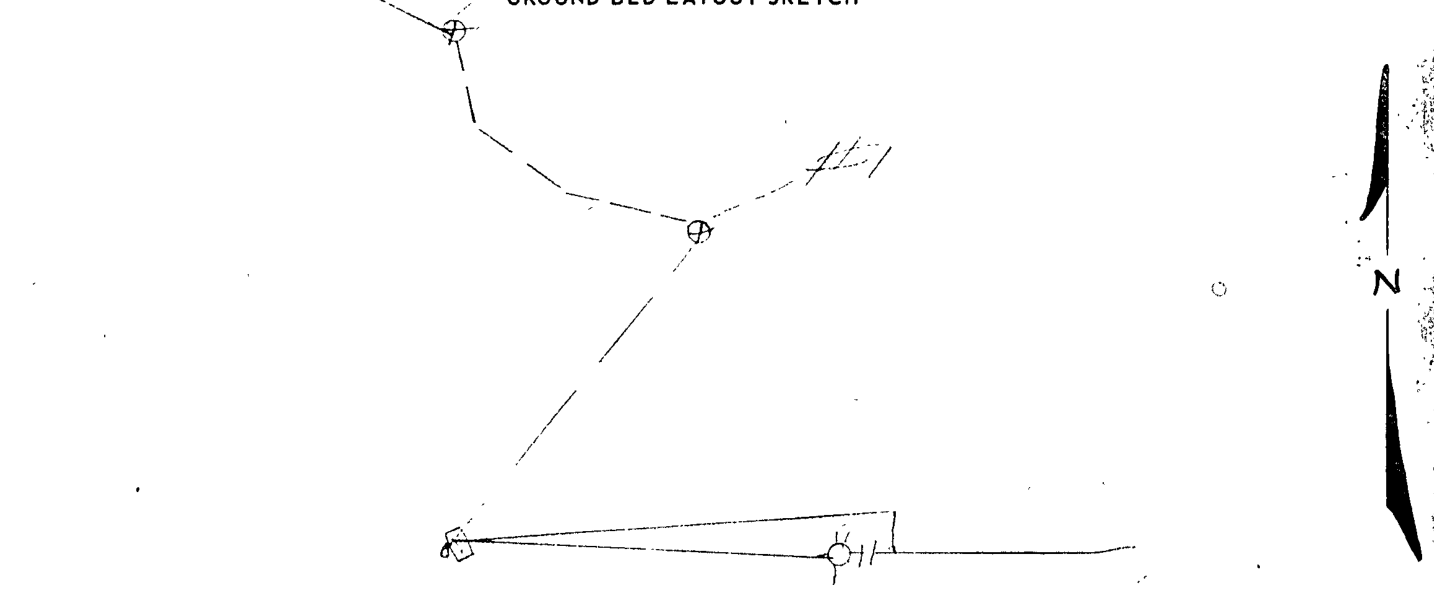
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.5	Amps 11.?	Ohms 1.??		

Remarks: Driller said hit at 240-271 inject to 435, Change to Mud.
Went to No. 1 Anode, Perforated 365'
Pump 350 Shovels + ?? 50 Bags ?????? -
Slurry 50 shovels + 7 Bags ??????
Coke is above anodes -
12-7-71 — Slurry 29 Bags

All Construction Completed

Sorrels
(Signature)

GROUND BED LAYOUT SKETCH



Original & 1 Copy All Reports

El Paso Natural Gas Company
Form 7-238 (Rev. 1-69)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Legal

NO 2 GND BED
Contract By CPS

Drilling Log (Attach Hereto). ☐

Completion Date 7-11-70

Well Name	Location	CPS No.
Lincoln #8, #114 & 170	SW 20-27-6	691 W

Type & Size Bit Used	Work Order No.
6 3/4	20046 184 - 53452 - 50-20 54241

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
580				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	560	550	495	485	475	465	440	430	420	335
Anode Output (Amps)	3.0	3.0	5.5	5.5	4.6	4.6	5.6	5.6	1.5	2.2

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth										
Anode Output (Amps)										

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 12.5	Amps 13.0	Ohms 0.96		

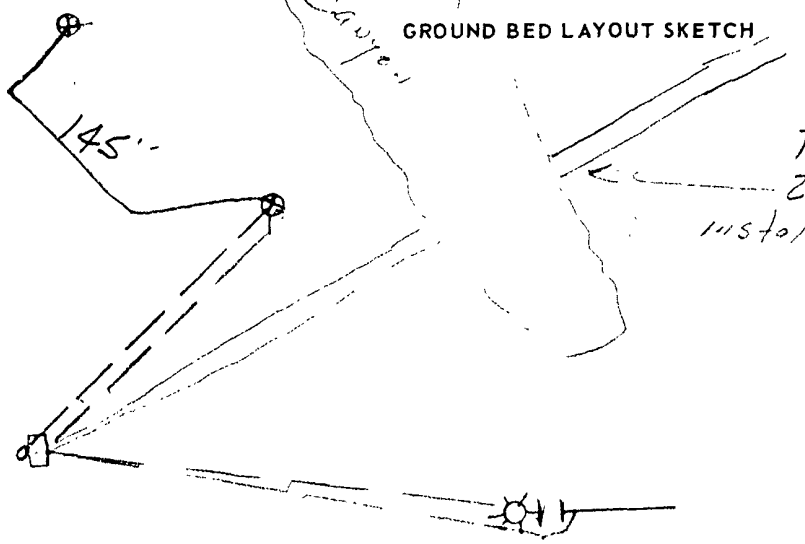
Remarks: Anodes 9 & 10 are single all others Dual
Drill 280 with air - wet at 260'
Pump 54 Bags Slurry 18 - 7-11-70 + Fill Dry 26 - Total 98 7-13-70
1" Hose attached to No 1 Anode - 420' Perforations

130

All Construction Completed

Jarrels
(Signature)

GROUND BED LAYOUT SKETCH



Original & 1 Copy All Reports

Form 7-1 (Rev. 5-67)

EL PASO NATURAL GAS COMPANY
ENGINEERING DEPARTMENT

Sheet ____ of ____
Date: ____
By: ____

691W Meter Creep

T.D. 580
Wet 260 - with air 280

420' perforations

250	78	30	178
	54		140
60	53	40	230
	53		125
70	52	50	120
	52		95
80	65	60	94
	83		150
90	77	70	190
	82		197
300	63	80	175
	71		200
10	66	90	210
	69		140
20	64	500	110
	63		103
30	83	10	100
	160		95
90	156	20	95
	134		96
50	89	30	88
	80		96
60	72	40	100
	85		102
70	95	50	140
	105		139
80	98	60	105
	102		
90	110	70	
	100		
400	190	60	
	102		
10	185	70	
	105		
20	145	80	
	175		

Pump 54.5 ks

10	335	1.4	2.0
9	420	.8	1.45
8	430	2.9	4.2
7	440		
6	465	2.2	3.4
5	475		
4	485	2.75	4.2
3	49		
2	550	1.55 - 2.50	
1	560		

11.5 V

10.2 A

1.12

MW		gals/mol
16	C_1	6 4
30	C_2	9 56
44	C_3	10 42
58	IC_4	12 18
"	NC_4	11 91
72	IC_5	13 85
"	NC_5	13 71
86	IC_6	15 59
"	C_6	15 57
100	IC_7	17 2
"	C_7	17 46
114	C_8	19 38
28	C_1	9 69
42	C_2	9 69

MbC

MW		gals/mol
44	CO_2	6 38
34	H_2S	5 17
28	N_2	4 16
2	H_2	3 38

WELL TYPE GROUNDBED DATA

DATA SHEET NO. 1 of 2

COMPANY El Paso Natural Gas Co. JOB No. 5664 DATE: 7-29-70

WELL: Rincon #8 MV & 114 PC & 170 PIPELINE: CPS #6 691-4

LOCATION: SEC. 20 TWP. 27 RGE. 6 CO Rio Arriba STATE N. Mex.

ELEV. — FT: ROTARY 580' FT: CABLE TOOL — FT: CASING — FT.

GROUNDBED: DEPTH 580' FT. DIA. 6 3/4 IN. GAB _____ LBS. ANODES 10-20D-0-51

DEPTH, FT.	DRILLER'S LOG	DRILL PIPE TO STRUCTURE			EXPLORING ANODE TO STRUCTURE			DEPTH, TOP OF ANODES
		E	I	R	E	I	R	
5	SURFACE SOIL (0-7')							
10	SANDSTONE (7-70)							
20								
30								
40								
50								
60								
70	SANDY SHALE (70-84)							
80								
	SANDSTONE w/Shale Stringers							
90	(84-155')							
100								
10								
20								
30								
40								
50								
	SHALE (155-171)							
60								
70								
	SANDSTONE (171-202)							
80								
90								
700								
	SANDY SHALE (202-218)							
10								

GROUNDBED RESISTANCE: (1) VOLTS _____ ÷ AMPS _____ = _____ OHMS

(2) VIBROGROUND _____ OHMS

cathodic protection service

HOUSTON TEXAS

WELL TYPE GROUNDBED DATA

DATA SHEET NO. _____

COMPANY _____ JOB No. _____ DATE: _____

WELL: _____ PIPELINE: _____

LOCATION: SEC. _____ TWP. _____ RGE. _____ CO. _____ STATE _____

ELEV. _____ FT: ROTARY _____ FT: CABLE TOOL _____ FT: CASING _____ FT.

GROUNDBED: DEPTH _____ FT. DIA. _____ IN. GAB _____ LBS. ANODES _____

DEPTH, FT.	DRILLER'S LOG	DRILL PIPE TO STRUCTURE			EXPLORING ANODE TO STRUCTURE			DEPTH, TOP OF ANODES
		E	I	R	E	I	R	
220	SANDSTONE (215-250)							
30								
40								
50	SANDY SHALE (250-290)				12.0	.78		
						.54		
60	SANDSTONE (290-345					.53		
	WATER - 360					.53		
70						.52		
						.52		
80						.65		
						.83		
90						.72		
						.82		
300						.63		
						.71		
10						.66		
						.69		
20						.64		
						.65		
30						.82		
						1.60	✓	335 (1)
40						1.36		
						1.38		
50						.84		
						.80		
60						.72		
						.85		
70						.95		
						1.05		
80						.98		
						1.02		
90						1.10		
						1.00		
400						.94		
						1.02		
10						1.05		
						1.05		
20						1.15	✓	420 (2)
						1.95		
30						1.20	✓	430

GROUNDBED RESISTANCE: (1) VOLTS _____ ÷ AMPS _____ = _____ OHMS

(2) VIBROGROUND _____ OHMS

cathodic protection service

HOUSTON TEXAS

WELL TYPE GROUNDBED DATA

DATA SHEET NO. ____________

COMPANY ______________________ JOB No. ________ DATE: ____________

WELL: ______________________ PIPELINE: ______________________

LOCATION: SEC ________ TWP. ________ RGE. ________ CO. ________________ STATE ____________

ELEV. ________ FT: ROTARY ________ FT: CABLE TOOL ________ FT: CASING ________ FT.

GROUNDBED: DEPTH ________ FT. DIA. ________ IN. GAB ________ LBS. ANODES ____________

DEPTH, FT.	DRILLER'S LOG	DRILL PIPE TO STRUCTURE			EXPLORING ANODE TO STRUCTURE			DEPTH, TOP OF ANODES
		E	I	R	E	I	R	
	SANDY SHALE & SILTSTONE					1.40		
440	(435-475)					2.30		440
						1.25		
50						1.20		
						.95		
60						.94		
						1.50		465
70						1.90		
	SANDY SHALE (475-580					1.97		475
80						1.75		
						2.00		485
90						2.10		
						1.40		495
500						1.10		
						1.03		
10						1.00		
						.85		
20						.95		
						.96		
30						.88		
						.96		
40						1.00		
						1.04		
50						1.40		550
						1.39		
60						1.45		560
70								
80								
	ANODES	WATER			CORE			
1&2	Doubles	12.0	1.35		13.0	2.0		
3&4	"		2.75			5.5		
5&6	"		2.20			4.6		
7&8	"		2.90			5.6		
9	Single		.80			1.5		
10	"		1.40			2.2		
	TOTAL				12.5	13.0		

GROUNDBED RESISTANCE: (1) VOLTS 12.5 ÷ AMPS 13.0 = 0.96 OHMS

(2) VIBROGROUND ________ OHMS

cathodic protection service

HOUSTON TEXAS

Form 22-2 (Rev. 1-61)

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

C.P.S. # 6914 redrill from 1970

DAILY DRILLING REPORT

LEASE Pierson WELL NO. 170 CONTRACTOR Morrow RIG NO. REPORT NO. DATE 12-6 1971

MORNING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	240	dry sand stone		
240	270	water sand		
270	415	sand		
415	435	sandy shale		

NO. DC ___ SIZE ___ LENG. ___

BIT NO.

NO. DC ___ SIZE ___ LENG. ___

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
435	460	sand		
460	490	sandy shale		
490	535	sand		
535	562	sandy shale		

NO. DC ___ SIZE ___ LENG. ___

BIT NO.

NO. DC ___ SIZE ___ LENG. ___

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

NO. DC ___ SIZE ___ LENG. ___

BIT NO.

NO. DC ___ SIZE ___ LENG. ___

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Joe Morrow Company Supervisor