

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECCOMPLETION REPORT AND LOG

FORM APPROVED

OMB NO. 1004-0137

Expires: November 30, 2000

5. Lease Serial No.

SF-078095A

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.

Horton #1B

9. API Well No.

30-045-30165

10. Field and Pool, or Exploratory

Blanco-Mesaverde

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

Survey or Area 7 T31N R11W

12. County or Parish

San Juan

13. State

NM

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

6250 KB 6238 GL

2. Name of Operator

Hallador Petroleum, LLP

3. Address

1660 Lincoln St., Suite 2700, Denver CO 80264

3a. Phone No. (include area code)

303 839-5504

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

At surface

2370' fsl, 1750' fel, Sec 7 T31N R11W

At top prod. interval reported below same

At total depth

same

14. Date Spudded

04/23/00

15. Date T.D. Reached

05/01/00

16. Date Completed

☐ D & A ☒ Ready to
08/21/00

18. Total Depth: MD 7490
TVD

19. Plug Back T.D.: MD 5575
TVD

20. Depth Bridge Plug Set: MD
TVD

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

High Res. Induction, Spectral Density Epithermal Neutron, High Res. T

22. Was well cor ☒ No ☐ Yes (Submit copy)

Was DST run ☒ No ☐ Yes (Submit copy)

Directional Surve ☒ 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
12-1/4	9-5/8	K-55 36	surface	219	219	127		surface CIR	
8-3/4	7	K-55 20	surface	3173	3173	491		surface CIR	
6-1/8	4-1/2	J-55 11.6	2748	7331	7331	288		5124 CBL	
	4-1/2		2748	7331	2748	120		2748 CIR	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth	Size	Depth Set (MD)	Packer Set (MD)
2-3/8	5130							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Mesaverde	4908	5365	4908-5365	1/2"	38	open
B)			4346-4626	1/2"	39	squeezed
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and type of Material
4908-5565	150,000# 20/40 sand with nitrogen foamed slick water frac
4346-4626	160,000# 20/40 sand with nitrogen foamed slick water frac
4346-4626	32.5 bbls cement squeeze
4346-4626	31.5 bbls cement squeeze

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
08/21/00	08/22/00	24	→	0	633	0			Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Well Status	
1/2"	155	420	→	0	633	0		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	Oil Gravity Corr. API	Well Status	
			→						

(See instructions and spaces for additional data on reverse side)

NMOC

FARMINGTON FIELD OFFICE

SEP 04 2000

ACCEPTED FOR RECORD

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water B3L	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
Nacimiento	surface	1024	water zone	Nacimiento	surface
Ojo Alamo	1024	1099	water zone	Ojo Alamo	1024
Fruitland	2370	2833	gas zone	Kirtland Shale	1099
Pictured Cliffs	2833	3010	gas zone	Fruitland	2370
Lewis Shale	3010	4398	gas zone	Pictured Cliffs	2833
Cliff House	4398	4632	gas zone	Lewis Shale	3010
Menefee	4632	5032	gas zone	Cliff House	4398
Point Lookout	5032	5448	gas zone	Menefee	4632
Dakota	7230		gas zone	Point Lookout	5032
				Macos Shale	5448
				Dakota	7230
				all tops measured from KB	

32. Additional remarks (include plugging procedure):

perf 4 holes @ 5111, squeeze 122 sacks cement, cement top 5030 CBL. Perf 4 holes @ 5010, squeeze 95 sacks cement, cement top 4900 CBL. Perf 4 holes @ 4860, squeeze 50 sacks cement, cement top 4848 CBL. Perf 4 holes @ 4650, squeeze 85 sacks cement, cement top 4030 CBL. Squeeze lap at 2748 with 120 sacks cement, cement top 2748 CIR.

33. Circle enclosed attachments:

- | | | | |
|--|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verificatio | 5. Core Analysis | 7. Other | |

36. 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) Timothy Lovseth

Title Manager of Exploration and Geology

Signature

Date

8/25/00

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 U States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.