Form 3160-4
(March 2012)

RECEIVED
MAY 23 2013
Farmington Field Office
Bureau of Land Management

Amended

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM 109399

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. Report To Lease

2. Name of Operator: Logos Operating, LLC

8. Lease Name and Well No.: Logos #6

3. Address: 4001 North Butler Ave, Building 7101, Farmington, NM 87401

3a. Phone No. (include area code): 505-436-2627

9. API Well No.: 30-045-35422 - 0001

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface: 1662' FNL & 1973' FEL

10. Field and Pool or Exploratory: Basin Dakota

11. Sec., T., R., M., on Block and Survey or Area: Sec. 8, T23N, R8W

At top prod. interval reported below: Same as above.

CONFIDENTIAL

At total depth: Same as above.

12. County or Parish: San Juan

13. State: NM

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, RKB, RT, GL)*
02/06/2013	02/28/2013	☐ D & A ☑ Ready to Prod. 05/04/2013	6896' GL

18. Total Depth: MD / TVD	19. Plug Back T.D.: MD / TVD	20. Depth Bridge Plug Set: MD / TVD
6230'	6175'	

21. Type Electric & 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	333'	N/A	101 sks	29 bbls	surface	0
7-7/8"	5-1/2" P-110	17	0	6220'	4165'	872 sks	284 bbls	surface	0

RCVD MAY 23 '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 5092'							

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Dakota	5996'	5996'	2 SPF	0.38"	1	open
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
**5874'-5996'	Frac with 48 bbls of 15% HCl; 10,657# of 100 mesh sand; 39,813# of 40/70 sand; 4,337 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
5/12/13	5/12/13	24	→	0	0	0			flowing Please refer to section #32 for test details.

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
		0	→	0	0	0		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	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					

ACCEPTED FOR RECORD
MAY 23 2013
FARMINGTON FIELD OFFICE
BY William Tambekou

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

NMOCD

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	873		Dakota 6070		
Kirtland	1080				
Fruitland	1502				
Pictured Cliffs	1570				
Cliffhouse	3038				
Menefee	3065				
Point Lookout	3970				
Mancos	4150				
Niobrara A	4990				
Niobrara B	5015				
Niobrara C	5100				
Carlisle	5710				
Greenhorn	5930				
Graneros	5990				

32. Additional remarks (include plugging procedure):

#27
**5874'-5996' The lower Gallup perforations were frac'd with the Dakota based on the rock properties. Actual Dakota perf 5996'.

#28
LOGOS will file a subsequent production allocation sundry upon recovery of frac load. These initial tests are not representative of true production potential due to a large volume of frac fluid.

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 05/22/2013

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.

(Continued on page 3)

Form 3160-4
(March 2012)

RECEIVED
MAY 23 2013
Farmington Field Office
Bureau of Land Management

Amended

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM 109399

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. Report To Lease

2. Name of Operator: Logos Operating, LLC

8. Lease Name and Well No.: Logos #6

3. Address: 4001 North Butler Ave, Building 7101, Farmington, NM 87401

3a. Phone No. *(include area code)*: 505-436-2627

9. API Well No.: 30-045-35422 -00C2

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

At surface: 1662' FNL & 1973' FEL

At top prod. interval reported below: Same as above.

CONFIDENTIAL

At total depth: Same as above.

10. Field and Pool or Exploratory: Nageezi Gallup

11. Sec., T., R., M., on Block and Survey or Area: Sec. 8, T23N, R8W

12. County or Parish: San Juan

13. State: NM

14. Date Spudded: 02/06/2013

15. Date T.D. Reached: 02/28/2013

16. Date Completed: 05/04/2013 ☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*: 6896' GL

18. Total Depth: MD 6230' TVD

19. Plug Back T.D.: MD 6175' TVD

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & 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	333'	N/A	101 sks	29 bbls	surface	0
7-7/8"	5-1/2" P-110	17	0	6220'	4165'	872 sks	284 bbls	surface	0

RCVD MAY 23 '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 5092'							

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Gallup	5108'	5388'	3 SPF	0.38"	108	open
B) Sanostee	5580'	5730'	2 SPF	0.38"	42	open
C) Greenhorn	5874'	5982'	2 SPF	0.38"	33	open
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
5/12/13	5/12/13	24	→	25	0	20			flowing Please refer to section #32 for test details.

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
		0	→	25	0	20		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	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					

ACCEPTED FOR RECORD
MAY 23 2013
FARMINGTON FIELD OFFICE
BY William Tambekou

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

NMOCD

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	873		Dakota 6070		
Kirtland	1080				
Fruitland	1502				
Pictured Cliffs	1570				
Cliffhouse	3038				
Menefee	3065				
Point Lookout	3970				
Mancos	4150				
Niobrara A	4990				
Niobrara B	5015				
Niobrara C	5100				
Carlisle	5710				
Greenhorn	5930				
Graneros	5990				

32. Additional remarks (include plugging procedure):

#27
5108'-5150' Frac with 48 bbls of 15% HCl; 9,377# 100 mesh sand; 77,093# of 40/70 sand; 5,521 bbls of slickwater
5192'-5272' Frac with 48 bbls of 15% HCl; 10,078# of 100 mesh; 103,153# of 40/70 sand; 70Q Foam (2,619 bbls of Slickwater and 2.53 MMSCF N2)
5324'-5388' Frac with 48 bbls of 15% HCl; 10,668# of 100 mesh sand; 79,874# of 40/70 sand; 70Q Foam (2,344 bbls of slickwater and 2.34 MMSCF N2)
5580'-5730' Frac with 48 bbls of 15% HCl; 10,000# of 100 mesh sand; 82,440# of 40/70 sand; 8,187 bbls of slickwater
**5874'-5996' Frac with 48 bbls of 15% HCl; 10,657# of 100 mesh sand; 39,813# of 40/70 sand; 4,337 bbls of slickwater, actual Gallup perfs 5108'-5982'

#28
LOGOS will file a subsequent production allocation sundry upon recovery of frac load. These initial tests are not representative of true production potential due to a large volume of frac fluid.

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 05/22/2013

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.

(Continued on page 3)

Form 3160-4
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAY 22 2013
Farmington Field Office
Bureau of Land Management

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM 109399

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
Report To Lease

2. Name of Operator
Logos Operating, LLC

8. Lease Name and Well No.
Logos #6

3. Address 4001 North Butler Ave, Building 7101
Farmington, NM 87401

3a. Phone No. *(include area code)*
505-436-2627

9. API Well No.
30-045-35422 — 00C1

4. Location of Well *(Report location clearly and in accordance with Federal requirements)**
At surface 1662' FNL & 1973' FEL

CONFIDENTIAL

10. Field and Pool or Exploratory
Basin Dakota

11. Sec., T., R., M., on Block and Survey or Area Sec. 8, T23N, R8W

At top prod. interval reported below Same as above.

At total depth Same as above.

12. County or Parish
San Juan

13. State
NM

14. Date Spudded
02/06/2013

15. Date T.D. Reached
02/28/2013

16. Date Completed 05/04/2013
☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*
6896' GL

18. Total Depth: MD 6230'
TVD

19. Plug Back T.D.: MD 6175'
TVD

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & 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	333'	N/A	101 sks	29 bbls	surface	0
7-7/8"	5-1/2" P-110	17	0	6220'	4165'	872 sks	284 bbls	surface	0

RCVD MAY 23 '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 5092'							

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Dakota	~~5996'~~ 5874'	5996'	1 SPF	0.38"	1 34	open
B)			2			
C)						
D)						

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

Depth Interval	Amount and Type of Material
**5874'-5996'	Frac with 48 bbls of 15% HCl; 10,657# of 100 mesh sand; 39,813# of 40/70 sand; 4,337 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
5/12/13	5/12/13	24	→	0	0	0			flowing Please refer to section #32 for test details.

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
		0	→	0	0	0		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	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					

ACCEPTED FOR RECORD
MAY 22 2013
FARMINGTON FIELD OFFICE
BY William Tambekou

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

NMOCD FV

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	873		Dakota 6070		
Kirtland	1080				
Fruitland	1502				
Pictured Cliffs	1570				
Cliffhouse	3038				
Menefee	3065				
Point Lookout	3970				
Mancos	4150				
Niobrara A	4990				
Niobrara B	5015				
Niobrara C	5100				
Carlisle	5710				
Greenhorn	5930				
Graneros	5990				

32. Additional remarks (include plugging procedure):

#27
**5874'-5996' The lower Gallup perforations were frac'd with the Dakota based on the rock properties. Actual Dakota perf 5996'.

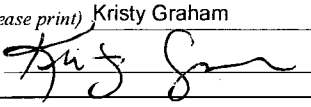
#28
LOGOS will file a subsequent production allocation sundry upon recovery of frac load. These initial tests are not representative of true production potential due to a large volume of frac fluid.

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 05/22/2013

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.

(Continued on page 3)

Form 3160-4
(March 2012)

RECEIVED
MAY 22 2013
Farmington Field Office
Bureau of Land Management

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM 109399

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. Report To Lease

2. Name of Operator: Logos Operating, LLC

8. Lease Name and Well No.: Logos #6

3. Address: 4001 North Butler Ave, Building 7101, Farmington, NM 87401

3a. Phone No. *(include area code)*: 505-436-2627

9. API Well No.: 30-045-35422-00C2

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

At surface: 1662' FNL & 1973' FEL

At top prod. interval reported below: Same as above.

CONFIDENTIAL

At total depth: Same as above.

10. Field and Pool or Exploratory: Nageezi Gallup

11. Sec., T., R., M., on Block and Survey or Area: Sec. 8, T23N, R8W

12. County or Parish: San Juan

13. State: NM

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, RKB, RT, GL)*
02/06/2013	02/28/2013	☐ D & A ☑ Ready to Prod. 05/04/2013	6896' GL

18. Total Depth:	19. Plug Back T.D.:	20. Depth Bridge Plug Set:
MD 6230' TVD	MD 6175' TVD	MD TVD

21. Type Electric & 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	333'	N/A	101 sks	29 bbls	surface	0
7-7/8"	5-1/2" P-110	17	0	6220'	4165'	872 sks	284 bbls	surface	0

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 5092'							

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Gallup	5180'	5388'	3 SPF	0.38"	108	open
B) Sanostee	5580'	5730'	2 SPF	0.38"	42	open
C) Greenhorn	5874'	5982'	2 SPF	0.38"	33	open
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
5/12/13	5/12/13	24	→	25	0	20			flowing Please refer to section #32 for test details.

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
		0	→	25	0	20		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	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
			→					

ACCEPTED FOR RECORD
MAY 22 2013
FARMINGTON FIELD OFFICE
BY William Tambekou

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

NMOCD

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	873		Dakota 6070		
Kirtland	1080				
Fruitland	1502				
Pictured Cliffs	1570				
Cliffhouse	3038				
Menefee	3065				
Point Lookout	3970				
Mancos	4150				
Niobrara A	4990				
Niobrara B	5015				
Niobrara C	5100				
Carlisle	5710				
Greenhorn	5930				
Graneros	5990				

32. Additional remarks (include plugging procedure):

#27
5108'-5150' Frac with 48 bbls of 15% HCl; 9,377# 100 mesh sand; 77,093# of 40/70 sand; 5,521 bbls of slickwater
5192'-5272' Frac with 48 bbls of 15% HCl; 10,078# of 100 mesh; 103,153# of 40/70 sand; 70Q Foam (2,619 bbls of Slickwater and 2.53 MMSCF N2)
5324'-5388' Frac with 48 bbls of 15% HCl; 10,668# of 100 mesh sand; 79,874# of 40/70 sand; 70Q Foam (2,344 bbls of slickwater and 2.34 MMSCF N2)
5580'-5730' Frac with 48 bbls of 15% HCl; 10,000# of 100 mesh sand; 82,440# of 40/70 sand; 8,187 bbls of slickwater
**5874'-5996' Frac with 48 bbls of 15% HCl; 10,657# of 100 mesh sand; 39,813# of 40/70 sand; 4,337 bbls of slickwater, actual Gallup perfs 5108'-5982'

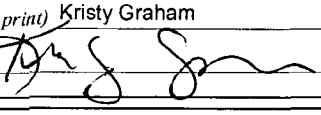
#28
LOGOS will file a subsequent production allocation sundry upon recovery of frac load. These initial tests are not representative of true production potential due to a large volume of frac fluid.

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 05/22/2013

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.

(Continued on page 3).