

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

Sundry Notices and Reports on Wells BLM

99 MAR -4 PM 2:20

1. Type of Well
GAS

070 FARMINGTON, NM

Lease Number
SF-078438
If Indian, All. or
Tribe Name

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

7. Unit Agreement Name
San Juan 32-9 Unit

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

8. Well Name & Number
San Juan 32-9 U#1

9. API Well No.

30-045-13216

4. Location of Well, Footage, Sec., T, R, M

1650' FSL 790' FWL, Sec.18, T-31-N, R-9-W, NMPM

10. Field and Pool
Blanco Mesaverde

11. County and State
San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment

Type of Action

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other -

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to add Lewis pay to the Mesaverde formation of the subject well according to the attached procedure and wellbore diagram.

14. I hereby certify that the foregoing is true and correct.

Signed [Signature] Title Regulatory Administrator Date 3/2/99

TLW

(This space for Federal or State Office use)

APPROVED BY Chip Haraden Title Acting Team Lead Date 3/12/99

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes 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.

NMOC

San Juan 32-9 Unit #1
Lewis Shale Payadd Procedure
K 18 31N 09W
San Juan County, NM
Latitude: 36 Deg., 53.73 Min
Longitude: 107 Deg., 49.42 Min.

Summary:

The subject well is a 1999 Lewis Shale payadd in 4-1/2" casing. This well was drilled in 1952 and was open hole completed. In 1970, the subject well was sidetracked and 4-1/2" casing was run from TD to surface and cemented. The Pt. Lookout interval was stimulated w/ approximately 70,000 lbs. total sand and 66,900 gal. total slickwater. The Cliffhouse interval was stimulated w/ approximately 20,000 lbs. total sand and 20,980 gal. total slickwater and placed on production. The Lewis will be perforated and fracture stimulated in one (1) stage with 138,292 total gal. of 75Q N₂ foamed "Clearfrac" fluid and 200,000 lbs. total 20/40 mesh sand. The new stimulation technique will test the viability of "Clearfrac" and a single stage stimulation within the Lewis Shale interval. The well will then be cleaned-up, tubing landed in the Mesaverde and placed on production.

Comply to all NMOCD, BLM and BR regulations. Conduct daily safety meetings for all personnel on location. Notify BR regulatory (Peggy Bradfield 326-9727) and the appropriate Regulatory Agency prior to pumping any cement job and after CBL is run. If an unplanned cement job is required, approval is required before the job can be pumped. If verbal approval is obtained, document the approval in Dims. Allow adequate notice prior to the pump time for the Agency to witness the cementing operation.

- Inspect location and wellhead and install rig anchors prior to rig move.
 - Construct blow pit.
1. MOL, hold safety meeting and RU completion rig. Insure all safety equipment is strategically located and functioning properly. NU relief lines to blow pit. Set four (4) 400 BBL frac tank and fill w/ 4% KCL. Blow well down and kill well w/ 4% KCL water as necessary. ND wellhead and NU 7-1/16" 3M BOP, stripping head and blooie line. Operationally test BOP.
 2. TOOH w/ approximately 190 jts. 2-3/8" Mesaverde tubing set at +/- **5981'** and stand back. Inspect tubing and replace bad tubing as necessary**.
- **NOTE:** If existing tbg. is scaled-up, contact production engineer and a scale analysis will be run. This will determine if we will pump acid down the 2-3/8" 4.7# J-55 workstring and acid wash perforations across the Point Lookout and Cliffhouse interval.
3. RU wireline. RIH w/ 4-1/2" gauge ring and check wellbore for obstructions to PBTD @ **6148'**. POOH.**
- **NOTE:** If obstructions are encountered, PU 3-7/8" bit and 4-1/2" 10.5# csg. scraper on 2-3/8" 4.7# J-55 workstring and CO to PBTD @ **6148'**. TOOH
4. TIH w/ CIBP and 2-3/8" 4.7# J-55 workstring and tubing set CIBP @ +/- **4950'****. Load hole down tubing w/ 12 bbls 10% Acetic Acid + 5% NH₄CL*** for perforating. Load hole w/ 66 bbls 4% KCL for pressure testing. RU wireline company w/ packoff and pump-in tee. RIH w/ GR/CCL/CBL and log from **4930'-4150'**. POOH w/ GR/CCL/CBL logging tool. RIH w/ TDT and log from **4930'-4150'**. POOH w/ TDT logging tool. RU 4-1/2" 11.6# wellhead isolation tool and 4" frac valve. RU stimulation company. Pressure test surface lines to **4800** psi. Pressure test CIBP to **3800** psi (80% of burst in 4-1/2" 10.5# csg). RD stimulation company. TOOH w/ workstring and standback.

** Tie into Elec. log.

*** All Acid to contain the following additives/ 1000 gal:

1000 gal	10%	Acetic Acid
2 gal	MSA II	corrosion inhibitor
5%	NH ₄ CL	clay control

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5. RU wireline company w/ packoff and pump-in tee. RIH w/ CCL** on top of perforating guns. Perforate the entire Lewis Shale interval with 3-1/8" Hollow Steel Carrier Select Fire guns w/ HSC-3125-306T charges. These are 12 gram charges with a 0.30" hole and 17.48" penetration. Shoot approximately 50 holes top down. Perforations will be determined after TDT logging run. RD wireline company.

** Tie into new TDT log.

6. RU stimulation company. Pressure test surface lines to **4800** psi. Breakdown perforations @ 20-25 BPM w/ 4% KCL (approximately 10 BBL). Displace w/ 300 gal. of 10% Acetic Acid + 5% NH₄CL** dropping one-hundred (100) 7/8" 1.1 SG RCN balls evenly displaced through acid. Displace acid w/ approximately 56 BBL of 2% KCL to bottom perforation. Balloff to maximum pressure of **3800** psi (80% of burst in 4-1/2" 10.5# csg). Record breakdown pressure, ball action and ISIP.

** All Acid to contain the following additives/ 1000 gal:

1000 gal	10%	Acetic Acid
2 gal	MSA II	corrosion inhibitor
5%	NH ₄ CL	clay control

7. RU wireline w/ packoff and pump-in tee. RIH w/ junkbasket and knock balls off perforations. POOH w/ junkbasket and record number of balls recovered and number of hits. RD wireline.
8. RU stimulation company to frac down wellhead isolation tool and 4" frac valve. Hold pre-job safety meeting with all personnel on location. Pressure test surface lines to **4800** psi prior to stimulation.
9. Fracture stimulate in 0.5 to 3.0 ppg stages @ 40 BPM constant downhole rate with 138,292 gal. of 75Q N₂ foamed "Clearfrac" fluid and 200,000 lbs. 20/40 mesh sand. When sand concentration begins to drop, call flush. Flush to top perf. Refer to frac schedule enclosed. Maximum bottomhole treating pressure is **3800** psi (80% of burst in 4-1/2" 10.5# csg). Estimated friction pressure is approximately **1367** psi @ **40** BPM. Maximum surface treating pressure is **3800** psi.
10. Record ISIP, 5, 10 and 15 shut-in pressure. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-choke manifold and pit. Begin flowback after stimulation company has rigged down from frac valve. Open well to pit on accordance to flowback schedule listed in the table below. Do not shut well in during flowback. When schedule dictates a larger choke size, open ball valve upstream of adjustable choke and open adjustable choke on manifold to pre-determined size listed in table and begin flowing through adjustable choke. Close ball valve upstream of positive flow bean and change out flow bean to next larger size in table. Open ball valve upstream of positive flow bean and begin flowing. Close ball valve upstream of adjustable choke and close adjustable choke.

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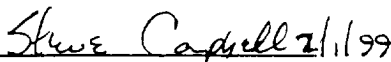
16/64" Choke	From Shut-in – Until 2/3 of flush volume has been recovered (Approximately 52 BBL).
10/64" Choke	Approximately 2 hrs.
12/64" Choke	Approximately 2 hrs.
14/64" Choke	Approximately 2 hrs.
16/64" Choke	Approximately 3 hrs.
18/64" Choke	Approximately 3 hrs.
20/64" Choke	Approximately 3 hrs.
22/64" Choke	Approximately 3 hrs.
24/64" Choke	Approximately 3 hrs.
32/64" Choke	Approximately 3 hrs.

11. After well cleans up and pressures allow, TOO H w/ 4-1/2" wellhead isolation tool and 4" frac valve and TIH w/ 3-7/8" flat mill on 2-3/8" 4.7# J-55 workstring and clean-up to CIBP @ +/- 4950' with air/mist. When well is sufficiently clean, gauge the Lewis interval for one (1) hour. Obtain an accurate pitot gauge for the Lewis interval.
12. Drill out CIBP @ +/- 4950' w/ 3-7/8" flat mill on 2-3/8" workstring. Use minimum mist rate of 10-12 BPH. CO to PBTD @ 6148'. TOO H w/ 2-3/8" 4.7# J-55 workstring and stand back. Lay down 3-7/8" flat mill.

****NOTE:** If tbg. was scaled-up, acid wash the existing Cliffhouse and Point Lookout perforations w/ treatment specified by service company.
13. Broach in tubing on sandline. TIH w/ one joint of 2-3/8" 4.7# J-55 tubing w/ expendable check, seating nipple, then remaining 2-3/8" production tubing. Land tubing @ 5934'.
14. ND BOP's, NU single tubing hanger wellhead. Pump off expendable check. Obtain a final pitot up tubing. If well will not flow on it's own, make swab run to seating nipple. If swab run is not necessary, RD and MOL.

Approve:  2/1/99
Team Leader

Approve:  2/1/99
Drilling Superintendent

Recommend:  2/1/99
Production Engineer

VENDORS:

Wireline:	Schlumberger	325-5006
Stimulation:	Dowell	325-5096
Packer:	Arrow Completion Systems	326-5141
Bridge Plug:	Arrow Completion Systems	326-5141
Flat Mill:	Arrow Completion Systems	326-5141

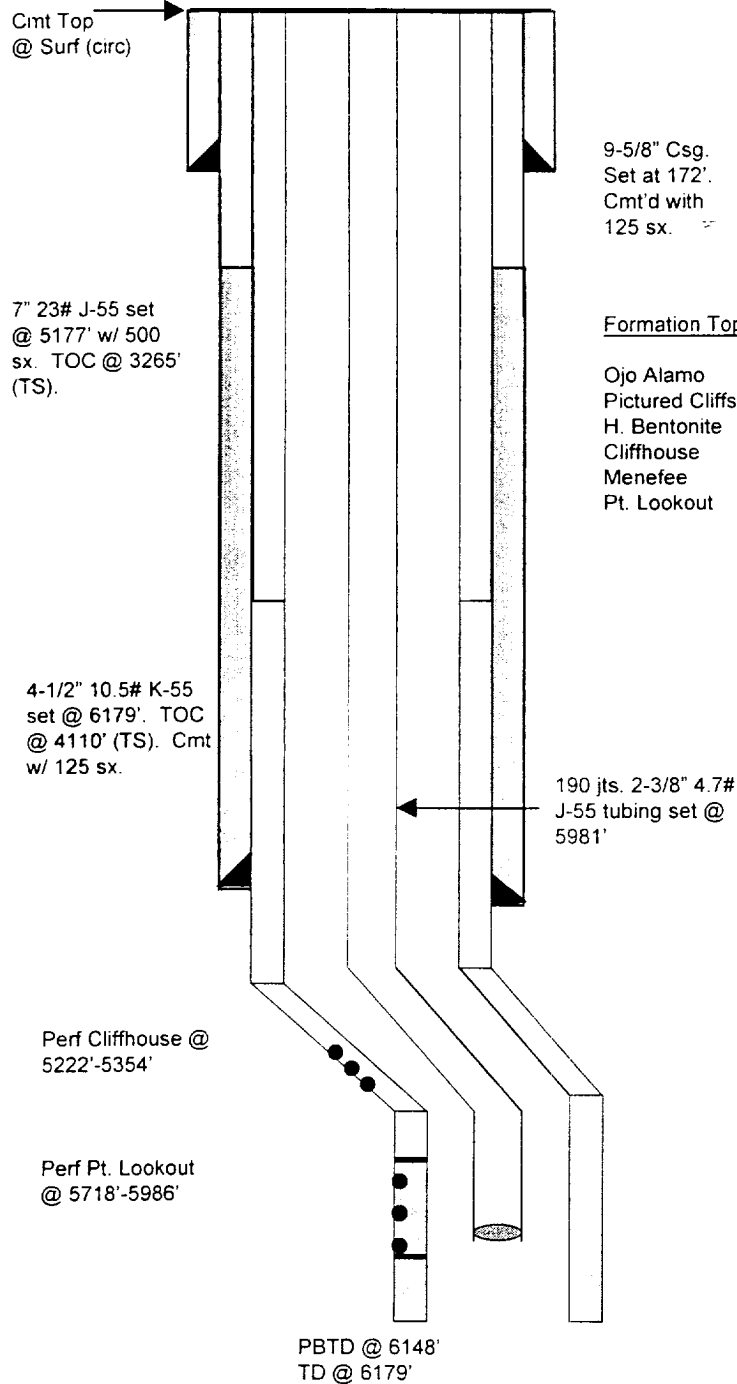
Steve Campbell Home 325-8218
Glen Christiansen Home 327-5089
Hans Dube Home 564-9401

Office 326-9546 Pager 564-1902
Office 326-9733 Pager 324-7562
Office 326-9555

San Juan 32-9 Unit #1

Unit K, Section 18, T31N, R09W
San Juan County, NM

Current Schematic



Proposed Schematic

