

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLIC.

(See other in-
structions on
reverse side)FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

CJSE

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____						5. LEASE DESIGNATION AND SERIAL NO. NM-22080	
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR <input type="checkbox"/> Other _____						6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR ARCO Permian						7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. P.O. Box 1610, Midland, TX 79702						8. FARM OR LEASE NAME, WELL NO. BARCLAY FEDERAL 19	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 700' FNL, 2100' FEL At top prod. interval reported below At total depth						9. API WELL NO. 30-015-30284	
14. PERMIT NO.						10. FIELD AND POOL, OR WILDCAT LIVINGSTON RIDGE (DEL)	
15. DATE SPUNDED 9/2/98						11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA 12-T23S-R31E	
16. DATE T.D. REACHED 9/15/98						12. COUNTY OR PARISH EDDY	
17. DATE COMPL. (Ready to prod.) 9/20/98						13. STATE NM	
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3490'						19. ELEV. CASINGHEAD	
20. TOTAL DEPTH, MD & TVD 8450'		21. PLUG, BACK T.D., MD & TVD 8384'		22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY →	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* SEE ATTACHED						25. WAS DIRECTIONAL SURVEY MADE N	
26. TYPE ELECTRIC AND OTHER LOGS RUN MICRO-CFL, COMPENSATED NEUTRON						27. WAS WELL CORED N	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE/GRADE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE	
13-3/8		48		858		17-1/2	
8-5/8		32		4459		11	
5-1/2		17		8447		7-7/8	
						4400' TS	
29. LINER RECORD							
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*	
30. TUBING RECORD							
SIZE		TOP (MD)		BOTTOM (MD)		PACKER SET (MD)	
2-7/8				6962			
31. PERFORATION RECORD (Interval, size and number) SEE ATTACHED				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
OCT 30 1998 ORIG. SGD. LES BARYAK BLM				DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
				SEE ATTACHED			
33. PRODUCTION							
DATE FIRST PRODUCTION 9-20-98		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) PUMPING				WELL STATUS (Producing or shut-in) PRODUCING	
DATE OF TEST 10/7/98		HOURS TESTED 24		CHOKE SIZE		PROD'N. FOR TEST PERIOD →	
FLOW. TUBING PRESS. 300		CASING PRESSURE 80		CALCULATED 24-HOUR RATE →		OIL - BBL 120	
						GAS - MCF. 90	
						WATER - BBL 540	
						GAS - OIL RATIO 36.0	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) SOLD						TEST WITNESSED BY	
35. LIST OF ATTACHMENTS							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <u>Klitzpland R. Cashe</u>				TITLE <u>REGULATORY COMPLIANCE</u>		DATE <u>10/13/98</u>	

(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
DELAWARE	4485'		
BONE SPRING	8384		

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

ATTACHMENT TO FORM 3160-4
BARCLAY FEDERAL #19
API # 30-015-30284

24. 6401-6411 – 21 HOLES; 6777-6782 – 6 HOLES; 6632-6637 – 6 HOLES; 6622-6624 – 3 HOLES;
6974-7078 – 12 HOLES; 7211-7222 – 12 HOLES

31. SEE #24

32. 7211-7222 FRAC W/2000 GAL 15%; 17500 GAL VIK I-25, 435000 #SD
6974-7078 FRAC W/1000 GAL 15%; 37500 GAL VIK I-25, 95000 #SD
6622-6782 FRAC W/1000 GAL 15%; 25000 GAL VIK I-25; 61000 #SD
6401-6411 FRAC W/1000 GAL 15%; 12500 GAL VIK I-25; 30500 #SD

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-30284	Pool Code 39360	Pool Name LIVINGSTON RIDGE (DEL)
Property Code 20860	Property Name BARCLAY FEDERAL	Well Number 19
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 3490'

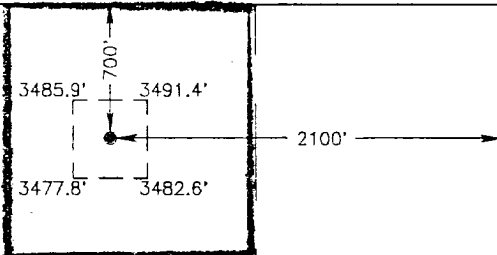
Surface Location

UL or lot No. B	Section 12	Township 23 S	Range 31 E	Lot Idn	Feet from the 700	North/South line NORTH	Feet from the 2100	East/West line EAST	County EDDY
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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
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Elizabeth A. Casbeer</i> Signature REG/COMP. ANALYST Printed Name ELIZABETH A. CASBEER Title 10-19-98 Date</p>	
				<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>MARCH 25, 1998</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>Ronald J. Edson</i> 3-30-98 98-1-0485</p> <p>Certificate No. RONALD J. EDSON 3239 SARAH EDSON 12641</p>	

RECEIVED

APR 01 1998

**LAND
ADMINISTRATION**

ARCO Permian
Barclay Fed. #19
Eddy Co., NM

STATE OF NEW MEXICO
DEVIATION REPORT

256	1/2
529	3/4
820	1-1/4
1,339	2
1,432	1-3/4
1,684	1-1/4
1,976	3/4
2,453	3/4
2,931	1/2
3,430	1/4
3,904	1-3/4
4,031	2
4,126	1-1/2
4,250	2
4,314	1-1/2
4,376	1-3/4
4,440	1
4,950	1-3/4
5,426	1-1/4
5,924	1/2
6,400	1/4
6,873	1/4
7,344	1
7,635	1-1/4
8,134	1-1/2
8,418	1

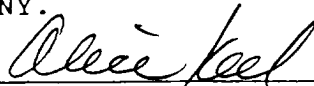


By: Ray Peterson

STATE OF TEXAS

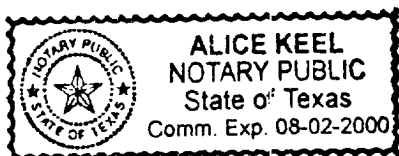
COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me
this 21st day of September, 1998, by RAY PETERSON
on behalf of PETERSON DRILLING COMPANY.



Notary Public for Midland
County, Texas

My Commission Expires: 8/2/2000



COMPANY: ARCO Permian

WELL: Barclay Federal #19

FIELD: Livingston Ridge-Delaware

COUNTY: Eddy

STATE: New Mexico

COUNTY: Eddy Field: Livingston Ridge-Delaware Location: 700' FNL & 2100' FEL Well: Barclay Federal #19 Company: ARCO Permian	LOCATION		PLATFORM EXPRESS Array Induction Imager Micro-CFL		
	700' FNL & 2100' FEL		Elev.: K.B. 3503 F G.L. 3490 F D.F. 3502 F		
	Permanent Datum: Ground Level		Elev.: 3490 F		
	Log Measured From: Kelly Bushing		13.0 F above Perm. Datu		
Drilling Measured From: Kelly Bushing					
API Serial No. 30-015-30284		SECTION 12	TOWNSHIP 23-S	RANGE 31-E	
Logging Date		16-SEP-1998			
Run Number		One			
Depth Driller		8450 F			
Schlumberger Depth		8460 F			
Bottom Log Interval		8452 F			
Top Log Interval		4460 F			
Casing Driller Size @ Depth		8.625 IN @ 4460 F		@	
Casing Schlumberger		4460 F			
Bit Size		7.875 IN			
Type Fluid In Hole		Fresh Mud			
MUD	Density	Viscosity	8.6 LB/G	32 S	
	Fluid Loss	PH	17 C3	10	
	Source Of Sample		Circulation Tank		
	FM @ Measured Temperature		0.182 OHMM @ 76 DEGF		@
FMF @ Measured Temperature		0.182 OHMM @ 76 DEGF		@	
FMC @ Measured Temperature		@		@	
Source RMF		RMC	Measured		
FM @ MRT		RMF @ MRT	0.148 @ 95	0.148 @ 95	@ @
Maximum Recorded Temperatures		95 DEGF			
Circulation Stopped		Time	15-SEP-1998	21:00	
Logger On Bottom		Time	16-SEP-1998	2:15	
Unit Number		Location	3005	Roswell	
Recorded By		Paul Niles			
Witnessed By		John Slaton			