Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Ave , Artesia, NM 88210
District III
1000 Rio Brazos Rd , Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
June 19, 2008

WELL API NO. 30-039-23213
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

7. Lease Name or Unit Agreement Name: EPCMU

1. Type of Well: Oil Well ☐ Gas Well ☒ Other
8. Well Number #33 (P-5)

2. Name of Operator: Benson-Montin-Greer Drilling Corp.
9. OGRID Number 2096

3. Address of Operator: 4900 College Blvd., Farmington, NM, 87402
10. Pool name or Wildcat: East Puerto Chiquito Mancos

4. Well Location
Unit Letter P : 660 feet from the South line and 660 feet from the East line
Section Township 26N Range 1E NMPM County Rio Arriba

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 7015' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
OTHER: Complete in Mancos formation	☒			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

BMG intends to complete EPCMU #33 (P-5) in the Mancos formation. See attached completion procedure.

Spud Date: 5/16/83 TD @ 3092' Rig Release Date: 6/27/83

NSL-5881

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Engineer DATE 8/1/08

Type or print name _____ E-mail address: _____ PHONE: _____

For State Use Only

APPROVED BY: [signature] TITLE Deputy Oil & Gas Inspector, District #3 DATE AUG 11 2008

Conditions of Approval (if any):

Benson-Montin-Greer Drilling Corp.

EPCMU # 33 (P-5)

API # 30-039-23213

Sec 5, T26N – R1E

Rio Arriba County, New Mexico

GL: 7015', KB: 7024', TD: 3092', PBTD: 2925'

Surface casing:	9 5/8" 36 lb/ft, Casing @ 104', TOC = surf
Intermediate casing:	7" 23 lb/ft, Casing @ 1865', TOC = 1010'
Production liner:	4-½" 11.6 lb/ft casing @ 2943', TOC = 2234'
Current prod tubing:	None
Current pump/ rods:	None
Current Perforated Zones:	
	None

Proposed Work: Add Greenhorn, Carlisle, Sanostee, Niobrara C, B &A.

1. General Note: All fluids entering the hole will have added **2% KCl and a biocide.**

2. Recover oil sample for off-set well for analysis by frac Service Company.

3. MIRU completion rig with rig pit, pump and BOP with accumulator. Rig is to be equipped with tubing handling equipment for 2-3/8, 2-7/8".

4. ND WH, NU BOP.

5. MI 5 - 400 bbl frac tank and fill with 2% KCl water.

6. TIH with 2-3/8" tubing, 3-¾" bit and scraper, run down to the PBTD. Check for fill. If fill is to be removed, TIH with hydrostatic bailer to clean out fill. TOOH.

7. Pressure test casing to 3800 psi.

8. MIRU stimulation company.

9. TIH with 2 3/8" tubing to 2870'. Spot 100 gal 7 ½% HCl from 2870' to 2717'. Displace acid to spot with treated 2% KCl water. TOOH.

Greenhorn

10. MIRU perforating company. Correlate to Schlumberger 5" Ind/GR log dated 6-22-83. Perforate the Greenhorn with 3-1/8" HSC and 0.34"-0.35" holes as follows:

Greenhorn

2846-2848	**2 ft**	**4jspf**	**8 holes**
2853-2855	**2 ft**	**4jspf**	**8 holes**
2866-2873	**7 ft**	**4jspf**	**28 holes**

Total perforations, 11' = 44 holes.

11. TIH with 2-3/8" tubing and 4-½" packer. Set packer @ +/- 2750'. Use pup joint to position a collar beneath the pipe rams. Close the rams above the collar. Chain down the tubing and valve, prepare for the breakdown.

12. Breakdown and balloff the Greenhorn with 1200 gallons 7-½% HCl and 60 RCN ballsealers as follows; pump treated 2% KCl water to breakdown the perfs, pump 15 bbl HCl, then slow down rate and drop 42 RCN ballsealers in the remaining 8.5 bbl HCl. Increase rate to 4 bpm while displacing acid. MAX pressure 3800 psi.

13. Un-set packer, TOOH.

14. RIH with wireline junk basket and retrieve RCN ballsealers. Count "hits" on ballsealers.

15. TIH with 2 3/8" tubing to +/- 2840'. Swab test the Greenhorn.

Carlisle/Sanostee

16. RIH and set a composite bridge plug @ +/- 2700'. Dump 5 gal sand on top of the bridge plug. Pressure test bridge plug.

17. TIH with 2 3/8" tubing to 2614'. Spot 100 gal 7 ½% HCl from 2614' to 2461'. Displace acid to spot with treated 2% KCl water. TOOH.

18. MIRU perforating company. Correlate to Schlumberger 5" Ind/GR log dated 6-22-83. Perforate the Carlisle and Sanostee with 3-1/8" HSC and 0.34"-0.35" holes as follows:

Sanostee

2513-2520	**7 ft**	**2jspf**	**14 holes**

Carlisle

2588-2591	**3 ft**	**4jspf**	**12 holes**
2596-2598	**2 ft**	**4jspf**	**8 holes**
2609-2611	**3 ft**	**4jspf**	**12 holes**
2615-2617	**2 ft**	**4 jspf**	**8 holes**

Total perforations, 17' = 54 holes.

19. TIH with 2-3/8" tubing and 4-½" packer. Set packer @ +/- 2535'. Use pup joint to position a collar beneath the pipe rams. Close the rams above the collar. Chain down the tubing and valve, prepare for the breakdown.

20. Breakdown and balloff the Carlisle with 500 gallons 7-½% HCl and 60 RCN ballsealers. Displace with treated 2% KCl water. MAX pressure 3800 psi. TOOH with tubing and packer.

21. TIH with tubing, packer and RBP. Trip down to push ballsealers off the perfs to the BP. Set RBP @ +/- 2550' and set packer @ + /- 2450'.

22. Breakdown the Sanostee with 500 gallons 7-½% HCl. Displace with treated 2% KCl water. MAX pressure 3800 psi.

23. Swab test the Sanostee.

24. Trip down and retrieve RBP @ 2550'. Set RBP @ 2700'. Set packer @ 2535'.

25. Swab test the Carlisle.

26. Fill 3 – 400 bbl frac tanks with 2% KCl water.

27. TIH with 2 7/8" N-80 frac string made up as follows; 4 ½" packer, 4 jts 2 3/8" N-80 frac string, 2 7/8" N-80 frac string to surface. Set packer @ 2550. Install flanged frac head and 10K frac valve.

28. MIRU stimulation company, prepare to fracture stimulate the Carlisle with 40000# 20/40 mesh sand and 30000 gal 15# XL gel at +/- 25 bpm via frac string as follows:

    Pump 6000 gal 15 ppt XL gel as pad
    Pump 12000 gal 15 ppt XL gel w/ 1 ppg 20/40 mesh sand
    Pump 8000 gal 15 ppt XL gel w/ 2 ppg 20/40 mesh sand
    Pump 4000 gal 15 ppt XL gel w/ 3 ppg 20/40 mesh sand
    Pump 650 gal linear gel as flush

    Est STP = 2500-3500 psi.

    Switch to the blender tub by-pass. Start flush when sand at the INLINE DESIOMETER reads 1 ppg. . Flush to the top perforation.
    SD, obtain ISIP, 5, 10 and 15 min SI pressures.

29. Wait 2 hour or until the pressure has dropped to zero.

30. Remove frac valve and frac flange. Unset packer and TOOH with frac string.

31. TIH with frac string, RBP and packer. Set RBP @ 2550'. Set packer to +/- 2470'.

32. MIRU stimulation company, prepare to fracture stimulate the Sanostee with 40000# 20/40 mesh sand and 30000 gal 15# XL gel at +/- 25 bpm via frac string as follows:

Pump 6000 gal 15 ppt XL gel as pad
Pump 12000 gal 15 ppt XL gel w/ 1 ppg 20/40 mesh sand
Pump 8000 gal 15 ppt XL gel w/ 2 ppg 20/40 mesh sand
Pump 4000 gal 15 ppt XL gel w/ 3 ppg 20/40 mesh sand
Pump 650 gal linear gel as flush

Est STP = 2500-3500 psi.

Switch to the blender tub by-pass. Start flush when sand at the INLINE DESIOMETER reads 1 ppg. . Flush to the top perforation.
SD, obtain ISIP, 5, 10 and 15 min SI pressures.

33. Wait 2 hour for gel to break.

34. Flow well, swab as needed to recover frac fluid and test the Sanostee interval.

35. Trip down, clan off the RBP and retrieve the RBP. TOOH with the frac string.

36. TIH with 2 3/8" tubing and test the combined Carlisle and Sanostee intervals.

Niobrara A, B & C

37. RIH and set a composite bridge plug @ +/- 2250'. Pressure test bridge plug.

38. MIRU perforating company. Correlate to Schlumberger 5" Ind/GR log dated 6-22-83. Perforate the Niobrara A, B and C with 3-1/8" HSC and 0.34"-0.35" holes as follows:

Niobrara A

1968-1972	**4 ft**	**1jspf**	**4 holes**
1993-1997	**4 ft**	**1 jspf**	**4 holes**

Niobrara B

2034-2038	**4 ft**	**1jspf**	**4 holes**
2050-2052	**2 ft**	**1jspf**	**2 holes**
2056-2058	**2 ft**	**1jspf**	**2 holes**
2065-2067	**2 ft**	**2 jspf**	**4 holes**
2074-2076	**2 ft**	**2 jspf**	**4 holes**

Niobrara C

2165-2169	**4 ft**	**2jspf**	**8 holes**

Total perforations, 24' = 32 holes.

39. TIH with 2-3/8" tubing and 4-½" packer. Set packer @ +/- 2100'. Use pup joint to position a collar beneath the pipe rams. Close the rams above the collar. Chain down the tubing and valve, prepare for the breakdown.

Niobrara C

40. Breakdown the Niobrara C with 200 gallons 7-½% HCl. Displace with treated 2% KCl water. MAX pressure 3800 psi.

41. Swab test the Niobrara C.

42. Fill 2 – 400 bbl frac tanks with 2% KCl water.

43. TIH with 2 7/8" N-80 frac string made up as follows; 4 ½" packer, 4 jts 2 3/8" N-80 frac string, 2 7/8" N-80 frac string to surface. Set packer @ 2180. Install flanged frac head and 10K frac valve.

44. MIRU stimulation company, prepare to fracture stimulate the Niobrara C with 20000# 20/40 mesh sand and 15000 gal 15# XL gel at +/- 20 bpm via frac string as follows:

Pump 3000 gal 15 ppt XL gel as pad
Pump 6000 gal 15 ppt XL gel w/ 1 ppg 20/40 mesh sand
Pump 4000 gal 15 ppt XL gel w/ 2 ppg 20/40 mesh sand
Pump 2000 gal 15 ppt XL gel w/ 3 ppg 20/40 mesh sand
Pump 600 gal linear gel as flush

Est STP = 2500-3500 psi.

Switch to the blender tub by-pass. Start flush when sand at the INLINE DESIOMETER reads 1 ppg. . Flush to the top perforation.
SD, obtain ISIP, 5, 10 and 15 min SI pressures.

45. Wait 2 hour for gel to break.

Niobrara A & B

46. TIH and set a composite BP @ +/- 2120'. Dump 5 gal sand on top of the BP. TOOH.

47. MIRU stimulation company. Breakdown and balloff the Niobrara A & B with 750 gal 7 ½% HCl and 40 RCN ballsealers down 4 1/2" casing. MAX pressure 3800 psi.

48. RIH with WL junk basket and retrieve ballsealers. Count the "hits" on the ballsealers.

49. MIRU stimulation company, prepare to fracture stimulate the Niobrara A & B with 75000# 20/40 mesh sand and 55000 gal 15# XL gel at +/- 45 bpm via casing as follows:

Pump 10000 gal 15 ppt XL gel as pad
Pump 20000 gal 15 ppt XL gel w/ 1 ppg 20/40 mesh sand
Pump 20000 gal 15 ppt XL gel w/ 2 ppg 20/40 mesh sand
Pump 5000 gal 15 ppt XL gel w/ 3 ppg 20/40 mesh sand
Pump 1250 gal linear gel as flush

Est STP = 1500-2500 psi.

Switch to the blender tub by-pass. Start flush when sand at the INLINE DESIOMETER reads 1 ppg. . Flush to the top perforation.
SD, obtain ISIP, 5, 10 and 15 min SI pressures.

50. Begin flow back and clean up of the Niobrara A, B.

51. TIH with tubing, check for sand fill. Swab test the Niobrara A&B.

52. TIH with 2 3/8" tbg and bit, drill out the composite bridge plug set @ 2120'.

53. Test the Niobrara A, B and C together.

54. TIH with 2 3/8" tbg and drill bit, drill out the composite bridge plugs @ 2250'and 2700'. Clean out to PBTD.

55. TIH with the 2-3/8" production string made up as follows: Collar, 1 jt 2-3/8" tbg, perf sub, SN, 10 jts 2-3/8" tubing, tubing anchor and 2-3/8" tbg to surface. Land tubing with EOT @ +/- 2900'.

56. Test the complete interval as determined by the results of the previous swab tests.

57. If needed place well on pump and pump well while producing casing gas.

All 7 ½% HCl acid is to contain:
1 gpt low-temp corrosion inhibitor
2 gpt MA-844 surfactant
10 gpt citric acid sequestering agent
NE agent as determined by lab tests

Treated 2% KCl water is to contain: (To be furnished by stimulation company.)
2 gpt MA-844 surfactant
0.5 gpt clay stabilizer
NE agent as determined by lab tests

All Frac fluid is to contain:

- **15 ppt refined guar gelling agent**
- **2 gpt MA-844 surfactant**
- **0.5gpt clay stabilizer**
- **Crosslinking agent as determined by lab tests**
- **Low temperature breaker system as determined by lab tests**
- **NE agent as determined by lab tests**

Treated 2% KCl gel water is to contain:

- **15 ppt refined guar gelling agent**
- **2 gpt MA-844 surfactant**
- **0.5 gpt clay stabilizer**
- **Low temperature breaker system**

NE agent as determined by lab tests

Initiated by:
Loren Diede
D-D Consulting Services, Inc.
6-2-08

Approved by: