

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well
GAS
2. Name of Operator
SOUTHLAND ROYALTY
3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499 (505) 326-9700
4. Location of Well, Footage, Sec., T, R, M
1650' FSL, 990' FEL Sec.18, T-28-N, R-9-W, NMPM
5. Lease Number
NM-01772A
6. If Indian, All. or
Tribe Name
7. Unit Agreement Name
8. Well Name & Number
Reid #13
9. API Well No.
30-045-07438
10. Field and Pool
Basin Ft Coal/
Aztec Pic.Cliffs
11. County and State
San Juan Co, NM

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

Type of Submission

Type of Action

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Abandonment | <input type="checkbox"/> Change of Plans |
| <input type="checkbox"/> Subsequent Report | <input checked="" type="checkbox"/> Recompletion | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Final Abandonment | <input checked="" type="checkbox"/> Plugging Back | <input type="checkbox"/> Non-Routine Fracturing |
| | <input checked="" type="checkbox"/> Casing Repair | <input type="checkbox"/> Water Shut off |
| | <input type="checkbox"/> Altering Casing | <input type="checkbox"/> Conversion to Injectio |
| | <input type="checkbox"/> Other - | |

13. Describe Proposed or Completed Operations

It is intended to repair the casing and add the Fruitland Coal to this wellbore and commingle with the Pictured Cliffs per the attached procedure and wellbore diagram. Application is being made to the New Mexico Oil Conservation Division for commingling. Application is also being made for the non-standard location of the Fruitland Coal Pool.

RECEIVED
JUL 0 5 1994
OIL CON. DIV.
DIST. 3

NO. 100-1001 NM
JUL 13 1994
RECEIVED

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

Signed [Signature] (LL3) Title Regulatory Affairs Date 6/24/94

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

JUN 29 1994

Reid #13
Recommended Completion Procedure
SE/4 Section18 T28N R9W
Lat 36.659302 Long 107.823822

1. Test rig anchors and repair if necessary. Install 2-400 bbl frac tanks on location and fill with 2% KCl water. Filter all water to 25 microns.
2. MOL and RU. Comply to all NMOCD, BLM, and MOI rules and regulations. Hold safety meeting. Check and record pressures on tubing, casing, and bradenhead. Blow down or kill well as necessary. ND wellhead. NU BOP. Test operation of rams. NU relief line and blooie line.
3. Release 4-1/2" AD-1 Baker pkr. TOOH w/1967' of 2-3/8" tbg, tally & inspect.
4. TIH w/ 3-7/8" bit and 4-1/2" casing scraper on 2-3/8" workstring and clean out to 2025'. TOOH. TIH w/ 4-1/2" RBP and packer combination. Set RBP at 1960'. Set pkr at 1930' and test RBP, tubing, and pkr to 3000 psi. Pull up to 1742' and test to 3000 psi. Pressure test under pkr to determine depth of deepest hole. Once hole is found, circulate to surface. TOOH. Ensure hole is full prior to logging.
5. RU wireline and run CBL-CCL-GR from 1960' to surface.
6. PU and install csg spear. PU 4-1/2" csg to release csg slips. RU wireline and run "Free-Point". Determine csg Free-Point. Run chemical cutter and cut casing at depth to be determined from CBL and "Free-Point".
7. Condition and circulate hole clean with mud. TOOH with 4-1/2" csg, laying down.
8. PU skirted mill on 2-3/8" tbg. TIH and dress top of 4-1/2" csg. TOOH w/ mill.
9. TIH w/ new 4-1/2" csg w/ "Bowen Lead Seal" casing patch and tie into existing csg in well. Set seal. Pressure test on csg and patch to 800 psi. When csg holds, set in slips and cut off top of csg.
10. Perf 2 SQ holes 50' above the TOC. TIH w/2-3/8" tbg and fullbore pkr and squeeze the perf holes w/100% excess cmt open at surface. Circ 5 bbls of good cmt out of the bradenhead valve and then shut in valve and squeeze remaining cmt away. Over displace the cmt out of the 2-3/8" tbg by 3 bbls. Release pkr and pull 2 stands. Reset pkr and repressurize the squeeze. Hold pressure on cmt for 4 hrs then open at surface and check for flow. Shut in well until flow ceases. TOH w/pkr.
11. WOC for 12 hrs before drilling out. Pressure test on squeeze to 500 psi. Resqueeze as necessary.

Lower Coal

12. RU wireline and perf the following coal interval w/ 3-1/8" HSC w/ 12 gram charges at 4 SPF (correlate depths with GR).

1942' - 1954'

Total: 12 feet: 48 holes

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13. TIH w/ 2-7/8" 6.5# N-80 FJ frac string and set fullbore pkr at 1742'. Load backside w/ 2% KCl water. Pressure test annulus to 800 psi. Hold.
14. RU treatment company for frac. Hold safety meeting with all personnel. Pressure test surface lines to 5000 psi. Fracture treat lower coal according to attached schedule w/ 70Q foam at 20 BPM with 125000 lbs of 20/40 mesh Arizona sand. Tag sand with 0.4 mCi/1000# Ir-192 tracer. Flush with 10 bbl water. Estimated pressure is 2800 psi. **MAXIMUM PRESSURE IS LIMITED TO 4000 PSI!** Monitor backside and bradenhead pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
15. SI well for 3 hours for gel break.
16. After gel break, open well through choke manifold and monitor flow. Flow @ 20 bbls/hr or less if sand is observed.
17. Re-fill 1-400 bbl frac tank with 2% KCl water and filter to 25 microns.
18. When well ceases to flow, TOOH with pkr and frac string. RU wireline. RIH w/wireline and set 4-1/2" RBP @ 1919'.

Upper Coal

19. RU wireline and perf the following coal interval w/ 3-1/8" HSC w/ 12 gram charges @ 4 SPF (correlate depths with GR)

1756' - 1768'
1814' - 1819'
1825' - 1835'
1847' - 1851'
1853' - 1856'
1864' - 1869'

Total: 30 feet: 120 holes

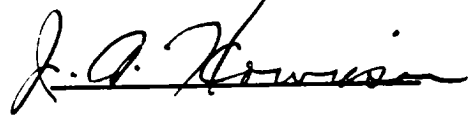
20. TIH w/ frac string and set pkr @ 1889'. Pressure test RBP to 4000 psi surface pressure.
21. Release pkr, PU to 1742'. Load backside with 2% KCl water and set pkr @ approx 1742'.
22. RU treatment company for frac. Hold safety meeting with all personnel. Pressure test surface lines to 5000 psi. Fracture treat upper coal according to attached schedule w/ 70Q foam at 30 BPM with 60,000 lbs of 20/40 mesh Arizona sand. Tag sand with 0.4 mCi/1000# Ir-192 tracer. Flush with 9 bbl foam. Estimated pressure is 3500 psi. **MAXIMUM PRESSURE IS LIMITED TO 4000 PSI!** Monitor backside and bradenhead pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
23. SI well for 3 hours for gel break.

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24. After gel break, open well through choke manifold and monitor flow. Flow @ 20 bbls/hr or less if sand is observed.
25. When well ceases to flow, TOOH with pkr and frac string, laying down. TIH w/ retrieving head on 2-3/8" tbg and clean out upper zone until sand flow stops. Take Pitot gauge before releasing RBP. Release RBP set @ 1919' and TOOH.
26. TIH w/ retrieving head on 2-3/8" tbg and clean out lower zone until sand flow stops. Take Pitot gauge before releasing RBP. Release RBP set @ 1960' and TOOH.
27. TIH w/2-3/8" tbg and 3-7/8" bit and CO to 2025'. TOOH.
28. Run After-Frac-Gamma-Ray log from 2025'-1000'.
29. TIH w/ one jt 2-3/8" tbg, 6' perforated sub, standard seating nipple and remaining 2-3/8" tbg. Land tbg string at 1967'.
30. ND BOP and NU independent wellhead. Pump off plug. Take final Pitot gauge. Rig down and release rig.

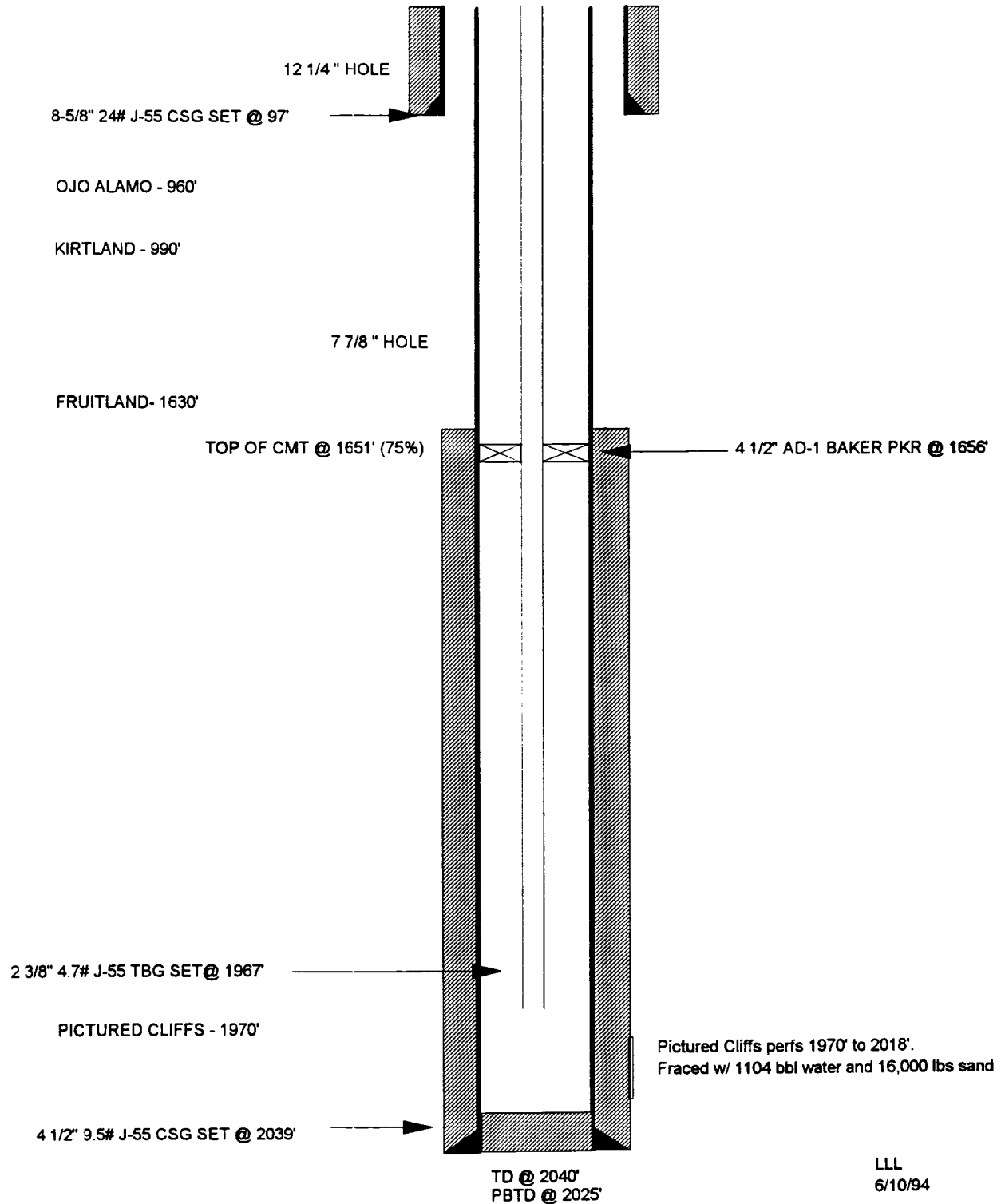
Approval



VENDORS:

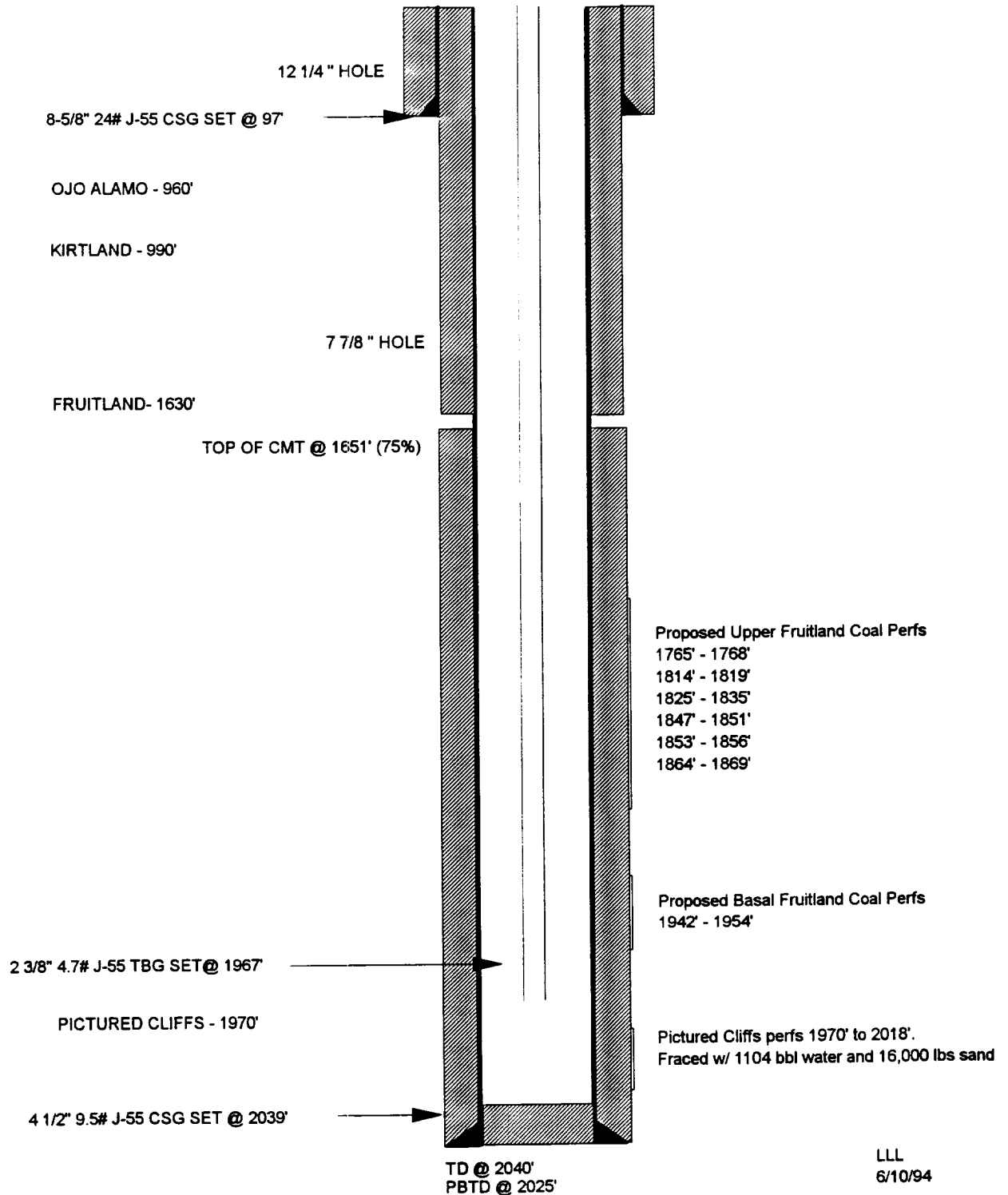
Wireline	Blue Jet	325-5584
Fracturing	Western	327-6222
RA Tagging	Protechnics	326-7133
Casing Patch	Oil Field Rentals	327-4421
Chemical Cut	Wireline Specialties	327-7141

REID #13
SECTION 18, T28N, R9W
SAN JUAN COUNTY, NEW MEXICO
CURRENT
WELLBORE SCHEMATIC



REID #13
SECTION 18, T28N, R9W
SAN JUAN COUNTY, NEW MEXICO

PROPOSED
WELLBORE SCHEMATIC



LLL
6/10/94