

#1A 30-045-225276

#4 30-045-20781

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. 15 Twp 30 Rng 10

Name of Well/Wells or Pipeline Serviced SUNRAY A #1A, #4

cps 1263w

Elevation 6402 Completion Date 6/28/78 Total Depth 440' 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. 80'

Depths gas encountered: N/A

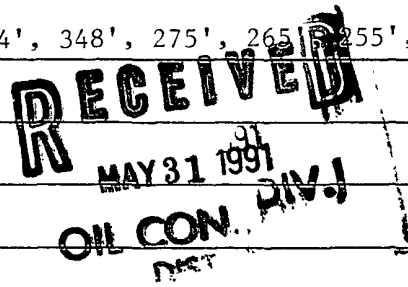
Type & amount of coke breeze used: N/A

Depths anodes placed: 402', 396', 390', 360', 354', 348', 275', 265', 255', 245'

Depths vent pipes placed: 402'

Vent pipe perforations: 320'

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) ☐ #4

Completion Date 6-28-78

Well Name SUNRAY A #1-A		Location SE 15-30-10		CPS No. 1263 W	
Type & Size Bit Used 6 3/4"				Work Order No. 57205-21	
Anode Hole Depth 440	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used	
Anode Depth					
# 1 402	# 2 396	# 3 390	# 4 360	# 5 354	# 6 348
# 7 275	# 8 265	# 9 255	# 10 245		
Anode Output (Amps)					
# 1 2.7	# 2 3.2	# 3 3.1	# 4 1.9	# 5 2.1	# 6 2.0
# 7 3.1	# 8 3.4	# 9 2.7	# 10 2.9		
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 12.0	Amps 13.4	Ohms 0.90			

Remarks: Static 600's = 0.82. Installed 10-2" x 4" Graphite Anodes
DRILLER SAID MAKING WATER @ 80', DRILLED TO 100' next A.M. WATER
STANDING @ 80'. 10 GALS PER MIN. Anodes #1 thru #6 set @ 6' spacing. Anodes
#7 thru #10 set @ 10' spacing. PERFORATED 320' O.S. 1" PVC vent pipe. Installed 402'
O.S. 1" PVC vent pipe.

HOV 16A Rectifier
Stub Pole

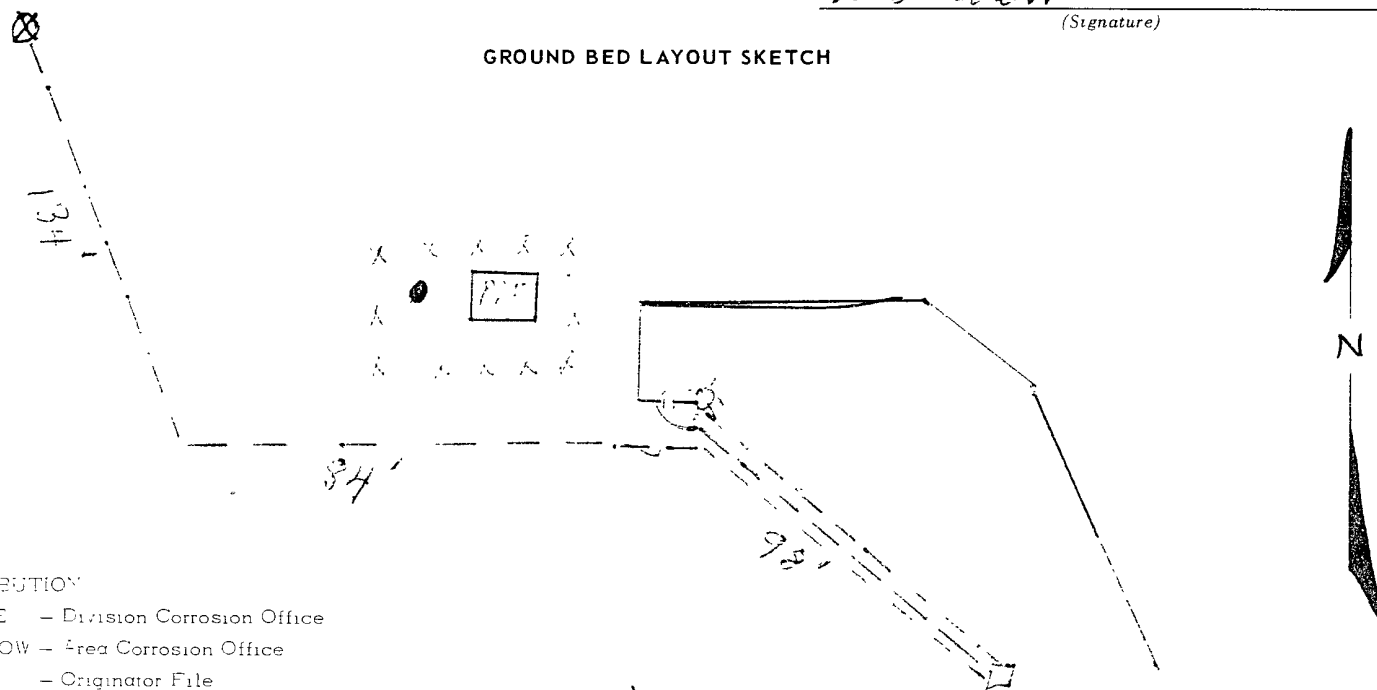
Ditch #1 Cable = 316
Extra Cable = 196
Hole Depth = -60

All Construction Completed

W. I. Lott

(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION

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

1263W

LEASE

WELL NO. 1263W

CONTRACTOR

O'Brien

RIG NO.

/

REPORT NO. 3/

DATE 6-28

1978

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.
		NO. DC	SIZE	LENG.			NO. DC	SIZE	LENG.			NO. DC	SIZE	LENG.
BIT NO.		NO. DC	SIZE	LENG.	BIT NO.		NO. DC	SIZE	LENG.	BIT NO.		NO. DC	SIZE	LENG.
SERIAL NO.		STANDS			SERIAL NO.		STANDS			SERIAL 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.		
FROM	TO	TIME BREAKDOWN			FROM	TO	TIME BREAKDOWN			FROM	TO	TIME BREAKDOWN		
0	80	Sandy shale 10 gpm			135	153	Sandy shale							
80	90	Shale			153	158	Shale							
90	105	Sandy shale			158	240	Sandy shale							
105	120	Sandy shale			240	280	Shale							
120	124	Sandy shale			280	420	Shale - Sandy							
124	135	Shale			420	440	Sandy shale							
REMARKS -					REMARKS -					REMARKS -				
										6 3/4 To 440				
										Logged To 440				
										Water 10 gpm @ 88				

SIGNED: Toolpusher

Tom O'Brien

— *CONJUGATION* — SUPPLEMENT

759

5

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

Operator MERIDIAN OIL Location: Unit I Sec. 15 Twp 30 Rng 10

Name of Well/Wells or Pipeline Serviced SUNRAY A #4, #1A

cps 1263

Elevation 6402' Completion Date 8/29/88 Total Depth 500' 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. 50'

Depths gas encountered: N/A

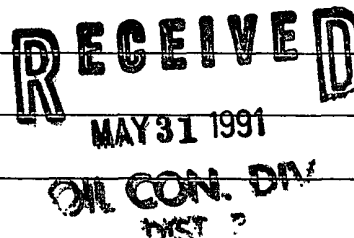
Type & amount of coke breeze used: N/A

Depths anodes placed: 430', 395', 385', 265', 255', 245', 235', 120', 110', 75'

Depths vent pipes placed: 500'

Vent pipe perforations: BOTTOM 460'

Remarks: gb #2



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

comp 9-1-88 *Preskill*

Drilling Log (Attach Hereto) ☒Completion Date 8-29-88

CPS #	Well Name, Line or Plant	Work Order #	Static	Ins Union Check
63 1236 W	Sunday B#4 #1A	52399 A ✓ 48556 A ✓		☒ Good ☐ Bad
Location	Anode Size	Anode Type	Size Bit	
IL-30-10	2" x 10"	Duriron	634	
Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs Goke Used	Lost Circulation Mat'l Used
500'	500'			
Anode Depth				
# 1 430	# 2 395	# 3 385	# 4 265	# 5 255
# 6 245	# 7 235	# 8 120	# 9 110	# 10 75
Anode Output (Amps)				
# 1 3.3	# 2 2.7	# 3 2.2	# 4 3.3	# 5 2.8
# 6 3.0	# 7 2.5	# 8 3.3	# 9 3.3	# 10 1.7
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	
Volts 12.32 Amps 16.0 Ohms .77			No. 2 C.P. Cable Used	

Remarks: 2 1/2" water at 50'; water sample taken. Installed 500'
of 1" PVC vent pipe, bottom 460' perforated

GB 4074.00

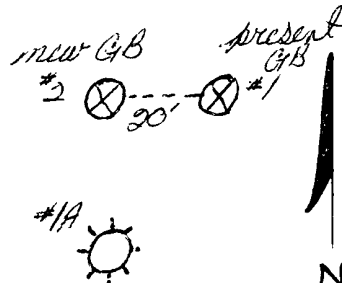
Rectifier Size: _____ V _____ A 2
 Addn'l Depth: 0
 Depth Credit: 0
 Extra Cable: 10' @ .24 2.40 ✓
 Ditch & 1 Cable: 20' @ .70 14.00 ✓
 25' Meter Pole: 0
 20' Meter Pole: 0
 10' Stub Pole: 0

All Construction Completed

Cahm Radman
(Signature)

GROUND BED LAYOUT SKETCH

1. junction box 225.00
4315.40
 tax 215.77
4531.17 orig



☐ rect

6462

CPS #13364

D. CRASS DRILLING CO.Drill No. 3

DRILLER'S WELL LOG

S. P. No. SUNRAY A #1A Date 8-29-88
Client Meridian Oil Co. Prospect _____
County SAN JUAN State New Mex.

If hole is a redrill or if moved from original staked position show distance
and direction moved. _____

FROM	TO	FORMATION — COLOR — HARDNESS
0	40	SANDstone
40	80	SAND
80	95	Shale'
95	110	SANDstone
110	130	SANDy Shale
130	235	SANDstone
235	270	Shale'
270	335	SANDstone
335	350	Shale'
350	380	SANDstone
380	400	Shale'
400	465	SANDstone
465	500	Shale'
Mud	Brm	Lime

Rock Bit Number _____ Make _____

Remarks: Water @ 50'Driller Ronnie Brown

SUNRAY A #1-A SE15-30-10 1263W 57205-21

Static 600' S = 0.82

HOU 16A RECTIFIER

Stub Pole

Ditch Cable =

EXTRA CABLE =

Hole Depth = -60

10-2" X 48" GRAPHITE ANODES

DRILLER SAID MAKING WATER @ 80' DRILLED
TO 100' NEXT A.M. WATER STANDING @ 80'

10 GALS PER MIN

PERFORATED 320' O.S.I" PVC VENT PIPE

INSTALLED 402' O.S.I" PVC VENT PIPE

ANODES #1 THRU #6 SPACED @ 6' INSTEAD OF 10'

ANODES #7 THRU #10 SPACED 10'. ~~HOLE WAS LEAKING~~
WHILE INSTALLING #1 ANODE.

MW		gals/mol
16.04	C ₁	6.4
30.07	C ₂	10.12
44.10	C ₃	10.42
58.12	iC ₄	12.38
58.12	nC ₄	11.93
72.15	iC ₅	13.85
72.15	nC ₅	13.71
86.18	iC ₆	15.50
86.18	C ₆	15.57
100.21	iC ₇	17.2
100.21	C ₇	17.46
114.23	C ₈	19.39
28.05	C ₂	9.64
42.08	C ₃	9.67

MW	MISC.	gals/mol
32.00	O ₂	3.37
28.01	CO	4.19
44.01	CO ₂	6.38
64.06	SO ₂	5.50
34.08	H ₂ S	5.17
28.01	N ₂	4.16
2.02	H ₂	3.38

80 .5	40 .7	10 .9
+10 1.0	1.3	.8
90 .8 .9	50 1.3	20 .3
.6	1.3	.7
100 .5 .5	60 1.3	30 .6
.4 .3	1.6	.7
10 .4 .3	70 1.7	40 +25' DRILLED
.6	1.4	
20 .7 1.1	80 .7	
+1 1.1	.3	
30 .5 1.0	90 .4	
.7	.4	
40 .3 .3	300 .5	
.3	.6	
50 .3	10 .8	
.7	.7	
60 .7	20 .8	
.3	.6	
70 .3	30 .6	
.3	.5	
80 .3	40 .7	
.4	1.2	
90 .4	50 1.2	
.4	1.3	
200 .3	60 1.1	
.3	.7	
10 .3	70 .6	
.3	.5	
20 .2	80 .7	
.2	.8	
30 .3	-80 1.6	
.5	1.6	
	400 1.6	
	1.3	

① 402	1.5	2.7
② 396	1.7	3.2
③ 390	1.7	3.1
④ 380	1.3	1.9
⑤ 354	1.3	2.1
⑥ 348	1.3	2.0
⑦ 275	1.5	3.1
⑧ 265	1.8	3.4
⑨ 255	1.5	2.7
⑩ 245	1.5	2.9

VOLTS = 12.0

AMPS = 13.4

OHMS = 0.90

History File

SAN JUAN DIVISION LABORATORY

ANALYSIS NO. 1-9230

DATE COMPLETED 7-6-78

WELL NAME	LOCATION S T R	DATE SECURED	GAL./ DAY	PPM T.D.S.	pH	PPM CHLORIDES	PP SULF
Jones A #1A MV	10-28-8	6-20	24	7452	7.0	4320	7840
Jones A #1A PC	10-28-8	6-20	1	39	6.8	13	1000
Hughes #4A	20-29-8	6-20	54	6858	7.2	4830	1280
Day A #5A	18-29-8	6-20	38	7632	7.1	6320	2500
Day #1A	17-29-8	6-20	80	6670	7.4	6390	500
Day A #1A	17-29-8	6-20	106	7527	7.4	7170	1000
Day #3A	18-29-8	6-20	42	6913	6.7	7170	1000
Day A #2A	7-29-8	6-20	96	5887	7.6	6320	64
1 Paso #1A	20-29-9	6-17	8	9493	6.8	6745	7080
Mansfield #2A 1241-V ✓	19-30-9	6-19		1019	7.3	24	1520
Wigley #1A 1275W	6-30-9	6-19		430	7.1	20	600
Lorance #2A 1220W ✓	21-30-9	6-19		1373	7.3	16	2520
San Juan #11A 1252W ✓	11-30-10	6-19		636	6.4	24	800
San Ray A #1A 1263W	15-30-10	6-19		210	6.2	8	600
Atlantic D Com #5A 1209W ✓	12-30-10	6-19		1493	6.6	16	3000
Bernaghan #4A 1237W	30-31-8	6-19		432	7.3	12	600
Bernaghan #2A 1235W	28-31-8	6-19		190	7.2	16	680
Bernaghan #1A 1234W	33-31-8	6-19		571	6.9	32	800
Walker 1A 1271W	31-31-9	6-19		1064	7.0	32	3520
Atlantic A #8A 1199W ✓	29-31-10	6-19		2637	7.1	152	5560
Atlantic "C" 4A 1200W ✓	31-31-10	6-19		6720	7.7	504	9800
Cott #4A 1258W	17-31-10	6-19		4506	7.0	186	7760
Brookhaven Com A-1 1212W ✓	16-31-10	6-19		3979	6.7	270	6920