

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 04 2013

FORM APPROVED  
OMB NO. 1004-0137  
Expires: October 31, 2014

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other <input type="checkbox"/> Diff. Resvr. b. Type of Completion: <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other: _____						5. Lease Serial No. NMNM 109398			
2. Name of Operator Logos Operating, LLC						6. If Indian, Allottee or Tribe Name			
3. Address 4001 North Butler Ave, Building 7101 Farmington, NM 87401						7. Unit or CA Agreement Name and No. <b>Report To Lease</b>			
3a. Phone No. (include area code) 505-436-2627						8. Lease Name and Well No. Logos #5			
4. Location of Well (Report location clearly and in accordance with Federal requirements)* 671' FSL & 973' FEL At surface  Same as above.  At top prod. interval reported below  At total depth Same as above.						9. API Well No. 30-045-35423 -0002			
14. Date Spudded 01/30/2013						15. Date T.D. Reached 02/19/2013		16. Date Completed 03/13/2013 <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.	
17. Elevations (DF, RKB, RT, GL)* 6867' GL						10. Field and Pool or Exploratory Basin Dakota			
18. Total Depth: MD 6443' TVD						19. Plug Back T.D.: MD 6390' TVD		11. Sec., T., R., M., on Block and Survey or Area Sec. 4, T23N, R8W	
20. Depth Bridge Plug Set: MD TVD						12. County or Parish San Juan		13. State NM	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR/CCL/CBL/Neutron/Density/Electric						22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> 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
12-1/4"	9-5/8" J-55	36	0	343'	N/A	182 cu ft	32 bbls	surface	0
7-7/8"	5-1/2" L-80	17	0	6435'	4267'	890 sks	290 bbls	surface	0
RCUD APR 5 '13 OIL CONS. DIV. DIST. 3									
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2-7/8"	6.5# J55 5155'								
25. Producing Intervals									
Formation			Top	Bottom	Perforation Record		Size	No. Holes	Perf. Status
A) Dakota			6116'	6122'	2 SPF		0.38"	12	open
B)									
C)									
D)									
27. Acid, Fracture, Treatment, Cement Squeeze, etc.									
Depth Interval			Amount and Type of Material						
**5960'-6122'			frac w/ 2,000 gal of 12% HCl; 10,001# of 100 mesh sand; 41,545# of 40/70 sand; 4,038 BBLs of slickwater						
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
3/25/13	3/25/13	8.5	→	2.6	TSTM	84			swabbing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press. 0	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
	no tbg			7	TSTM	237		pumping	
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
			→						ACCEPTED FOR RECORD
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)

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## 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 (Solid, used for fuel, vented, etc.)  
Gas TSTM.

## 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
Ojo Alamo Kirtland	950 1164				
Fruitland Pictured Cliffs	1685 1690				
Cliffhouse Menefee	3100 3150				
Point Lookout Mancos	4040 4150				
Gallup Greenhorn	5040 5972				
Dakota	6100				

## 32. Additional remarks (include plugging procedure):

\*\*The lower Gallup perforations were frac'd with the Dakota based on the rock properties. Actual Dakota perforations 6116'-6122'.

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

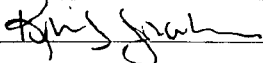
- ☐ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☐ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

## 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) Kristy Graham

Title Production Engineer

Signature



Date 04/03/2013

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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
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## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

APR 04 2013

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☒ Diff. Resvr.  
Other: \_\_\_\_\_  
Farmington Field Office  
Bureau of Land Management2. Name of Operator  
Logos Operating, LLC3. Address 4001 North Butler Ave, Building 7101  
Farmington, NM 874013a. Phone No. (include area code)  
505-436-2627

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

671' FSL & 973' FEL  
At surface

Same as above.

At top prod. interval reported below

At total depth Same as above.

14. Date Spudded  
01/30/201315. Date T.D. Reached  
02/19/201316. Date Completed 03/13/2013  
☐ D & A ☒ Ready to Prod.17. Elevations (DF, RKB, RT, GL)\*  
6867' GL18. Total Depth: MD 6443'  
TVD19. Plug Back T.D.: MD 6390'  
TVD20. Depth Bridge Plug Set: MD  
TVD

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

GR/CCL/CBL/Neutron/Density/Electric

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	9-5/8" J-55	36	0	343'	N/A	182 cu ft	32 bbls	surface	0
7-7/8"	5-1/2" L-80	17	0	6435'	4267'	890 sks	290 bbls	surface	0

RCUD APR 5 '13  
OIL CONS. DIV.  
DIST. 3

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	6.5#J55 5155'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Gallup	5180'	6034'	2 SPF	0.38"	192	open
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
	Please refer to section #32 for frac details.

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
3/17/13	3/17/13	6	→	0	0	131			flowing Please refer to section #32 for test details.
Choke Size	Flwg. Press. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
	no tbq	0	→	0	0	524		pumping	

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	Flwg. Press. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

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

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## 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 (Solid, used for fuel, vented, etc.)  
Gas TSTM.

## 30. Summary of Porous Zones (Include Aquifers):

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Fruitland Pictured Cliffs	1685 1690				
Cliffhouse Menefee	3100 3150				
Point Lookout Mancos	4040 4150				
Gallup Greenhorn	5040 5972				
Dakota	6100				

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## 32. Additional remarks (include plugging procedure):

#25 \*\*The lower Gallup perforations were frac'd with the Dakota based on the rock properties. Actual Gallup perms 5180'-6034'

#27

5180'-5196' frac w/ 2,000 gal of 12% HCl; 10,340# of 100 mesh sand; 63,250# of 40/70 sand; 70Q Foam (2,441 BBLS of slickwater and 2.14MMSCF N<sub>2</sub>)  
5253'-5324' frac w/ 2,000 gal of 12% HCl; 10,206# of 100 mesh sand; 103,450# of 40/70 sand; 70Q Foam (2,939 BBLS of slickwater and 2.47MMSCF N<sub>2</sub>)  
5370'-5400' frac w/ 2,000 gal of 12% HCl; 10,209# of 100 mesh sand; 82,763# of 40/70 sand; 5,429 BBLS of slickwater  
5616'-5770' frac w/ 2,000 gal of 12% HCl; 10,225# of 100 mesh sand; 82,094# of 40/70 sand; 5,581 BBLS of slickwater  
\*\*5960'-6122' frac w/ 2,000 gal of 12% HCl; 10,001# of 100 mesh sand; 41,545# of 40/70 sand; 4,038 BBLS of slickwater, actual Gallup perms 5180'-6034'

#28 LOGOS will file a subsequent production sundry upon recovery of frac load. Well blew dead before recovering any hydrocarbons; only recovered frac water and nitrogen.

## 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
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 ☐ Other:

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