

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101

May 27, 2004

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

AUG 07 2007

OCD ARTESIA

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Devon Energy Production Co., LP 20 North Broadway OKC, OK 731028260		² OGRID Number 6137
		³ API Number 30 - 01531889
⁴ Property Code	⁵ Property Name Cotton Draw Unit	⁶ Well No. 90
⁹ Proposed Pool 1 Unders. Cotton Draw; Brushy Canyon		¹⁰ Proposed Pool 2

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	36	24S	31E		660	NORTH	660	WEST	EDDY

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code O	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3525' GL
¹⁶ Multiple no	¹⁷ Proposed Depth 15,200'	¹⁸ Formation Morrow	¹⁹ Contractor	²⁰ Spud Date 9/20/01
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic ☐ _____ mils thick Clay ☐ Pit Volume: _____ bbls Drilling Method: Closed-Loop System ☐ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	43#	677'	1060 sx	
12 1/4"	9 5/8"	36#	4256'	1940 sx	
8 1/2"	7"	29#	12763'	3160 sx	
6"	5"	18#	15200'	280 sx	

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.

Describe the blowout prevention program, if any. Use additional sheets if necessary.

Devon Energy Production Company, LP requests approval to re-complete to the Delaware zone as follows:

- MIUL 8200' of 2-7/8" / 6.5 ppf/J-55/ EUE production tbg.
- MIRU WSU. ND WH and NU BOP. Test per company guidelines.
- POH with rods and pump, then POH and lay down 2-3/8" tubing.
- MIRU WLSU. NU WL BOPE and test per company guidelines.
- RIH w/ gauge ring and junk basket to 8200'.
- RIH w/4" csg gun. Perf L. Brushy Canyon at the following interval, 2 SPF 120° phased. Schlumberger GR/CNL/LDT open hole log dated 11/05/2001 8,174' - 8184' (20 shots) 7,643 - 7,664' (42 shots)
- RIH with CIBP on WL & st above Bone Spring perfs @ ~8750'. Dump bail 35' cmt on CIBP. RD WLSU.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Signature:

Printed name: Judy A. Barnett

Title: Regulatory Analyst

E-mail Address: Judith.Barnett@dmv.com

Date: 8-2-07

Phone: 405-228-8699

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARRANT

Title:

DISTRICT II GEOLOGIST

Approval Date: AUG 07 2007

Expiration Date: AUG 07 2008

Conditions of Approval Attached

☒ See attached well bore diagram

8. RIH with 7" treating pkr and RBP on 2-7/8" tbg and set RBP at ~8350', then PUH re-set pkr at ~7550'
9. RU treaters and acidize perfs w/ 2000 gals + 90 1.3 BS. If ballout occurs, surge balls off & continue w/ acid.
10. Unset treating pkr and run through perfs to knock off any BS, then set between the two perf intervals (@ ~8000'. Swab test perfs from **8174 – 84'** for oil cut and evaluate for FRAC.
11. If frac is deemed appropriate, RU treaters to frac **8174–84'** w/ approximately 50,000# 20/40 Ottawa & 16/30 RC and XL GBW, per service company recommendation (to follow).
12. Flow well back immediately at ½ to 1 BPM until well dies. RD treaters.
13. Rtrv RBP & re-set between two perf intervals at ~8000'. Set pkr above top set of perfs and swab test for oil cut. Evaluate for frac.
14. If oil cut is sufficient, RU treaters and frac **7643–7664'** per service company recommendation to follow. Flow well back immediately at ½ to 1 BPM until well dies. RD treaters.
15. Unset treating pkr. Rtrv RBP & re-set above top perf at ~7600'. Test RBP to 2000 psi, POH w/ treating pkr.
16. MIRU WLSU. NU WL BOPE and test per company guidelines.
17. RIH w/4" csg gun. Delaware at the following intervals, 2 SPF 120° phased **7115–23'** 2 SPF (16 shots) RD WLSU.
18. PU and RIH w/ treating pkr on tbg. Set treating pkr above new perfs, ~7000'.
19. RU treaters and acidize **7115–7123'** w/ 1000 gal 7½% Pentol acid, dropping 25 BS evenly w/ acid. Pump acid at up to 6 – 8 BPM. If ballout occurs, surge balls off and continue w/ acid.
20. Unset treating pkr and run through perfs to knock balls off, set packer above perfs and swab test new perfs for oil cut until at least half of load is recovered. Possible frac, depending on results of swab test.
21. Retrieve bridge plug and POH.
22. MIRU WLSU. NU WL BOPE and test per company guidelines.
23. RIH w/4" csg gun. Perf U. Brushy Canyon at following intervals, 2 SPF 120° phased **6192'–6206'** 2 SPF (28 shots)
24. RD WLSU.
25. RIH with RBP and treating packer on tubing to ~6500' and test.
26. PUH to ~6000' - and set treating pkr.
27. RU treaters and acidize **6192'–6206'** w/ 1500 gals 7½% Pentol acid, dropping 40 BS evenly w/ acid, per service company proposal. Pump acid at maximum rate possible w/ pumps on location (up to 8 BPM +/-). If ballout occurs, surge balls off and continue w/ acid.
28. Unset treating pkr and run through perfs to knock balls off, set pkr above new perfs and swab test for oil cut until at least half of load is recovered or oil cut reaches ~15%. Possible frac, depending on results.
29. After final swab test or frac, retrieve bridge plug and POH.
30. RIH w/MA, perf sub, SN, 10 jts 2-7/8" 6.5# N-80 tbg, 7" TA & 2-7/8" tbg to PBTD and CHC.
31. PUH to 8000' (EOT). ND BOP, set TA & NU pumping WH assembly.
32. RIH w/2½" x 1-1/2" pump, and rods per recommendation to follow. Set C640-305-168 pumping unit (gas engine required). Hang well on pump @ recommended SPM. RDMO PU.
33. Report daily production test until further notice.



DEVON ENERGY CORP
PADUCA Field, EDDY Co., NM

COT **RAW UNIT #90** (GAS)
Area: **INGLE WELLS/SAN**

660' FNL, 660' FWL, Sec 36, 24S 31E C NW NW Elev: 3525.5' (27.5' AGL)

Last updated by:
Jim Cromer 07/26/2007

Surface Casing Record
13.375" / 48.00# / H-40 / 8RD @ 704'

Intermediate Casing Record
9.625" / 36.00# / K-55 / 8RD @ 4283'

Production Casing Record
7 00" / 29.00# / P110 / LTC @ 12790'
26.00# / P110 @ 0'
29.00# / P110 @ 12790'

Production Liner Record
5 00" / 23 00# / P110 / STL @ 12267'-15200'

Tubing Record
2.375" / 4.70# / J-55 / EUE @ 8972'

Well History (spudded 09/09/2001):

5/02 - DC. Attempt 2 completions in Morrow 14995 - 15097' and 14782 - 14,794'. Both zones pressure-depleted.

10/16/2002: p/b to BONE SPRING 8817'- 8876'. ACID 8817'- 8876' w/ 2800 G 7½% HCl, FRAC 163k# prop in 64k g XLG (IP 0 BO, 90 MCF, 0 BW - pumping (?))

13 375" csg @ 704'

9 625" csg @ 4283'

TOC = 4300' (T S)

2.375" tbg @ 8972' (PUMP TAC)

PF 8817- 8876' (BONE S)

7 000" csg @ 12790'
w/3160 sx

Poss WFMP shale BP

Potential Atoka pay

Plugs:

CIBP @ 14715'
CIBP @ 14915'
FLTC @ 15149'

Perf Detail

Interval spf Date

14782-14794'
(MORROW)

TD = 15200'

PF 14995 - 15097' (MORROW)

5 000" lnr 12267'

API# 30-015-31889

Current status: PUMP

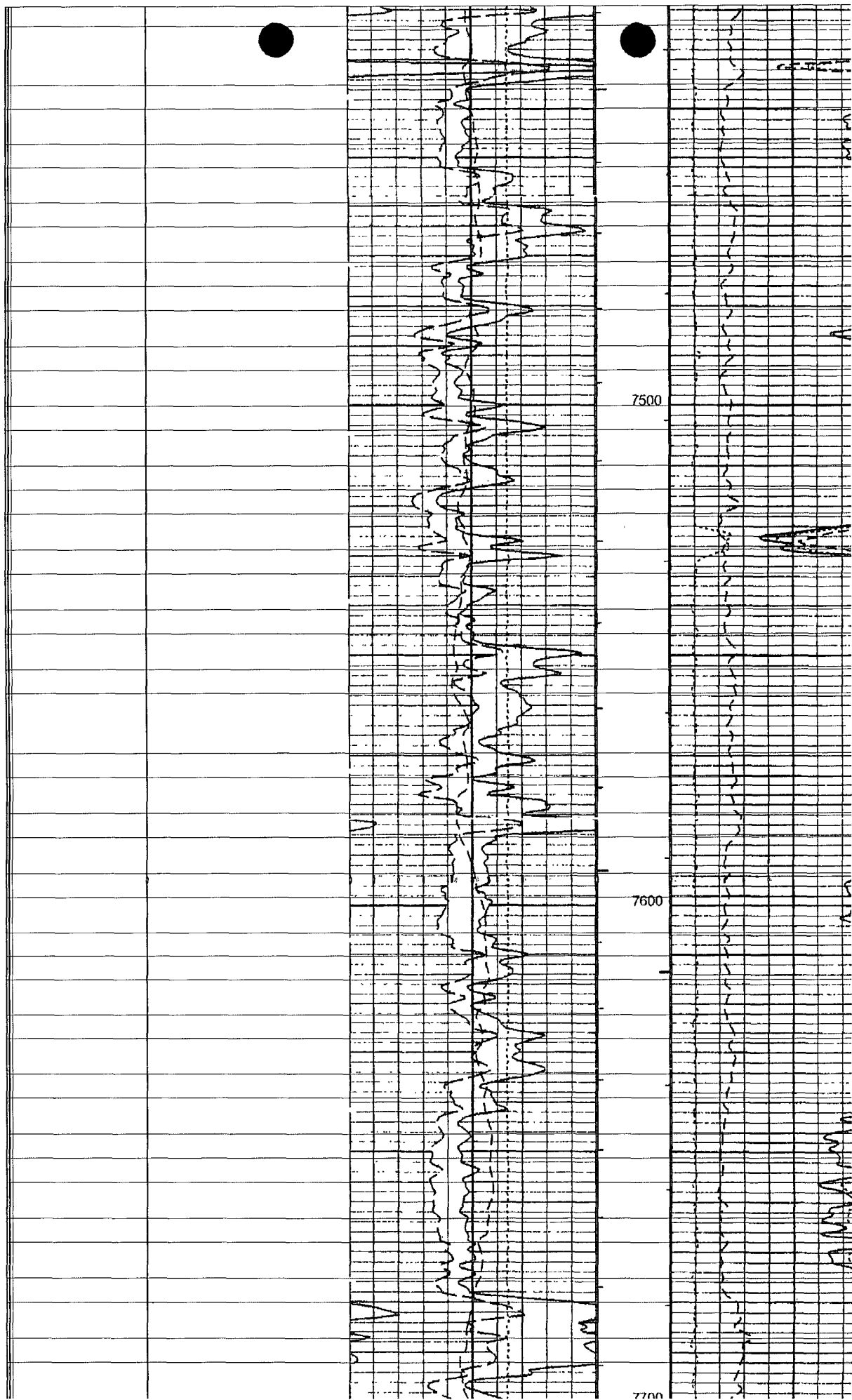
Comments:

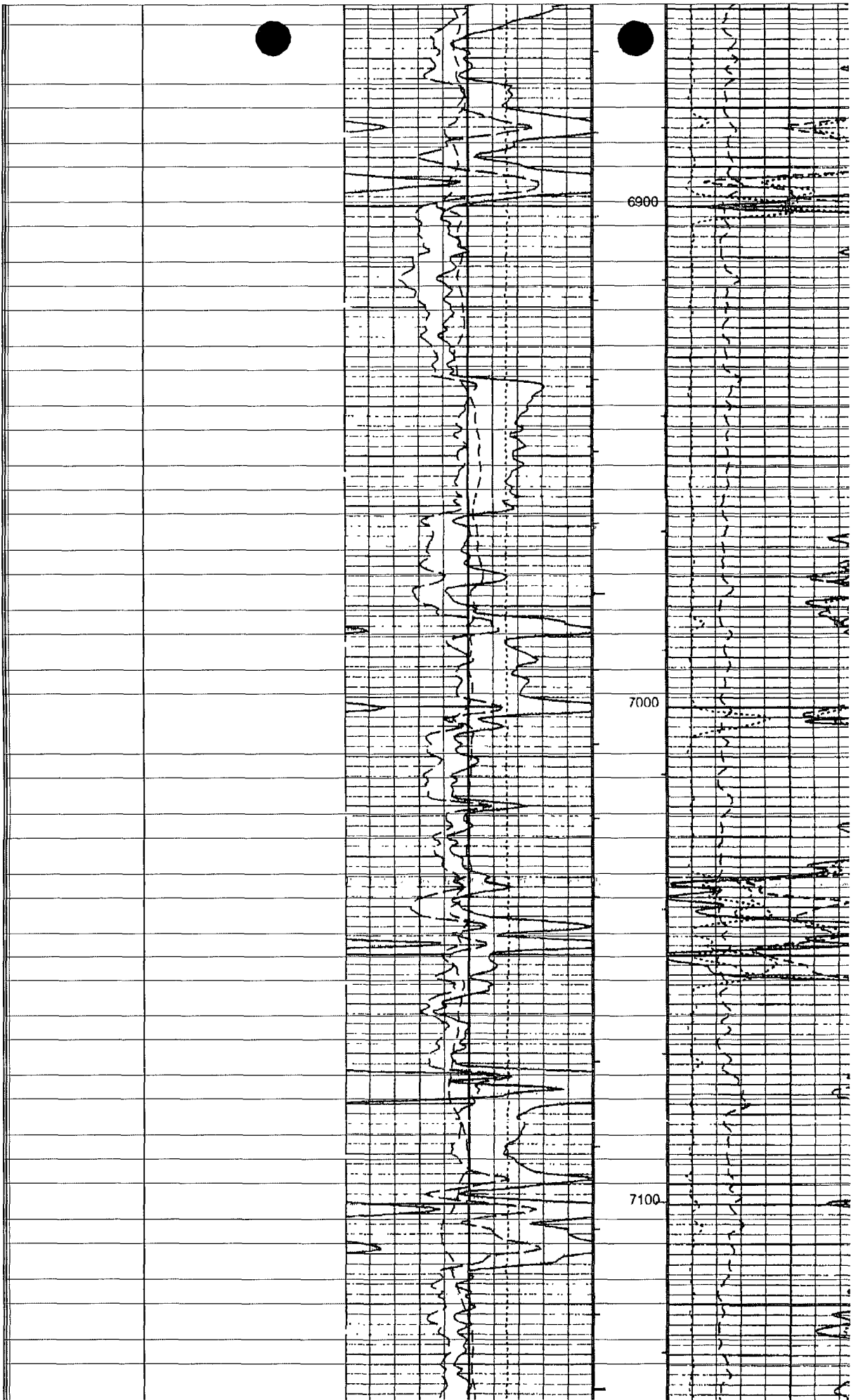
100' Plug across top of Wolfcamp @ 11715'

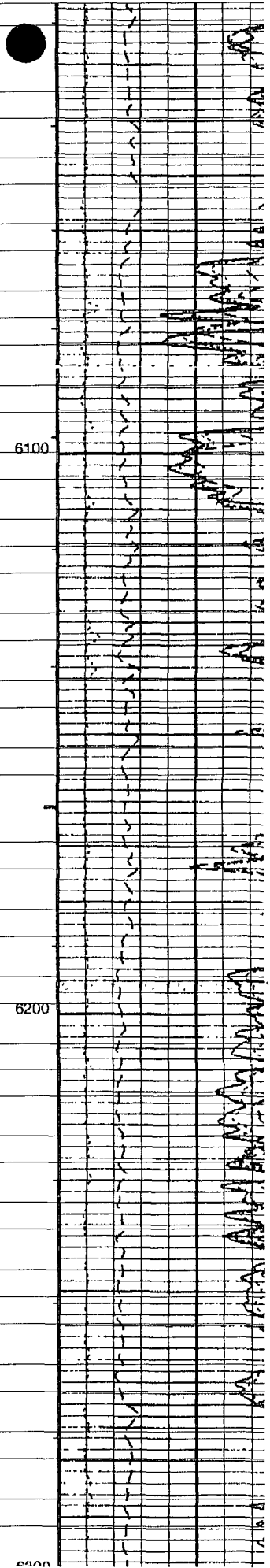
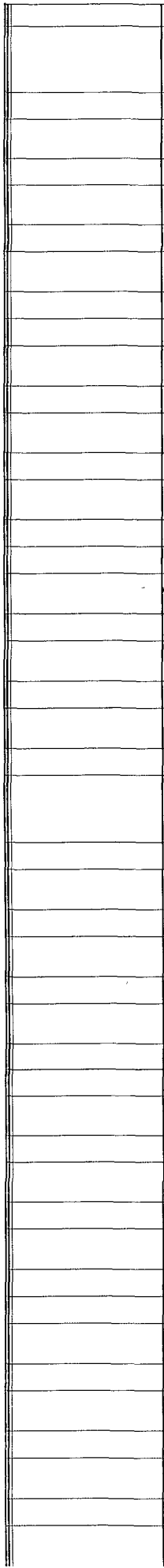
100' Plug Tag

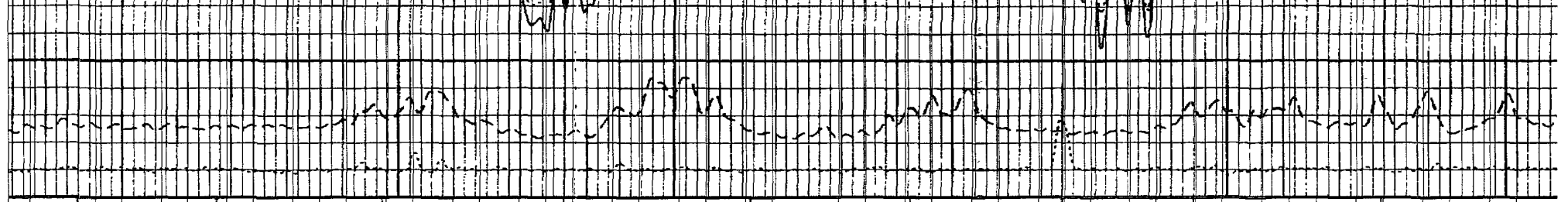
COUNTY: Eddy	Field: Paducah	Location: 860' FNL	Well: Cotton Dr	Company: Texaco S	LOCATION	D.F. 3526 5 ft
Permanent Datum		Ground Level		Elev 3498 ft		
Log Measured From:		Kelly Bushing		27.5 ft above Perm. Datum		
Drilling Measured From:		Kelly Bushing				
API Serial No. 30-015-31889		SECTION 36	TOWNSHIP 24 S	RANGE 31 E		
Logging Date	5-NOV-2001					
Run Number	One					
Depth Driller	12970 ft					
Schlumberger Depth	12798 ft					
Bottom Log Interval	12798 ft					
Top Log Interval	200 ft					
Casing Driller Size @ Depth	9.625 in	@	4283 ft			
Casing Schlumberger	4277 ft					
Bit Size	8.500 in					
Type Fluid In Hole	Cut Brine/ Gel Starch					
Density	Viscosity					
Fluid Loss	PH	8.7 lbm/gal	33 s			
Source Of Sample	Circulation Tank					
RM @ Measured Temperature	0.429 ohm.m	@	72 degF	@		
RMF @ Measured Temperature	0.381 ohm.m	@	74 degF	@		
RMC @ Measured Temperature		@		@		
Source RMF	RMC	Measured				
RM @ MRT	RMF @ MRT	0.190 @ 17	0.175 @ 171	@	@	
Maximum Recorded Temperatures	171 degF					
Circulation Stopped	Time	4-NOV-2001	23:30			
Logger On Bottom	Time	5-NOV-2001	7:00			
Unit Number	Location	6180 Roswell				
Recorded By	Henry Andres Olarte					
Witnessed By	John Bounds					

DISCLAIMER
THE USE OF AND RELIANCE UPON THIS RECORDED DATA BY THE HEREIN N









8000

8100

8200

