

#91 30-039-07635

#509 30-039-24293

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

Operator MERIDIAN OIL Location: Unit A Sec 16 Twp 29 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 29-7 UNIT #91, #509

cps 294w

Elevation 6276' Completion Date 6/8/89 Total Depth 485' 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. 200'

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MAY 31 1991

Depths gas encountered: N/A

OIL CON. D
DIST. 3

Type & amount of coke breeze used: N/A

Depths anodes placed: 435', 350', 344', 338', 320', 300', 290', 280', 270'

Depths vent pipes placed: 490' OF 1" PVC VENT PIPE

Vent pipe perforations: BOTTOM 320'

Remarks: gb #4

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 PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☒Completion Date 6-8-89

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check
294-w	S.J. 29-7 # 509 S.J. 29-7 # 91	3378A 69355	600' w = .796	☒ Good ☐ Bad
Location:	Anode Size:	Anode Type:	Size Bit:	
A16-29-7	2" x 60"	Duriron	6 3/4"	
Depth Drilled:	Depth Logged:	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used
485'	485'			
Anode Depth				
# 1 435'	# 2 350'	# 3 344'	# 4 338'	# 5 320'
# 6 310'	# 7 300'	# 8 290'	# 9 280'	# 10 270'
Anode Output (Amps)				
# 1 2.6	# 2 3.1	# 3 3.1	# 4 3.1	# 5 1.9
# 6 2.9	# 7 2.6	# 8 2.9	# 9 4.0	# 10 3.9
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 12.17	Amps 11.9	Ohms 1.023		

Remarks: DRILLED 485' LOGGED 485' DRILLER SAID WATER
AT 200'. INSTALLED 490' OF 1" PVC VENT PIPE
PERFORATED BOTTOM 320'

Rectifier Size: 60 V 30 A
 Addn'l Depth
 Depth Credit: 15' 3.75
 Extra Cable: 750' .20
 Ditch & 1 Cable: 510' .70
 25' Meter Pole: _____
 20' Meter Pole: _____
 10' Stub Pole: 1
 Junction Box: 1

3870.00 ✓
 789.00 ✓
~~52.50~~ 56.25
 150.00 ✓
 357.00 ✓
 144.50 ✓
 237.00 ✓
 5495.00
 274.75
 5769.75

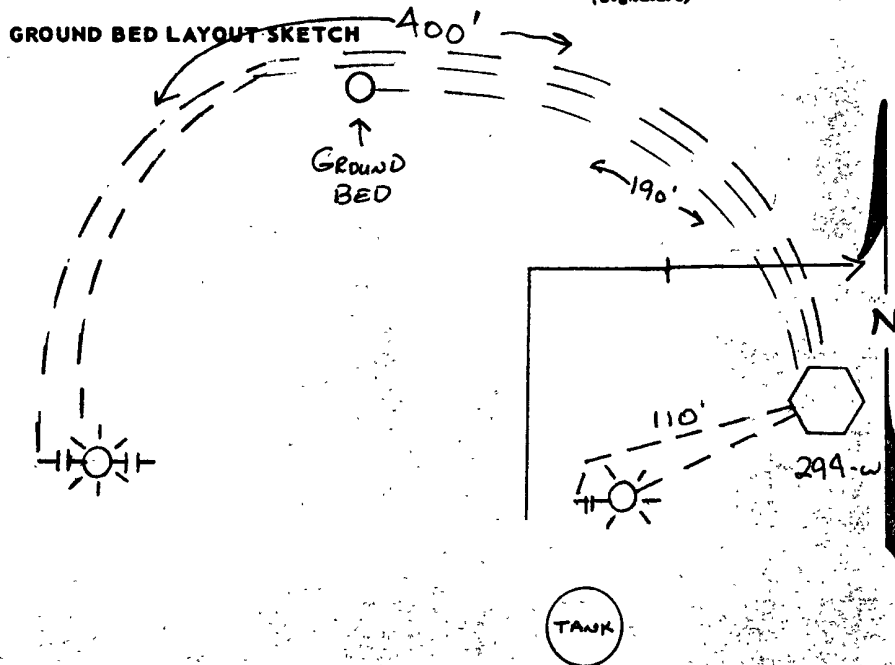
5491.25
 274.56
 5765.81

TANK

All Construction Completed

M. Williams
 (Signature)

GROUND BED LAYOUT SKETCH



294W
D. CIASS

DRILLING CO.

Drill No. 3

DRILLER'S WELL LOG

S. P. No. SAN JUAN 29-7 #509 Date 6-8-89

Client Meridian Oil Co. Prospect _____

County Rio Arriba State New Mexico

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

FROM	TO	FORMATION — COLOR — HARDNESS
<u>0</u>	<u>30</u>	<u>SANDSTONE</u>
<u>30</u>	<u>50</u>	<u>SHALE</u>
<u>50</u>	<u>230</u>	<u>SANDSTONE</u>
<u>230</u>	<u>250</u>	<u>SANDY SHALE</u>
<u>250</u>	<u>255</u>	<u>SANDSTONE</u>
<u>255</u>	<u>320</u>	<u>SHALE</u>
<u>320</u>	<u>330</u>	<u>SANDSTONE</u>
<u>330</u>	<u>355</u>	<u>SHALE</u>
<u>355</u>	<u>430</u>	<u>SANDSTONE</u>
<u>430</u>	<u>445</u>	<u>SHALE</u>
<u>445</u>	<u>485</u>	<u>SANDSTONE</u>

Mud _____ Bron _____ Lime _____

Rock Bit Number _____ Make _____

Remarks: Water @ 200'

Driller Ronnie Brown

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

Operator MERIDIAN OIL Location: Unit NE Sec. 16 Twp 29 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 29-7 UNIT #91, #509

cps 294w

Elevation 6276' Completion Date 10/29/78 Total Depth 460' 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. 210' & 360'

Depths gas encountered: N/A

Type & amount of coke breeze used: 49 SACKS

Depths anodes placed: 425', 415', 330', 320', 310', 300', 290', 280', 270', 260'

Depths vent pipes placed: 450' OF 1" PVC VENT PIPE

Vent pipe perforations: 300'

Remarks: gb #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.

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MAY 31 1991

OIL CON.

DIST. 3

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto) ☐

CONTRACT #3

Completion Date 10/29/78

Well Name S.J. 29-7 #91		Location NE 16-29-7		CPS No. 294 W	
Type & Size Bit Used 6 3/4"		(2" X 60" Durion)		Work Order No. 40064-19	
Anode Hole Depth 460 - 450 TD	Total Drilling Rig Time	Total Lbs. Coke Used 49 SACKS	Lost Circulation Mat'l Used	No. Sacks Mud Used	
Anode Depth	#1 425'	#2 415'	#3 330'	#4 320'	#5 310'
	#6 300'	#7 290'	#8 280'	#9 270'	#10 260'
Anode Output (Amps)	#1 3.0	#2 2.7	#3 2.2	#4 2.5	#5 2.4
	#6 2.8	#7 2.4	#8 2.7	#9 3.3	#10 2.7
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	Volts 11.5 V		Amps 11.0 A		Ohms 1.05 Ω
No. 8 C.P. Cable Used		No. 2 C.P. Cable Used			

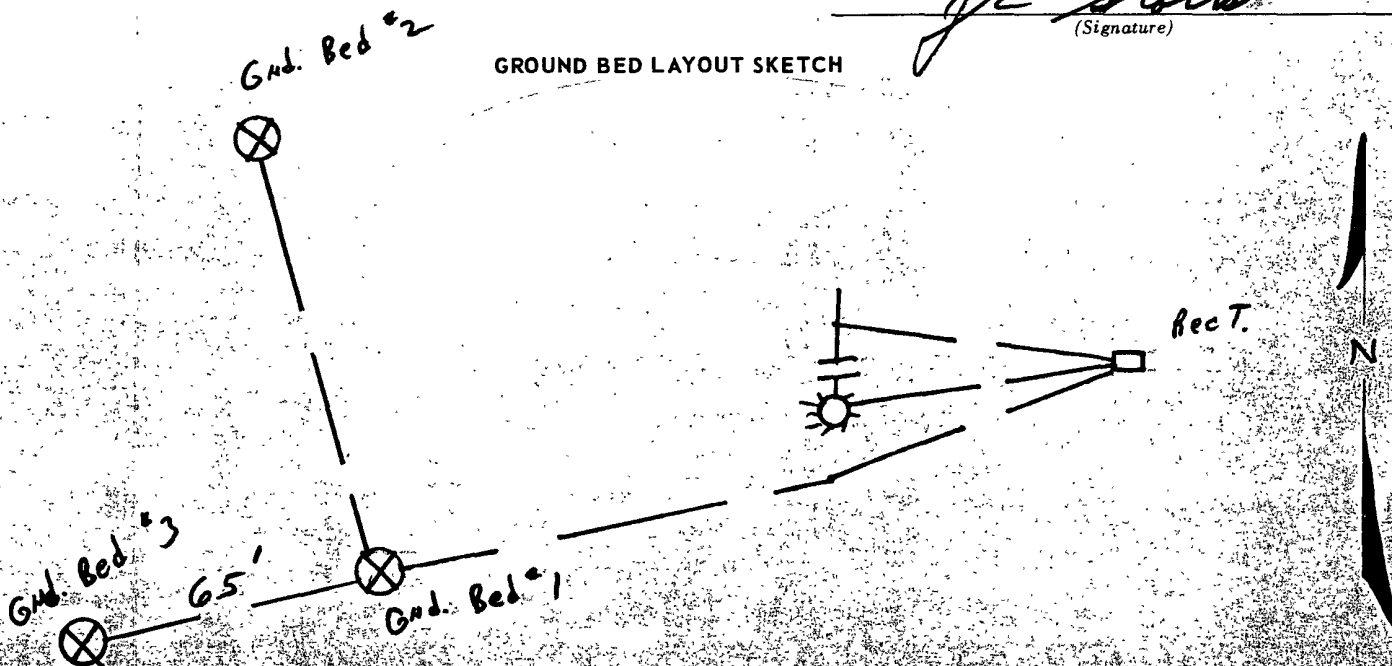
Remarks: Driller said water at 210'. Approx 2 gal/min. could not get water sample. Started incl. at 250'. Hit more water at 360' approx. 40 gal/min. Drilled 460', logged 450'. Installed 450' of 1" P.V.C. vent pipe. Perforated 300'.

Ditch + 1 cable = 65'
Hole Depth - 50'

All Construction Completed

(Signature)
(Signature)

GROUND BED LAYOUT SKETCH



El Paso Natural Gas Company
ENGINEERING CALCULATION

 Sheet: _____ of _____
 Date: _____
 By: _____
 File: _____

CPS #294 W

S.J. 29-7 *91

NE 16-29-7

W-1. 40064-19

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

210 -	.6	90 -	.5	Driller said water AT 210 Approx. 2 gals/min. Could NOT get water sample, started ind. AT 250. Hit more water AT 360. Approx. 4 gals/min. Drilled to 460' logged 450'. Installed 450' of 1" P.V.C. Vent pipe, perforated 300'.
20 -	.5	400 -	.6	
30 -	.8	10 -	.8	
40 -	.4	20 -	1.7	
50 -	.7	30 -	1.7	10/27/78 11.0 A = 1.05 11.5 V
60 -	1.1	40 -	.5	
70 -	2.0 - ⑦	50 -	.5	
80 -	1.8	60 -		
90 -	1.6 - ⑧			T.D. 450 Prill Log
100 -	1.2			
110 -	1.5 - ⑨			
120 -	1.5			
130 -	1.9 - ⑩			1 - 425 - 1.9 - 3.0 2 - 415 - 1.4 - 2.7 3 - 330 - 1.2 - 2.2 4 - 320 - 1.5 - 2.5 5 - 310 - 1.5 - 2.4 6 - 300 - 1.8 - 2.8 7 - 290 - 1.4 - 2.4 8 - 280 - 1.5 - 2.7 9 - 270 - 1.9 - 3.3 10 - 260 - 1.5 - 2.7
140 -	1.5			
150 -	1.5 - ⑪			
160 -	1.4			
170 -	1.6 - ⑫			
180 -	1.4			
190 -	1.1 - ⑬			
200 -	.6			
210 -	.7			
220 -	.7			
230 -	.4			
240 -	.5			
250 -	.6			
260 -	.5			
270 -	.5			
280 -	.6			
290 -	.5			

DAILY DRILLING REPORT

EVENING

CP Boer

Company Supervisor

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

Operator MERIDIAN OIL Location: Unit NE Sec. 16 Twp 29 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 29-7 UNIT #91, #509

cps 294w

Elevation 6276' Completion Date 10/12/66 Total Depth 560' 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. 220'

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MAY 31 1991

Depths gas encountered: N/A

OIL CON. DIV.
DIST. 3

Type & amount of coke breeze used: 5520 lbs.

Depths anodes placed: 334', 328', 322', 316', 310', 304', 298', 292', 286', 280', 274'

Depths vent pipes placed: 334' OF 3/4" HOSE

Vent pipe perforations: 100'

Remarks: gb #2

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If Federal or Indian, add Lease Number.

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Date 10-12-66

Well Name <u>Hoxsey State #1 - 29-7 #91</u>			CPS No. <u>294 W</u>		
Location <u>NE 16-29-7</u>			Work Order No. <u>184-40064-50-20</u>		
Anode Hole Depth <u>560'</u>	Total Drilling Rig Time <u>33 Hrs.</u>	Type & Size Bit Used <u>54902 = 60</u> <u>6 1/4" 5703 = 500</u>	No. Sacks Mud Used <u>4</u>		
No. Sacks Lost Circulation Mat'l Used <u>1</u>	Anode Depth				
	# 1 <u>334</u>	# 2 <u>328</u>	# 3 <u>322</u>	# 4 <u>316</u>	# 5 <u>310</u>
Total Lbs. Coke Used <u>5520</u>	Anode Output (Volts)				
	# 1 <u>3.2</u>	# 2 <u>3.4</u>	# 3 <u>2.7</u>	# 4 <u>3.0</u>	# 5 <u>2.9</u>
Total Circuit Resistance	No. Ft. Surface Cable Conduit				
Volts <u>12.4</u> Amps <u>8.6</u> Ohms <u>1.44</u>	<u>3684 Anodes 190 surface = 3874</u>				
Drilling Log (Attach Hereto). ☐	7 <u>298</u>	8 <u>292</u>	9 <u>286</u>	10 <u>280</u>	11 <u>274</u>
	7 <u>3.0</u>	8 <u>3.2</u>	9 <u>3.5</u>	10 <u>4.0</u>	11 <u>3.2</u>
					12 <u>No.</u>

Remarks:

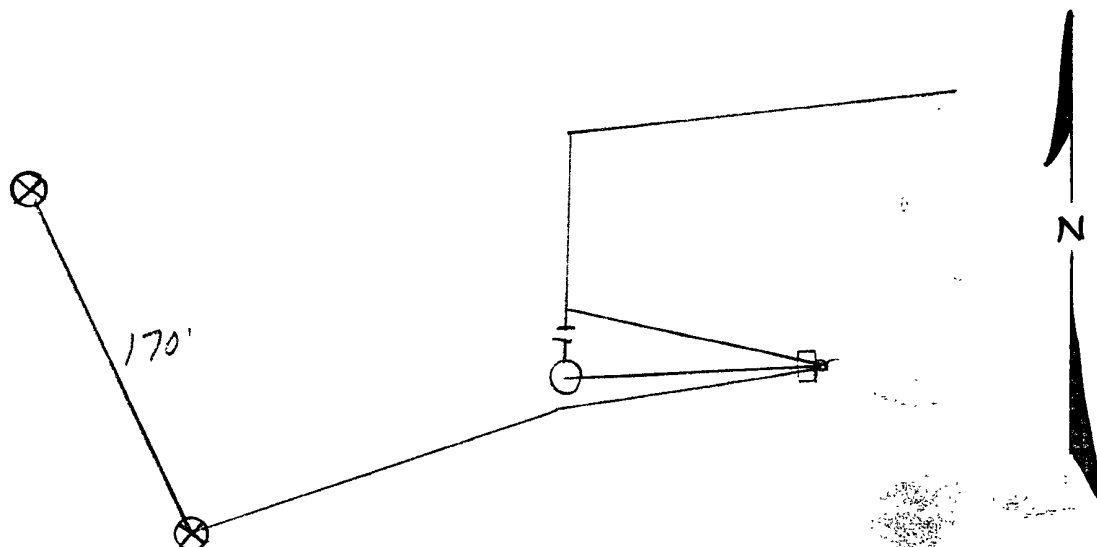
3/4" Hose tied to No. 1 Anode - Perforated 100'

Hole Drilled 8-29-66 - left open until 10-12-66.
Water at 220'

All Construction Completed

Danels
(Signature)

GROUND BED LAYOUT SKETCH



42-26-66
AIR D.C. INC.

DRILLING DEPARTMENT

DAILY DRILLING REPORT

42-26-66

LEASE: 42-26-66
WELL NO. 2794-W
CONTRACTOR L.E. WILSON DRILLING CO.
RIG NO. D8
REPORT NO. 29 AUG 66
DATE 29 AUG 66

WORKING 25 AUG 66

SHUTTLE 26 AUG 66

FINISHING 29 AUG 66

Driller W.O. JONES				Driller W.O. JONES				Driller W.O. JONES			
FROM		TO		FROM		TO		FROM		TO	
FORMATION		FORMATION		FORMATION		FORMATION		FORMATION		FORMATION	
WT. BIT		WT. BIT		WT. BIT		WT. BIT		WT. BIT		WT. BIT	
R.P.M.		R.P.M.		R.P.M.		R.P.M.		R.P.M.		R.P.M.	
0'	10'	SAND		300'	310'	SANDSTONE WITH SAND LENSES		500'	560'	SANDY SHALE	
10'	45'	SANDSTONE		310'	365'	SANDSTONE					
45'	63'	SANDY SHALE		365'	440'	SANDSTONE					
63'	115'	HARD SANDSTONE		440'	445'	SHALE					
NO. DC		NO. DC		NO. DC		NO. DC		NO. DC		NO. DC	
SIZE		SIZE		SIZE		SIZE		SIZE		SIZE	
LENG.		LENG.		LENG.		LENG.		LENG.		LENG.	
STANDS		STANDS		STANDS		STANDS		STANDS		STANDS	
SINGLES		SINGLES		SINGLES		SINGLES		SINGLES		SINGLES	
DOWN ON KELLY		DOWN ON KELLY		DOWN ON KELLY		DOWN ON KELLY		DOWN ON KELLY		DOWN ON KELLY	
TOTAL DEPTH		TOTAL DEPTH		TOTAL DEPTH		TOTAL DEPTH		TOTAL DEPTH		TOTAL DEPTH	
MUD RECORD		MUD RECORD		MUD RECORD		MUD RECORD		MUD RECORD		MUD RECORD	
MUD, ADDITIVES USED AND RECEIVED		MUD, ADDITIVES USED AND RECEIVED		MUD, ADDITIVES USED AND RECEIVED		MUD, ADDITIVES USED AND RECEIVED		MUD, ADDITIVES USED AND RECEIVED		MUD, ADDITIVES USED AND RECEIVED	
TIME		TIME		TIME		TIME		TIME		TIME	
WT.		WT.		WT.		WT.		WT.		WT.	
VIS.		VIS.		VIS.		VIS.		VIS.		VIS.	
115'	150'	SANDY SHALE		445'	480'	SANDSTONE					
150'	178'	SANDSTONE		480'	500'	SANDY SHALE					
178'	210'	HARD SANDSTONE									
210'	300'	SANDSTONE WITH SAND LENSES									
REMARKS - LEFT YARD AT 6 AM & ARRIVED AT FIELD WITH RIG AT 7:30 AM. SET UP ON LOCATION & STARTED 4 1/2" AIR HOLES. DROVE BIT DOWN CUTTING AT 75' CAME OUT & PUT ON 4 3/4" ROCK BIT. HIT WATER AT 210', DRILLED TO 230'. CAME OUT & STARTED 6 3/8" HOLE. LOST CIRCULATION @ 130'. ADDED MUDS & HAD & DRILLED TO 300'. CAME OUT & LEFT LOCATION AT 5 PM.				REMARKS - LEFT YARD 6 AM. PICKED UP LOAD OF MUDS, AND ARRIVED RIG AT 7:15 AM. STARTED DRILLING & LOST CIRCULATION AT 400'. ADDED MUD AND DRILLED TO 480'. GOT 2 MORE JOBS OF PIPE FROM OTHER RIG & DRILLED TO 500'. LEFT RIG AT 5 PM.				REMARKS - LEFT YARD 6 AM. ARRIVED RIG 7 AM. DRILLED TO 560'. CIRCULATION HOLE CLEAN & CAME OUT. LEFT RIG AT 1 PM. RAN NEW BIT, # 54902, 10', 500' - 560'. 8-12-66 LEFT YARD 6 AM. ARRIVED AT 2:00 PM. CLEANED OUT HOLES & LEFT YARD AT 2:00 PM.			

SIGNED: Toolpusher

Company Supervisor

Handwritten signature