STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-105
Revised 10-1-78

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OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State ☐ Federal Fee ☐
5. State Oil & Gas Lease No.:

1a. TYPE OF WELL
b. TYPE OF COMPLETION
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name:
8. Farm or Lease Name: Henshaw Federal
9. Well No.: 1
10. Field and Pool, or Wildcat: Wildcat - Atoka

2. Name of Operator: Petrus Oil Company, L. P.
3. Address of Operator: 12377 Merit Drive, Suite 1600 Dallas, Texas 75251
4. Location of Well: UNIT LETTER N LOCATED 330 FEET FROM THE South LINE AND 1750 FEET FROM THE West LINE OF SEC. 14 TWP. 16S RGE. 30E NMPM
12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
06-12-87	07-29-87	08-14-87	3839.5' KB, 3821.0' GL	

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
11,775	10,700		→	0-11,775	

24. Producing Interval(s), of this completion — Top, Bottom, Name: 10,374-10,390' Atoka
25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: Dual Laterolog/Micro-SFL/GR, CNL, LDT, DDBHC Sonic, Cyberlook
27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8	54.5	504	17-1/2	355 sx Class C	
8-5/8	24 & 32	3,113	12-1/4	1635 sx Lite, 200 sx Class C	
5-1/2	17	10,700	7-7/8	1300 sx Class H	

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8	10,332	10,332

31. Perforation Record (Interval, size and number)

10,374-10,390' 3-3/8" O.D. Vannguns loaded
4 SPF w/32 gram DP charges

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
08-14-87	Flowing	Shut-in

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio
08-16-87	2	16/64		8.8	103	0	11,642

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)
1090	0		106	1234	0	59

34. Disposition of Gas (Sold, used for fuel, vented, etc.): Vented
Test Witnessed By: J. C. Denney

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Suzann Jourdan TITLE Regulatory Coordinator DATE 09-17-87

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	9468	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	10068	T. Pictured Cliffs		T. Penn. "D"	
T. Yates	1450	T. Miss	10924	T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian	11462	T. Menefee		T. Madison	
T. Queen	2258	T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg	2640	T. Montoya		T. Mancos		T. McCracken	
T. San Andres	2970	T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta	4450	T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb	5698	T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand		T. Entrada		T.	
T. Abo	6450	T. Bone Springs		T. Wingate		T.	
T. Wolfcamp	7660	T.		T. Chinle		T.	
T. Penn.	8798	T.		T. Permian		T.	
T Cisco (Bough C)		T.		T. Penn. "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from 9300 to 9330 — No. 4, from ____ to ____

No. 2, from 10375 to 10390 — No. 5, from ____ to ____

No. 3, from ____ to ____ — No. 6, from ____ to ____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ____ to ____ feet. ____

No. 2, from ____ to ____ feet. ____

No. 3, from ____ to ____ feet. ____

No. 4, from ____ to ____ feet. ____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	1450	1450	Rd. shales, anhy., salt & sand				
1450	2600	1150	Sand, anhy, shales				
2600	4450	1850	Dolomite, shales				
4450	6450	2000	Shales, sand, limestone				
6450	7660	1210	Shales, dolomite				
7660	8800	1140	Shale, limestone				
8800	9460	660	Limestone				
9460	10000	540	Shale, limestone				
10000	10650	650	Shale, limestone, sand				
10650	10925	275	Shale, limestone				
10925	11462	537	Limestone, chert				
11462	11770	1308	Dolo., limestone, chert				

DRILL STEM TEST RESULTS

HENSHAW FEDERAL NO. 1
EDDY COUNTY, NEW MEXICO

07-02-87

DST #1: Top of Wolfcamp Test Interval: 7650-7740'

Pressure Results

Flow	Top Gauge	Bottom Gauge
IH	3360	3424
IF (5 min)	49	87
IFF	69	97
ISI (60 min)	267	2730
IFF (60 min)	99	125
FF	149	192
FSI (120 min)	2474	2521
FH	3366	3420
TEMP	98 deg	98 deg F

Drill pipe rec: 1/2 gal oil, 300' DM, tr oil thru-out
Sampler rec: Pressure=TSTM, no gas, no oil, no wtr, 1560 cc GCM

07-07-87

DST #2: Top of Cisco Test Interval: 8780-8851'

Pressure Results

Flow	Top Gauge	Bottom Gauge
IH	4136	4201
IF (5 min)	82	153
IFF	159	230
ISI (60 min)	3256	3282
IFF (60 min)	184	230
FF	579	638
FSI (120 min)	3141	3205
FH	4097	4188
TEMP	128 deg F	130 deg F

Drill pipe rec: 1971' free gas, 276' slightly OCM, 1011' sulfur wtr
Sampler rec: Pressure=580#, 0.83 CFG, tr oil, 1840 cc wtr, res=0.4 @ 90 deg F, Cl=11,000 ppm.
Surface indications: 5 min IF = 12" bubbles
7 min FF = 12" bubbles
10 min FF = 1 psi
60 min FF = 2.5 psi

07-15-87

DST #3 unsuccessful due to packer seat failure.

07-18-87

DST #4 unsuccessful due to packer seat failure.

DRILL STEM TEST RESULTS

HENSHAW FEDERAL NO. 1
EDDY COUNTY, NEW MEXICO

07-19-87

DST #5 @ base of Morrow interval 10540-10636'.

	Top Gauge	Bottom Gauge
IH	5308	5325
IF (5 min)	179-191	181-200
ISI (60 min)	1314	1312
FF (60 min)	190-320	200-345
FSI (120 min)	1860	1896
FH	5308	5325
	150 deg F	150 deg F

Recovery @ sampler @ 350#, 1.80 CF, 0 oil, 0 wtr, tr mud.
DP rec = 560' S G.C.D.M.

Surface Indicators
5 min IF = strong blow to 3#
60 min FF = blow to 6# constant thereafter, burn 2-3' flare.

07-27-87

DST #6: Top of Devonian interval 11420-11671'.
Surface indicators: 125 min IF: 1/4" bubble @ 5 min, zero blow @ 15 min, zero blow thereafter.
Note: Planned on 5 min IF & 60 min ISI. However, tool failed to close. Results were one flow & one SI as follows: 125 min IF & 240 min SI.
Drill Pipe Recovery: 60' DM
Sampler Recovery @ 630#, 3.2 CF G, 0 oil, 0 wtr, 760 CC DM

Pressure Gauges:	L. Gauge	U. Gauge
IH	5818	5731
IF (125M)	217-217	81-81
FSI (240M)	929	817
FH	5836	5731

No signs of tool plugging. Conclusive test.

07-29-87

DST #7: Devonian @ 11700-11775'.
Surface Indicators: 5 min IF=weak blow to 1/4" bubble
90 min FF= week blow to zero blow in 30 min
Drill Pipe Rec: calculate 167' DM (based on press recorder #3)
Sampler Recovery: 0 CFG, 0 oil, 0 wtr, 2260 cc mud

Pressure Gauges:	
IH	5915
IF (5 min)	99-99
ISI (60 min)	4866
FF (90 min)	97-117
FSI (180 min)	4645
FH	5909

Note: Tools stuck. Had leak in DC @ 1 std below top of collars. Left lower press recorder on btm @ 11768-11775'. Fish=6.36'L x 5 3/4" OD. TEST CONCLUSIVE!

BEFORE EXAMINER CATALANO
OIL CONSERVATION DIVISION
PETRUS EXHIBIT NO. 5
CASE NO. 9241