Form 3160-4
(August 2007)

AMENDED

RECEIVED
JAN 29 2015
Farmington Field Office

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: SF-078487-C

1a. Type of Well: [ ] Oil Well [X] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [X] 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.:

2. Name of Operator: **Burlington Resources Oil & Gas Company**

8. Lease Name and Well No.: **SUNRAY 1M**

3. Address: **PO Box 4289, Farmington, NM 87499**

3a. Phone No. *(include area code)*: **(505) 326-9700**

9. API Well No.: **30-045-35544 - 00C1**

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

At surface: **UNIT A (NENE) 999' FNL & 699' FEL**

10. Field and Pool or Exploratory: **Basin Dakota**

11. Sec., T., R., M., on Block and Survey or Area: **Sec. 5, T29N, R8W**

At top prod. Interval reported below: **UNIT H (SENE) 1957' FNL & 705' FEL**

At total depth: **UNIT H (SENE) 1957' FNL & 705' FEL**

12. County or Parish: **San Juan**

13. State: **NM**

14. Date Spudded: **11/14/2014**

15. Date T.D. Reached: **11/29/2014**

16. Date Completed: **1/15/2015-GRU** [ ] D & A [X] Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*: **GL - 6284'; KB - 6301'**

18. Total Depth: **MD-7680' / TVD 7520'**

19. Plug Back T.D.: **MD-7675'/TVD-7515**

20. Depth Bridge Plug Set: MD / TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each): **GR/CCL/CBL**

22. Was well cored? [X] No [ ] Yes (Submit analysis)
Was DST run? [X] No [ ] Yes (Submit report)
Directional Survey? [ ] No [X] 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" H-40	32.3#	0	228'	n/a	131Type I-II	36	0	0 bbls
8-3/4"	7", J-55	23#	0	3852'	n/a	533 sx Prem Lite	193	0	21 bbls
6-1/4"	4-1/2" L-80	11.6#	0	7676'	n/a	280 sx Prem Lite	100	2600'	

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",	7591'							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	Dakota	7450'	7640'	7440' - 7640' (see completion detail for exact placement)	.28"	50	open
B)							
C)							
D)							

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

Depth Interval	Amount and Type of Material
7440' - 7640'	Acid-10 bbls 15 % HCL; Frac - 1110 bbls 70Q N2 foam w/61,525# 20/40 AZ sand & 2,044 mscf N2

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
GRC 1/15/2014	1/19/2015	1	→	Trace	24	Trace			Flowing

Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
1/2"	SI 487	419	→	Trace	585	10		

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)

RECEIVED
FEB 03 2015
NMOCD
ACCEPTED FOR RECORD
DISTRICT III
FEB 02 2015
FARMINGTON FIELD OFFICE
BY: William Tambekou

NMOCD

3

Amended

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
			→					

RECEIVED
FEB 08 2015
NMOCD
DISTRICT III

29. Disposition of Gas *(Solid, 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 test, 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	1919	2107	White, cr-gr ss	**Ojo Alamo**	**1919**
Kirltand	2108	2786	Gry sh interbedded w/tight, gry, fine-gr ss.	**Kirltand**	**2108**
Fruitland	2787	3113	Dk gry-gry carb sh, coal, grn silts, light-med gry, tight, fine gr ss.	**Fruitland**	**2787**
Pictured Cliffs	3114	3238	Bn-Gry, fine grn, tight ss.	**Pictured Cliffs**	**3114**
Lewis	3239	3881	Shale w/ siltstone stingers	**Lewis**	**3239**
Huerfanito Bentonite	3882	4105	White, waxy chalky bentonite	**Huerfanito Bentonite**	**3882**
Chacra	4106	4642	Gry fn grn silty, glauconitic sd stone w/ drk gry shale	**Chacra**	**4106**
Mesa Verde	4643	4912	Light gry, med-fine gr ss, carb sh & coal	**Mesa Verde**	**4643**
Menefee	4913	5315	Med-dark gry, fine gr ss, carb sh & coal	**Menefee**	**4913**
Point Lookout	5316	5691	Med-light gry, very fine gr ss w/ frequent sh breaks in lower part of formation	**Point Lookout**	**5316**
Mancos	5692	6582	Dark gry carb sh.	**Mancos**	**5692**
Gallup	6583	7332	Lt. gry to brn calc carb micac gluac silts & very fine gry gry ss w/ irreg. interbed sh.	**Gallup**	**6583**
Greenhorn	7333	7380	Highly calc gry sh w/ thin lmst.	**Greenhorn**	**7333**
Graneros	7381	7423	Dk gry shale, fossil & carb w/ pyrite incl.	**Graneros**	**7381**
Dakota	7423	7680	Lt to dark gry foss carb sl calc sl sitty ss w/ pyrite incl thin sh bands cly Y shale breaks	**Dakota**	**7423**
Morrison			Interbed grn, brn & red waxy sh & fine to coard grn ss	**Morrison**	**0**

32. Additional remarks (include plugging procedure):

This is a commingled MV/DK well being commingled per DHC 3894AZ

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)* **Denise Journey** Title **Staff Regulatory Technician**

Signature Denise Journey Date **2/6/2015**

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)

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.)*

sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem test, 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	966	1005	White, cr-gr ss	**Ojo Alamo**	966
Kirltand	1006	2311	Gry sh interbedded w/tight, gry, fine-gr ss. Dk gry-gry carb sh, coal, grn silts, light-med gry, tight, fine gr ss.	**Kirltand**	1006
Fruitland	2312	2624		**Fruitland**	2312
Pictured Cliffs	2625	2801	Bn-Gry, fine grn, tight ss.	**Pictured Cliffs**	2625
Lewis	2802	3332	Shale w/ siltstone stingers	**Lewis**	2802
Huerfanito Bentonite	3333	3690	White, waxy chalky bentonite	**Huerfanito Bentonite**	3333
Chacra	3691	4157	Gry fn grn silty, glauconitic sd stone w/ drk gry shale	**Chacra**	3691
Mesa Verde	4158	4407	Light gry, med-fine gr ss, carb sh & coal	**Mesa Verde**	4158
Menefee	4408	4934	Med-dark gry, fine gr ss, carb sh & coal	**Menefee**	4408
Point Lookout	4935	5304	Med-light gry, very fine gr ss w/ frequent sh breaks in lower part of formation	**Point Lookout**	4935
Mancos	5305	6223	Dark gry carb sh.	**Mancos**	5305
Gallup	6224	6966	Lt. gry to brn calc carb micac gluac silts & very fine gry gry ss w/ irreg. interbed sh.	**Gallup**	6224
Greenhorn	6967	7024	Highly calc gry sh w/ thin lmst.	**Greenhorn**	6967
Graneros	7025	7084	Dk gry shale, fossil & carb w/ pyrite incl.	**Graneros**	7025
Dakota	7085	7225	Lt to dark gry foss carb sl calc sl silty ss w/ pyrite incl thin sh bands cly Y shale breaks	**Dakota**	7085
Morrison			Interbed grn, brn & red waxy sh & fine to coard grn ss	**Morrison**	0

32. Additional remarks (include plugging procedure):

This is a commingled MV/DK well being commingled per DHC 3894AZ

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)* **Denise Journey** Title **Staff Regulatory Technician**

Signature Denise Journey Date **1/28/2015**

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)