

#83 MW 30-039-07005
#146 DK 30-039-20157

CPS 1320

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. 23 Twp 27N Rng 6W

Name of Well/Wells or Pipeline Serviced Rincon #83 MV Rincon #146 DK

Elevation 6629' Completion Date 9/19/78 Total Depth 500' 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' - 320' Deep 60' thick

Depths gas encountered: NA

Type & amount of coke breeze used: type unknown 6000 lbs

Depths anodes placed: 363 to 435

Depths vent pipes placed: 500'

Vent pipe perforations: 240'

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

First ground bed installed at 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.

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto) ☐

Completion Date 9-19-78

Well Name <u>Rincon unit #146</u>		Location <u>NE 23-27-6</u>		CPS No. <u>1320W</u>	
Type & Size Bit Used <u>6 3/4"</u>		Contract # <u>?</u>		Work Order No. <u>#83-52852-19</u> <u>#146-54630-19</u>	
Anode Hole Depth <u>605' to 510' - 500'</u>		Total Drilling Time		Total C.P. Cable Used	
Anode Depth		Anode Output (Amps)		No. Sacks Mud Used	
# 1 <u>4.35</u>	# 2 <u>4.27</u>	# 3 <u>4.19</u>	# 4 <u>4.11</u>	# 5 <u>4.03</u>	# 6 <u>3.95</u>
# 7 <u>3.87</u>	# 8 <u>3.79</u>	# 9 <u>3.71</u>	# 10 <u>3.63</u>		
Anode Depth		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 <u>12.0</u>		Amps <u>10.1</u>		Ohms <u>1.2</u>	

Remarks: Static #83 600' SE = 0.78. #146 has Bend Box. Driller said
Making water @ 320'. Perforated 240' of 1" PVC Vent Pipe. Installed
500' of 1" PVC Vent Pipe. 10-12 Gals Per Min. of water. Slurried 60 sacks
of coke. Anodes spaced 8' apart.
60V 30A Rectifier

Stub Pole

Hole depth = 0

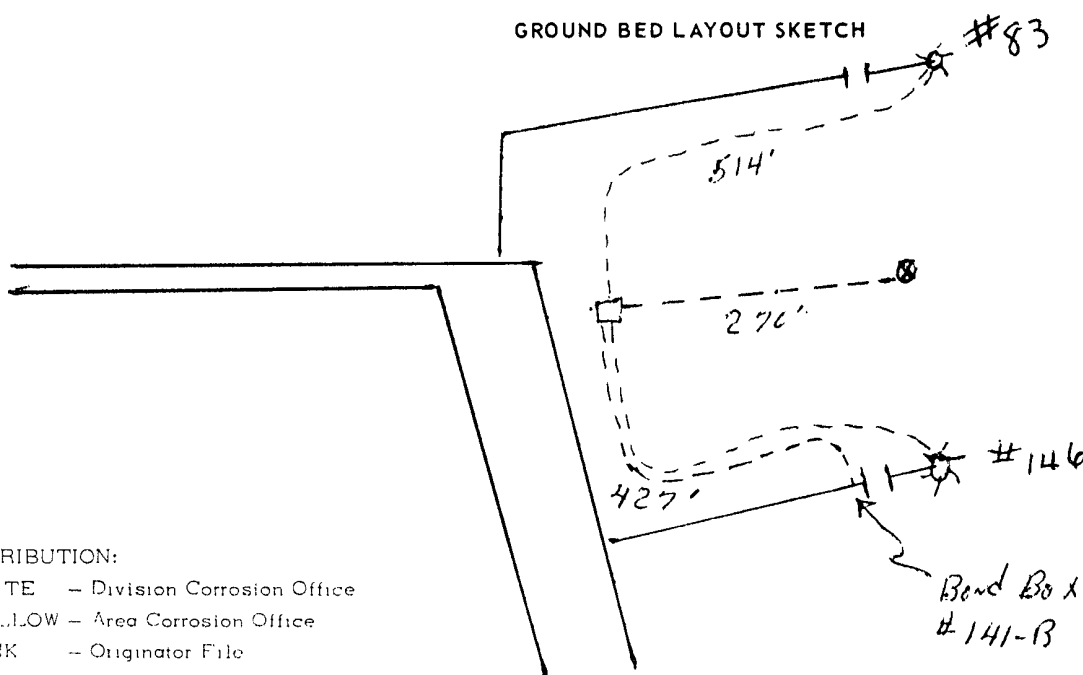
Ditch #1 cable = 1211'

Extra cable = 427'

All Construction Completed

W. Z. Lutz
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION:

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

El Paso Natural Gas Company
ENGINEERING CALCULATIONSheet: _____ of _____
Date: _____
By: _____
File: _____Rincon Unit #83
Rincon Unit #146NF 23-27-6
Bent 146 = 3

1320W

52852-19
54630-19

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

Static #83 600' SE = 0.78
Static #146 600' SE = (Bent 146)DRILLER SAID MAKING WATER @ 320'
10-12 GALS PER MIN
PERSONATED 240' OF 1" PVC VENT PIPE
INSTALLED 500' OF 1" PVC VENT PIPE
SHIPPED 60 SACKS OF COKE

SPACED ANODES 8' APART

200	20	1.4
		1.5
10	90	1.5
		1.4
20	400	1.3
		1.2
30	10	1.1
		.8
40	20	1.5
		1.8
50	30	1.7
		1.6
60	40	.6
		.6
70	50	.6
		.5
80	60	.5
		.6
90	70	.6
		.7
300	80	.7
		.5
10	90	.6
		.6
20	500	.6
		.3
30	10	.3
		.4
40	1.0	.4
		.5
50	.5	.5
		.5
60	.7	.7
		1.4
70	1.4	1.4
		1.4

60V 30A Rectifier
Stub Pole
Hole Depth = 0
Ditch 5' Cable = 1211'
EXTRA CABLE = 427'

① 435	1.0	2.2
② 427	1.7	3.4
③ 419	1.2	2.7
④ 411	1.0	2.3
⑤ 403	1.1	2.5
⑥ 395	1.2	2.7
⑦ 387	1.5	3.0
⑧ 379	1.4	2.7
⑨ 371	1.5	2.7
⑩ 363	1.5	3.1

Volts = 12.0
Amps = 10.1
ohms = 1.2

435-1
528-2
546-3
563-4
571-5
589-6
607-7
625-8
643-9
661-10
679-11
697-12
715-13
733-14
751-15
769-16
787-17
805-18
823-19
841-20
859-21
877-22
895-23
913-24
931-25
949-26
967-27
985-28
1003-29
1021-30
1039-31
1057-32
1075-33
1093-34
1111-35
1129-36
1147-37
1165-38
1183-39
1201-40
1219-41
1237-42
1255-43
1273-44
1291-45
1309-46
1327-47
1345-48
1363-49
1381-50
1399-51
1417-52
1435-53
1453-54
1471-55
1489-56
1507-57
1525-58
1543-59
1561-60
1579-61
1597-62
1615-63
1633-64
1651-65
1669-66
1687-67
1705-68
1723-69
1741-70
1759-71
1777-72
1795-73
1813-74
1831-75
1849-76
1867-77
1885-78
1903-79
1921-80
1939-81
1957-82
1975-83
1993-84
2011-85
2029-86
2047-87
2065-88
2083-89
2101-90
2119-91
2137-92
2155-93
2173-94
2191-95
2209-96
2227-97
2245-98
2263-99
2281-100
2299-101
2317-102
2335-103
2353-104
2371-105
2389-106
2407-107
2425-108
2443-109
2461-110
2479-111
2497-112
2515-113
2533-114
2551-115
2569-116
2587-117
2605-118
2623-119
2641-120
2659-121
2677-122
2695-123
2713-124
2731-125
2749-126
2767-127
2785-128
2803-129
2821-130
2839-131
2857-132
2875-133
2893-134
2911-135
2929-136
2947-137
2965-138
2983-139
3001-140
3019-141
3037-142
3055-143
3073-144
3091-145
3109-146
3127-147
3145-148
3163-149
3181-150
3199-151
3217-152
3235-153
3253-154
3271-155
3289-156
3307-157
3325-158
3343-159
3361-160
3379-161
3397-162
3415-163
3433-164
3451-165
3469-166
3487-167
3505-168
3523-169
3541-170
3559-171
3577-172
3595-173
3613-174
3631-175
3649-176
3667-177
3685-178
3703-179
3721-180
3739-181
3757-182
3775-183
3793-184
3811-185
3829-186
3847-187
3865-188
3883-189
3901-190
3919-191
3937-192
3955-193
3973-194
3991-195
4009-196
4027-197
4045-198
4063-199
4081-200
4099-201
4117-202
4135-203
4153-204
4171-205
4189-206
4207-207
4225-208
4243-209
4261-210
4279-211
4297-212
4315-213
4333-214
4351-215
4369-216
4387-217
4405-218
4423-219
4441-220
4459-221
4477-222
4495-223
4513-224
4531-225
4549-226
4567-227
4585-228
4603-229
4621-230
4639-231
4657-232
4675-233
4693-234
4711-235
4729-236
4747-237
4765-238
4783-239
4801-240
4819-241
4837-242
4855-243
4873-244
4891-245
4909-246
4927-247
4945-248
4963-249
4981-250
5000-251
5018-252
5036-253
5054-254
5072-255
5090-256
5108-257
5126-258
5144-259
5162-260
5180-261
5198-262
5216-263
5234-264
5252-265
5270-266
5288-267
5306-268
5324-269
5342-270
5360-271
5378-272
5396-273
5414-274
5432-275
5450-276
5468-277
5486-278
5504-279
5522-280
5540-281
5558-282
5576-283
5594-284
5612-285
5630-286
5648-287
5666-288
5684-289
5702-290
5720-291
5738-292
5756-293
5774-294
5792-295
5810-296
5828-297
5846-298
5864-299
5882-300
5900-301
5918-302
5936-303
5954-304
5972-305
5990-306
6008-307
6026-308
6044-309
6062-310
6080-311
6098-312
6116-313
6134-314
6152-315
6170-316
6188-317
6206-318
6224-319
6242-320
6260-321
6278-322
6296-323
6314-324
6332-325
6350-326
6368-327
6386-328
6404-329
6422-330
6440-331
6458-332
6476-333
6494-334
6512-335
6530-336
6548-337
6566-338
6584-339
6602-340
6620-341
6638-342
6656-343
6674-344
6692-345
6710-346
6728-347
6746-348
6764-349
6782-350
6800-351
6818-352
6836-353
6854-354
6872-355
6890-356
6908-357
6926-358
6944-359
6962-360
6980-361
6998-362
7016-363
7034-364
7052-365
7070-366
7088-367
7106-368
7124-369
7142-370
7160-371
7178-372
7196-373
7214-374
7232-375
7250-376
7268-377
7286-378
7304-379
7322-380
7340-381
7358-382
7376-383
7394-384
7412-385
7430-386
7448-387
7466-388
7484-389
7502-390
7520-391
7538-392
7556-393
7574-394
7592-395
7610-396
7628-397
7646-398
7664-399
7682-400
7700-401
7718-402
7736-403
7754-404
7772-405
7790-406
7808-407
7826-408
7844-409
7862-410
7880-411
7898-412
7916-413
7934-414
7952-415
7970-416
7988-417
8006-418
8024-419
8042-420
8060-421
8078-422
8096-423
8114-424
8132-425
8150-426
8168-427
8186-428
8204-429
8222-430
8240-431
8258-432
8276-433
8294-434
8312-435
8330-436
8348-437
8366-438
8384-439
8402-440
8420-441
8438-442
8456-443
8474-444
8492-445
8510-446
8528-447
8546-448
8564-449
8582-450
8600-451
8618-452
8636-453
8654-454
8672-455
8690-456
8708-457
8726-458
8744-459
8762-460
8780-461
8798-462
8816-463
8834-464
8852-465
8870-466
8888-467
8906-468
8924-469
8942-470
8960-471
8978-472
8996-473
9014-474
9032-475
9050-476
9068-477
9086-478
9104-479
9122-480
9140-481
9158-482
9176-483
9194-484
9212-485
9230-486
9248-487
9266-488
9284-489
9302-490
9320-491
9338-492
9356-493
9374-494
9392-495
9410-496
9428-497
9446-498
9464-499
9482-500
9500-501
9518-502
9536-503
9554-504
9572-505
9590-506
9608-507
9626-508
9644-509
9662-510
9680-511
9698-512
9716-513
9734-514
9752-515
9770-516
9788-517
9806-518
9824-519
9842-520
9860-521
9878-522
9896-523
9914-524
9932-525
9950-526
9968-527
9986-528
10004-529
10022-530
10040-531
10058-532
10076-533
10094-534
10112-535
10130-536
10148-537
10166-538
10184-539
10202-540
10220-541
10238-542
10256-543
10274-544
10292-545
10310-546
10328-547
10346-548
10364-549
10382-550
10400-551
10418-552
10436-553
10454-554
10472-555
10490-556
10508-557
10526-558
10544-559
10562-560
10580-561
10598-562
10616-563
10634-564
10652-565
10670-566
10688-567
10706-568
10724-569
10742-570
10760-571
10778-572
10796-573
10814-574
10832-575
10850-576
10868-577
10886-578
10904-579
10922-580
10940-581
10958-582
10976-583
10994-584
11012-585
11030-586
11048-587
11066-588
11084-589
11102-590
11120-591
11138-592
11156-593
11174-594
11192-595
11210-596
11228-597
11246-598
11264-599
11282-600
11300-601
11318-602
11336-603
11354-604
11372-605
11390-606
11408-607
11426-608
11444-609
11462-610
11480-611
11498-612
11516-613
11534-614
11552-615
11570-616
11588-617
11606-618
11624-619
11642-620
11660-621
11678-622
11696-623
11714-624
11732-625
11750-626
11768-627
11786-628
11804-629
11822-630
11840-631
11858-632
11876-633
11894-634
11912-635
11930-636
11948-637
11966-638
11984-639
12002-640
12020-641
12038-642
12056-643
12074-644
12092-645
12110-646
12128-647
12146-648
12164-649
12182-650
12200-651
12218-652
12236-653
12254-654
12272-655
12290-656
12308-657
12326-658
12344-659
12362-660
12380-661
12398-662
12416-663
12434-664
12452-665
12470-666
12488-667
12506-668
12524-669
12542-670
12560-671
12578-672
12596-673
12614-674
12632-675
12650-676
12668-677
12686-678
12704-679
12722-680
12740-681
12758-682
12776-683
12794-684
12812-685
12830-686
12848-687
12866-688
12884-689
12902-690
12920-691
12938-692
12956-693
12974-694
12992-695
13010-696
13028-697
13046-698
13064-699
13082-700
13100-701
13118-702
13136-703
13154-704
13172-705
13190-706
13208-707
13226-708
13244-709
13262-710
13280-711
13298-712
13316-713
13334-714
13352-715
13370-716
13388-717
13406-718
13424-719
13442-720
13460-721
13478-722
13496-723
13514-724
13532-725
13550-726
13568-727
13586-728
13604-729
13622-730
13640-731
13658-732
13676-733
13694-734
13712-735
13730-736
13748-737
13766-738
13784-739
13802-740
13820-741
13838-742
13856-743
13874-744
13892-745
13910-746
13928-747
13946-748
13964-749
13982-750
14000-751
14018-752
14036-753
14054-754
14072-755
14090-756
14108-757
14126-758
14144-759
14162-760
14180-761
14198-762
14216-763
14234-764
14252-765
14270-766
14288-767
14306-768
14324-769
14342-770
14360-771
14378-772
14396-773
14414-774
14432-775
14450-776
14468-777
14486-778
14504-779
14522-780
14540-781
14558-782
14576-783
14594-784
14612-785
14630-786
14648-787
14666-788
14684-789
14702-790
14720-791
14738-792
14756-793
14774-794
14792-795
14810-796
14828-797
14846-798
14864-799
14882-800
14900-801
14918-802
14936-803
14954-804
14972-805
14990-806
15008-807
15026-808
15044-809
15062-810
15080-811
15098-812
15116-813
15134-814
15152-815
15170-816
15188-817
15206-818
15224-819
15242-820
15260-821
15278-822
15296-823
15314-824
15332-825
15350-826
15368-827
15386-828
15404-829
15422-830
15440-831
15458-832
15476-833
15494-834
15512-835
15530-836
15548-837
15566-838
15584-839
15602-840
15620-841
15638-842
15656-843
15674-844
15692-845
15710-846
15728-847
15746-848
15764-849
15782-850
15800-851
15818-852
15836-853
15854-854
15872-855
15890-856
15908-857
15926-858
15944-859
15962-860
15980-861
16000-862
16018-863
16036-864
16054-865
16072-866
16090-867
16108-868
16126-869
16144-870
16162-871
16180-872
16198-873
16216-874
16234-875
16252-876
16270-877
16288-878
16306-879
16324-880
16342-881
16360-882
16378-883
16396-884
16414-885
16432-886
16450-887
16468-888
16486-889
16504-890
16522-891
16540-892
16558-893
16576-894
16594-895
16612-896
16630-897
16648-898
16666-899
16684-900
16702-901
16720-902
16738-903
16756-904
16774-905
16792-906
16810-907
16828-908
16846-909
16864-910
16882-911
16900-912
16918-913
16936-914
16954-915
16972-916
16990-917
17008-918
17026-919
17044-920
17062-921
17080-922
17098-923
17116-924
17134-925
17152-926
17170-927
17188-928

EL PASO NATURAL GAS COMPANY
DRILLING DEPARTMENT

DAILY DRILLING REPORT

CONTRACT #2

LEASE _____ WELL NO. 1320W CONTRACTOR D. & F. Enter RIG NO. 2 REPORT NO. _____ DATE Sep 20 19 78

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. _____		NO. DC _____ SIZE _____ LENG. _____	
NO. DC _____ SIZE _____ LENG. _____		NO. DC _____ SIZE _____ LENG. _____		NO. DC _____ SIZE _____ LENG. _____		NO. DC _____ SIZE _____ LENG. _____	
STANDS _____		STANDS _____		STANDS _____		STANDS _____	
SINGLES _____		SINGLES _____		SINGLES _____		SINGLES _____	
DOWN ON KELLY _____		DOWN ON KELLY _____		DOWN ON KELLY _____		DOWN ON KELLY _____	
TOTAL DEPTH _____		TOTAL DEPTH _____		TOTAL DEPTH _____		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	20	Sandy top soil	260	320	Shale & (Sand Stone)	500	510	Sandy Shale
20	60	Sand Stone	320	420	Shale			
60	120	Sandy Shale	420	440	Sandy Shale			
120	160	Sandy Shale	440	460	Shale			
160	240	Shale	460	480	Sandy Shale			
240	260	Brown Shale	480	500	Shale			

REMARKS -	REMARKS -	REMARKS -
		Drilled to 510 with 6 3/4 Bit
		Logged 500
		Est 10 to 12 gal. m. water

SIGNED: Toolpusher

D. F. Mc Donald

Company Supervisor