Form 3160-4
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2018

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. **NMSF-078138**

1a. Type of Well: [ ] Oil Well [X] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [ ] New Well [ ] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr.,
Other: **RECOMPLETE - AMENDED**

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator: **Hilcorp Energy Company**

8. Lease Name and Well No.: **Federal B 2**

3. Address: **382 Road 3100, Aztec, NM 87410**

3a. Phone No. *(include area code)*: **(505) 599-3400**

9. API Well No.: **30-045-32860**

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

At surface: **Unit I (NESE), 2200' FSL & 665' FEL**

At top prod. Interval reported below: **Same as above**

At total depth: **Same as above**

10. Field and Pool or Exploratory: **Blanco Mesaverde**

11. Sec., T., R., M., on Block and Survey or Area: **Sec. 28, T30N, R11W**

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

13. State: **New Mexico**

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, RKB, RT, GL)*
8/15/2005	8/26/2005	2/2/2019 [ ] D & A [X] Ready to Prod.	6076'

18. Total Depth:	19. Plug Back T.D.:	20. Depth Bridge Plug Set:
7343'	7298'	MD TVD

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

22. Was well cored? [X] No [ ] Yes (Submit analysis)
Was DST run? [X] No [ ] Yes (Submit report)
Directional Survey? [X] 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"	8 5/8" J-55	24#	0	366'	n/a	250 sx			None
7-7/8"	5 1/2" J-55	15.5#	0	7341'	n/a	1300 sx			None

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"	6992'							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	Menefee	4424'	4682'	1 SPF	.34"	24	open
B)	Point Lookout	4738'	5000'	1 SPF	.34"	30	open
C)							
D)	TOTAL					54	

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

Depth Interval	Amount and Type of Material
4424'-4682'	Frac'd w/ 150,913# 20/40 AZ sand / 126,537 Gal #20 gel foam / 1.55M SCF N2 @ 70Q, flushed w/105 fluid bbls
4738'-5000'	Frac'd w/ 150,967# 20/40 AZ sand / 115,044 Gal #20 gel foam / 1.21M SCF N2 @ 70Q, flushed w/132 fluid bbls

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FARMINGTON FIELD OFFICE
By:

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
2/4/2019	2/1/2019	1	→	0	88	4	N/A	N/A	Flowing

Choke Size	Tbg. Press. flowing	Csg. Press Flowing	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
1"	80	N/A	→	0	2126	96	N/A	Flowing

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
			→					

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FEB 22 2019
DISTRICT III

*(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.)*

vented

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	**958'**	**1127'**	White, cr-gr ss	**Ojo Alamo**	**958'**
Kirltand	**1127'**	**2070'**	Gry sh interbedded w/tight, gry, fine-gr ss.	**Kirtland**	**1127'**
Fruitland	**2070'**	**2394'**	Dk gry-gry carb sh, coal, grn silts, light-med gry, tight, fine gr ss.	**Fruitland**	**2070'**
Pictured Cliffs	**2394'**	**2546'**	Bn-Gry, fine grn, tight ss.	**Pictured Cliffs**	**2394'**
Lewis	**2546'**	**3356'**	Shale w/ siltstone stingers	**Lewis**	**2546'**
Chacra	**3356'**	**4080'**	Gry fn grn silty, glauconitic sd stone w/ drk gry shale	**Chacra**	**3356'**
Mesa Verde	**4080'**	**4149'**	Light gry, med-fine gr ss, carb sh & coal	**Mesaverde**	**4080'**
Menefee	**4149'**	**4758'**	Med-dark gry, fine gr ss, carb sh & coal	**Menefee**	**4149'**
Point Lookout	**4758'**	**5090'**	Med-light gry, very fine gr ss w/ frequent sh breaks in lower part of formation	**Point Lookout**	**4758'**
Mancos	**5090'**	**5972'**	Dark gry carb sh.	**Mancos**	**5090'**
Gallup	**5972'**	**6712'**	Lt. gry to brn calc carb micac gluac silts & very fine gry gry ss w/ irreg. interbed sh.	**Gallup**	**5972'**
Greenhorn	**6712'**	**6770'**	Highly calc gry sh w/ thin lmst.	**Greenhorn**	**6712'**
Graneros	**6770'**	'	Dk gry shale, fossil & carb w/ pyrite incl.	**Graneros**	**6770'**
Dakota			Lt to dark gry foss carb sl calc sl sitty ss w/ pyrite incl thin sh bands cly Y shale breaks	**Dakota**	'

32. Additional remarks (include plugging procedure):

This well is now producing as a Blanco Mesaverde/Basin Dakota commingled well, per DHC 4074AZ.

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)* **Cherylene Weston** Title **Operations/Regulatory Technician-Sr.**

Signature Cherylene Weston Date 2-13-19

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)

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Other: **RECOMPLETE**

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14. Date Spudded: **8/15/2005**

15. Date T.D. Reached: **8/26/2005**

16. Date Completed: [ ] D & A [X] Ready to Prod. **2/2/2019**

17. Elevations (DF, RKB, RT, GL)*: **6076'**

18. Total Depth: **7343'**

19. Plug Back T.D.: **7298'**

20. Depth Bridge Plug Set: MD / TVD

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

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Was DST run? [X] No [ ] Yes (Submit report)
Directional Survey? [X] No [ ] Yes (Submit copy)

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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"	6992'							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	Menefee	4244	4682	1 SPF	.34"	24	open
B)	Point Lookout	4738	5000	1 SPF	.34"	30	open
C)							
D)	TOTAL					54	

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

Depth Interval	Amount and Type of Material
4244-4682	Frac'd w/ 150,913# 20/40 AZ sand / 126,637 Gal #20 gel foam / 1.55M SCF N2 @ 70Q, flushed w/105 fluid bbls
4738-5000	Frac'd w/ 150,967# 20/40 AZ sand / 115,044 Gal #20 gel foam / 1.21M SCF N2 @ 70Q, flushed w/132 fluid bbls

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Choke Size	Tbg. Press. flowing	Csg. Press Flowing	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status
1"	80	N/A	→	0	2126	96	N/A	Flowing

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
			→					

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

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.)*

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Signature Cherylene Weston Date 2-6-19

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