

1301 W. Grand Avenue
Artesia, NM 88210

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Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resrv.
Other _____

2. Name of Operator

Pogo Producing Company

3. Address

P.O. Box 10340, Midland, TX 79702

3a. Phone No. (include area code)

432-685-8100

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 660' FSL & 660' FEL

At top prod. interval reported below same

At total depth same

14. Date Spudded

10/29/04

15. Date T.D. Reached

11/15/04

16. Date Completed

12/10/04

☐ D & A ☒ Ready to Prod.

18. Total Depth: MD

TVD 8339

19. Plug Back T.D.: MD

TVD 8277

20. Depth Bridge Plug Set: MD

TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

HDIL, ZDL/CN/GR

22. Was well cored? ☒ No ☐ Yes (Submit analysis)

Was DST run? ☒ No ☐ Yes (Submit report)

Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2	13-3/8	48		975		800		surface	
11	8-5/8	32		4250		1450		surface	
7-7/8	4-1/2	11.6		8339		2020		900' FS	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-3/8	7902							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Delaware	8098	8108			10	
B) Delaware	7963	7976			13	
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7963-8108 (OA)	Acidz w/ 1800 gals 7-1/2% acid
	Frac w/ 255,000# 16/30 sand

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
12/10/04	12/15	24	→	47	16	276	40.1		Pumping
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→				340:1	Producing	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

CONFIDENTIAL

Lease Serial No.
NM-104730

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.

Sundance Federal #31

9. AFI Well No.

30-015-33674

10. Field and Pool, or Exploratory

Sand Dunes Delaware West

11. Sec., T., R., M., on Block and

Survey or Area 4/T24S/R31E

12. County or Parish

Eddy County

13. State

NM

17. Elevations (DF, RKB, RT, GL)*

3430

ACCEPTED FOR RECORD
Pumping

JAN 10 2005

LES BABYAK
PETROLEUM ENGINEER

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):

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.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
Basal Anhydrite	4082				
Delaware Lime	4308				
Bell Canyon	4336				
Cherry Canyon	5234				
Manzanita	5393				
Brushy Canyon	6465				
Bone Spring	8174				

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

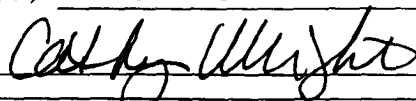
☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
☒ Sundry Notice for plugging and cement verification
☐ Core Analysis
☒ Other: C-104

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Cathy Wright

Title Sr Eng Tech

Signature



Date

1/6/05

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APDF) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
 Pogo Producing Company

3a. Address
 P.O. Box 10340, Midland, TX

3b. Phone No. (include area code)
 432-685-8100

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

660' FSL & 660' FEL, Section 4, T24S, R31E

5. Lease Serial No.

NM-104730

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Sundance Federal #31

9. API Well No.

30-015-33674

10. Field and Pool, or Exploratory Area

Sand Dunes Delaware West

11. County or Parish, State

Eddy County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Drilling operations
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Intermediate Csg - Drld 11" hole to 4250'. TD reached @ 0:00 hrs 11/07/04. Ran 98 jts 8-5/8" 32# J-55 ST&C csg. Cmt w/ 1250 sks Lite @ 12.4 ppg followed by 200 sks Cl "C" + 2% CaCl2 @ 14.8 ppg. Plug down @ 0:00 hrs 11/08/04. Circ 270 sks to surface. WOC 24 hrs. Make cut-off. Install WH. NU BOP's & test ok.

TD & Prod Csg - Drld 7-7/8" hole to 8339'. TD reached @ 08:00 hrs 11/15/04. Logged well w/ Baker Atlas. Ran 201 jts 4-1/2" 11.6# J-55 & N-80 ST&C csg. Cmt'd 1st stage w/ 750 sks Cl H + additives @ 15.7 ppg. Circ 35 sks to surface. Cmt'd 2nd stage w/ 750 sks Cl C + additives @ 14.1 ppg. Circ 47 sks to surface. Cmt'd 3rd stage w/ 420 sks Cl C @ 12.4 ppg followed by 100 sks Cl "C" Neat @ 14.8 ppg. Cric 27 sks to surface. CBL ran 11/25/04. TOC @ 900' FS.

14. I hereby certify that the foregoing is true and correct
 Name (Printed/Typed)

Cathy Wright

Signature

Cathy Wright

Title Sr Eng Tech

Date 1/6/05

ACCEPTED FOR RECORD

JAN 10 2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Office

LES BABYAK
 PETROLEUM ENGINEER

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)