

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well GAS	5. Lease Number SF-080781 6. If Indian, All. or Tribe Name 7. Unit Agreement Name
2. Name of Operator Southland Royalty	8. Well Name & Number Cain #8 9. API Well No.
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	10. Field and Pool Aztec PC/Basin FTC 11. County and State San Juan Co, NM
4. Location of Well, Footage, Sec., T, R, M 1650'FNL, 1190'FEL Sec.15, T-28-N, R-10-W, NMPM	
12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA	
Type of Submission <input checked="" type="checkbox"/> Notice of Intent <input type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment	Type of Action <input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other - <input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut off <input type="checkbox"/> Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to complete the Fruitland Coal formation in the existing Pictured Cliffs wellbore and produce the two formations via downhole commingling, according to the attached procedure and wellbore diagrams. An application for approval of this commingling is being submitted to the New Mexico Oil Conservation Division.

RECEIVED
AUG 17 1992
OIL CON. DIV.
DIST. 3

RECEIVED
BLM
AUG - 7 PM 2:06
SANTA FE, N.M.

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

Signed [Signature] (KAS) Title Regulatory Affairs Date 8/4/92

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

APPROVED

Date 8/11/1992

AREA MANAGER

NMOCD

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-182
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Rancho Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

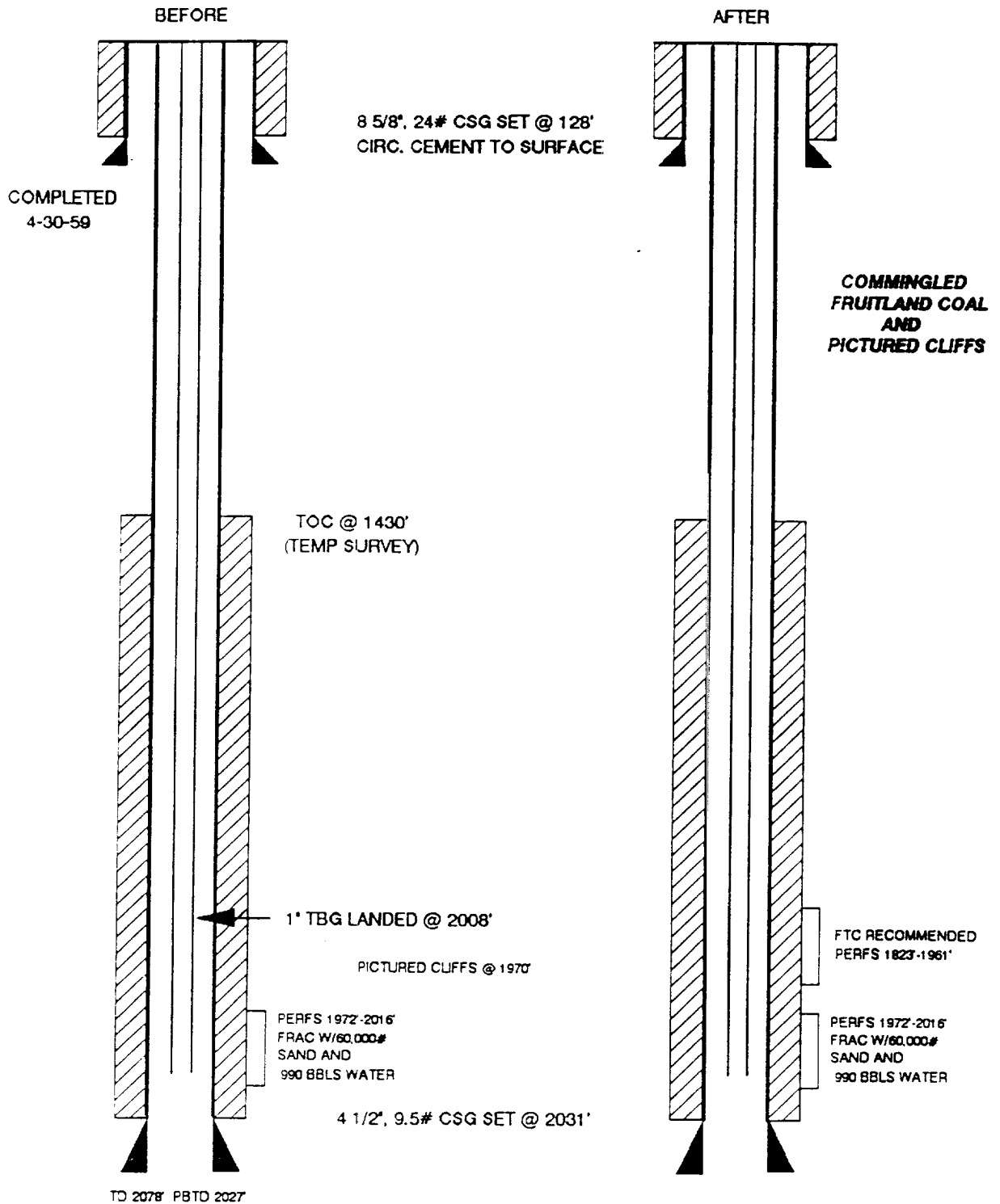
All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company		Lease Cain		Well No. 8
Unit Letter H	Section 15	Township 28 North	Range 10 West	County San Juan
Actual Foreign Location of Well: 1650 feet from the North line and 1190 feet from the East line				
Ground level Elev. 5833'	Producing Formation Pic.Cliffs/Fruitland Coal		Pool Aztec/Basin	Dedicated Acreage: 160/320 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or ink on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communication, unitization, farm-pooling, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and their descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>No allowable will be assigned to the well until all interests have been consolidated (by communication, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>				
<p>Not re-surveyed prepared from a plat dated 2-21-59 by Ernest V. Echohawk.</p> <p>RECEIVED AUG 17 1992 OIL CON. DIV. DIST. 3</p>			<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Peggy Bradfield</i> Signature Peggy Bradfield Printed Name Regulatory Affairs Position Southland Royalty Company Company 8-4-92 Date</p>	
			<p>SURVEYOR CERTIFICATION</p> <p>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 knowledge and belief.</p> <p>8-4-92 Date Surveyed C. EDWARDS Nearby Land Owners Signature Professional Surveyor 6857 6857</p>	

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CAIN #8

AZTEC PICTURED CLIFFS
UNIT H SECTION 15, T28N-R10W



**FTC CAPITAL WORKOVER
CAIN #8
Section 15H, T28 R10W
San Juan County, New Mexico**

1. Install 2x400 bbl frac tanks and fill with filtered (25 micron) water. Add KCL substitute (NETRA-CLA-CW), supplied by Weskem-Hall (2% KCL equivalent) the day before moving the rig on location. Add 5#'s of biocide to each tank before filling.
2. MIRU. Comply with all BLM, NMOC, and MOI rules and regulations. Blow down well and kill with water if needed. ND WH and NU BOP assembly.
3. TOOH w/1" tbg and laydown. TIH with 4-1/2" 9.5# casing scraper and 2-3/8" tbg. Make scraper run to 2040'. TOOH.
4. RU wireline and set 4-1/2" drillable bridgeplug (POT) @ 1966'. Install treesaver and pressure test casing to 3500 psi. RD treesaver. If casing does not hold pressure, contact production engineering and a repair procedure will be provided.
5. Perforate the following coal intervals with 3-1/8" HSC and 16 gram charges (0.45" Dp) @ 4 SPF and 90 degree phasing.

1946'-61' (15') Total 15 feet; 60 holes
6. TIH with SAP tool and 2-3/8" tubing. Breakdown perforations in one foot intervals with 7-1/2% HCl (add 0.2% quaternary amine type clay stabilizer, inhibitor, and a sequestering agent to the acid). Use 1 bbl/perforated foot at 2 bpm. Record each BD pressure, injection pressure, injection rate, and ISIP. Unload hole with air, TOOH.

RU Halliburton such that they are ready to stimulate first stage at daylight. Purpose is to stimulate both stages the same day.
7. Install treesaver. RU stimulation company for first stage. Hold safety meeting. Pressure test surface lines to 4500 psi; maximum allowable pressure is 3500 psi. Stimulate during daylight w/nitrogen foam. See attached stimulation procedure.
8. RD treesaver. RU wireline and set drillable bridgeplug @ 1920'. RU treesaver. Pressure test to 3500 psi.
9. Perforate the following coal intervals with 3-3/8" HSC and 16 gram charges (0.45" Dp) @ 4 SPF and 90 degree phasing.

1823-35' (12')
1877-84' (7')
1896-98' (2')

Total 21 feet; 84 holes

Cain #8
Recompletion Procedure
Page 2

10. TIH with SAP tool and 2-3/8" tubing. Breakdown perforations in one foot intervals with 7-1/2% HCl (add 0.2% quaternary amine type clay stabilizer, inhibitor, and a sequestering agent to the acid). Use 1 bbl/perforated foot at 2 bpm. Record each BD pressure, injection pressure, injection rate, and ISIP. Unload hole with air, TOOH.
11. Install treesaver. RU stimulation company for second stage. Hold safety meeting. Pressure test surface lines to 4500 psi; maximum allowable pressure is 3500 psi. Stimulate during daylight w/nitrogen foam. See attached stimulation procedure. RD treesaver.
12. Flow well to pit on 1/8" choke. Increase choke size as needed but do not exceed 20 BPH or 2.5 MMCF/D estimated returns at any time. TIH w/ bit and 2-3/8" tubing. Clean out to top of drillable bridgeplug at 1920'. Obtain gauge then tag fill. When sand returns stop and fluid production is minimal; drill bridgeplug.
13. Clean out to second drillable bridgeplug. Obtain gauge then tag fill. When sand returns stop, obtain final gauge from Fruitland Coal. Drill bridgeplug at 1966'. Obtain gauge from now commingled FTC and PC. TOOH
14. TIH w/ 2-3/8" production string and SN one joint off bottom. CO to 2027'. When fluid production becomes negligible, land tubing at 2006' and obtain a final gauge from the combined Fruitland Coal and Pictured Cliffs.
15. ND BOP, NU WH. Release rig.

J. A. Howieson

Service Company:

Stimulation - Halliburton (325-3575)
Wireline - Basin Perforating Logging (327-5244)
KCL Substitute - Weskem-Hall (325-3535)