UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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District I PO Box 1980, Hobbs, NM 88241-1980 PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV PO Box 2088, Santa Fe. NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back

OIL CONSERVATION DIVISION 2 PM Submix to Appropriate District Office PO Box 2088
Santa Fe, NM 87504-2088

State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	¹ Pool Code	³ Pool Name		
30-045-23645	71629/71599	Basin Fruitland Coal/Basin	in Dakota	
* Property Code	, k	roperty Name	' Well Number	
	Mitchell		1E	
'OGRID No.	'(' Elevation		
14538	Burlington Resou	rces Oil & Gas Company	5966' GR	

¹⁰ Surface Location

UL or lot Bo.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
F	5	31N	12W	ļ	1758	North	1850	West	San Juan
Il Pottom Unia Location If Different From Surface									

Bottom Hole Location II Different From Surface

UL or iot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County	
12 Dedicated Acre	Joint	oriafill '*	Consolidatio	n Code 15	Order No.					
W/318.36	ł	İ								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	/758	Original plat James P. Lees	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
1850'—		5	Signature Peggy Cole Printed Name Regulatory Supervisor Title 2- //- 00
			18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey
			Signature and Seal of Professional Surveyer: Certificate Number

Mitchell #1E

Recompletion Procedure

Burlington Resources Oil & Gas NE Sec 5, T31N – R12W Lat:36° 55.81' Long:108° 07.25

PROJECT SUMMARY: Plug back existing Dakota perforations and recomplete in the Fruitland Coal. Stimulate with a single stage 20# (25# pad) Delta 140 Frac, and 250,000# sand.

- ♦ 4-1/2" 11.6# K-55 Burst Pressure: 5350 psi, 80% of Burst: 4280 psi.
- 4-1/2" casing in 7-7/8" hole annular volume: 0.2278 cuft/ft (0.0406 bbl/ft).
- ♦ Capacity of 2-3/8" tubing 0.02171 cuft/ft (0.00387 bbl/ft).
- 1. Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. Take pressure reading on bradenhead, bleed off pressure if needed. NU BOP with flow tee and stripping head. NU blooie line and 2-7/8" relief line.
- 2. TOOH w/ 214 jts 1-1/2" 2.9# EUE tubing.
- 3. RU wireline unit. Round trip 3-3/4" gauge ring to 6880'. POOH.
- 4. Plug #1 (Dakota top @ 6880'.) RIH with 4-1/2" CIBP on 2-3/8" tubing. Set CIBP @ 6880'. Load casing with water and pressure test to 500#. Spot an 75' balanced plug of Class B cement on top of CIBP (Cement from 6805' to 6880'). Pull up 5 stands and reverse circulate to clean out tubing.

Slurry Volume:

1 bbl

Sks:

5 sks

Displacement:

26.3 bbl

5. Plug #2 (Gallup top @ 6050'.) Pull up with open-ended tubing to 6100'. Spot an 150' balanced plug of Class B cement straddling the Gallup formation top @ 6050' (Cement from 5975' to 6125'). Pull up 150' and reverse circulate to clean out tubing. TOOH.

Slurry Volume:

2 bbl

Sks:

10 sks

Displacement:

23.1 bbl

6. Plug #3 (Squeeze and isolate MV. MV top @ 3890'.) RU wireline unit. Perforate at 3890' (1' at 2spf). Establish injection rate from surface. Set 4-1/2" cement retainer at 3870'. Pressure test retainer. Sting into retainer. Pump 100 sks Class B cement. (100sks * 1.18cuft/sk/.2278 cuft/ft = 518 linear feet.) Sting out of retainer and spot 5 sks on top of the retainer. Pull up and reverse circulate to clean out tubing.

Slurry Volume:

22 bbl

Sks:

105 sks

Displacement:

14 bbl (leaves 5 sks for placement on retainer.)

- 7. PC Top. Zonal Isolation obtained with Cement Retainer and FTC/PC squeeze in next step.
- 8. Zonal Isolation for FTC (Top perf @ 2064' 30' above planned stimulation top perf, bottom perf @ 2441' 100' below planned stimulation bottom perf.) RU wireline unit. Perforate @ 2064' and 2441' (2 spf). RIH with 4-1/2" cement retainer, set at 2391' (50' above bottom perforation). RIH with 2-3/8" tubing, sting into retainer. Establish circulation. (If circulation cannot be established, block squeeze to give zonal isolation. Have tension set packer on location for use if necessary.) Pump 109 sks Class B cement. (Annular vol: 85.9 cuft, pump 50% excess, yield 1.18 cuft/sk). Displace with 9.3 bbl water. (Tbg Capacity: .00387bbl/ft * 2391' = 9.3 bbl.) Sting out of retainer, pull up above top perf and reverse circulate to clean out tubing. TOOH.

Slurry Volume:

23 bbl

Sks:

109 sks

Displacement:

9.3 bbl

- 9. WOC 12 hours.
- 10. TIH w/ 3-3/4" bit, clean out to 2100' (below top perforation). Pressure test casing to 500 psi to insure top perforation is covered with cement. Drill out to retainer, leaving retainer as PBTD. Pressure test casing to insure no leaks above retainer @ 2391'.
- 11. Run CBL.
- 12. Load hole with 2% KCl.
- 13. Run in hole with wireline and perforate. Perforate 4 spf 2094' 2106', 4 spf 2115' 2117', 4 spf 2204' 2207', 4 spf 2217' 2219', 4 spf 2228' 2239', 4 spf 2242'- 2246', 4 spf 2269' 2283', 4 spf 2326' 2341'. Jet Perforate 252 holes with 3-1/8 HSC-3125-306T, 12 g charge, 0.30" diameter holes, 17.48" penetration.
- 14. RU stimulation company. Test surface lines to 5000 psi. Max surface treating pressure will be 4000 psi. Keep bradenhead valve open throughout the stimulation and shutdown if returns are noticed. Bullhead 1000 gals of 10% HCL ahead of fracture treatment. Stimulate FRTC down casing string with 70 quality N2 foam using 20# X-link gel as the base fluid for the sand stages. Use 250,000# 20/40 Arizona sand. Pump at 50 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, and sand concentration with computer van. See attached treatment schedule.
- 15. Allow at least 1.5 hours for gel to break and then commence with flowback. Use a 24-hour flow back schedule. Take pitot gauges when possible.

10/64"	Choke	Approximately	2 hrs.
12/64"	Choke	Approximately	2 hrs.
14/64"	Choke	Approximately	2 hrs.
16/64"	Choke	Approximately	3 hrs.
18/64"	Choke	Approximately	3 hrs.
20/64"	Choke	Approximately	3 hrs.

Mitchell #1E/Recompletion Burlington Resources Oil & Gas 11/28/2000

24/64" Choke

Approximately 3 hrs.

32/64" Choke

Approximately 3 hrs.

Follow this schedule to utilize a 24+ hour flowback. If well begins to slug or make large amounts of sand to surface, drop to next lower choke size. If well begins to taper off in liquid production (mostly N2), change to next larger choke size before time schedule dictates.

- 16. TIH w/ 3-7/8" mill. CO to PBTD. TOOH. Clean up until sand production is at a trace and stimulation fluids are cleaned up. Pump and rods will be run in this well.
- 17. TIH w/ production tubing. Run production tubing string as follows: Purge valve will be on bottom with 2-3/8" x 10' pup joint, 2-3/8" x 6' pup joint, 2-3/8" x 4' perfortated sub and 2-3/8" seating nipple and remaining tubing. Land tubing @ 2336' (five feet above bottom perf). Obtain final pitot up tubing. Hang tubing in donut.
- 18. ND BOP, NU single tubing hanger wellhead.
- 19. Run pump and rods. TIH with new top hold down rod pump (2"x1-1/4"x10'x14' RHAC-Z), 4' section cup type plunger, three 1-1/4" sinker bars, 83 ¾" grade D sucker rods, a set of ¾" pony rods to space out, one 1-1/4"x22'-3/4" pin polished rod and one 1-1/4"x1-1/2"x10' polished rod liner.
- 20. Seat the downhole pump, hang horses head, space pump.
- 21. Load tubing, pressure test.
- 22. Start pumping unit and test. (Adjust spacing if needed).

23. RD and MOL. Turn well to production.

Recommended;

Production Engineer

Approved:

Coal Team Manager

Approved:

Drilling Manager

Drilling Manager

Vendors:

Stimulation

Halliburton/DS

325-3575/325-5096

Wireline

Basin Perforating

327-5244

Production Engineer: Leslie White 326-9717-work; 326-0321-home