

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-077874 6. If Indian, All. or Tribe Name 7. Unit Agreement Name
2. Name of Operator Southland Royalty	8. Well Name & Number Hanks #16E 9. API Well No.
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	10. Field and Pool Basin Dakota 11. County and State San Juan Co, NM
4. Location of Well, Footage, Sec., T, R, M 1520'FNL, 1725'FWL, Sec 6, T-27-N, R-9-W, NMPM	

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 type="checkbox"/> Casing Repair <input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing <input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other -

13. Describe Proposed or Completed Operations

It is intended to plugback the wellbore from the Dakota to the Fruitland coal formation according to the attached procedure and wellbore diagrams.

RECEIVED
AUG - 2 1993
OIL CON. DIV.
DIST. 3

RECEIVED
BLM
3 JUL 15 PM 2:40
070 FARMINGTON, NM

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

Signed Jay D. KAS (KAS) Title Regulatory Affairs Date 7/15/93

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

6-164 For NSC

APPROVED

JUL 29 1993

DISTRICT MANAGER

NMOCD

All dist. must be from the corner boundaries of the Section

Operator SOUTHLAND ROYALTY COMPANY			Lessor HANKS		Well No. 16E
Unit Letter F	Section 6	Township 27N	Range 9W	County San Juan	
Actual Footage Location of Wells 1520 feet from the North line and 1725 feet from the West line					
Ground Level Elev. 6350	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

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

Name
Peggy Bradfield

Position
Regulatory Representative

Company
Southland Royalty Company

Date
7-15-93

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.

Date Surveyed

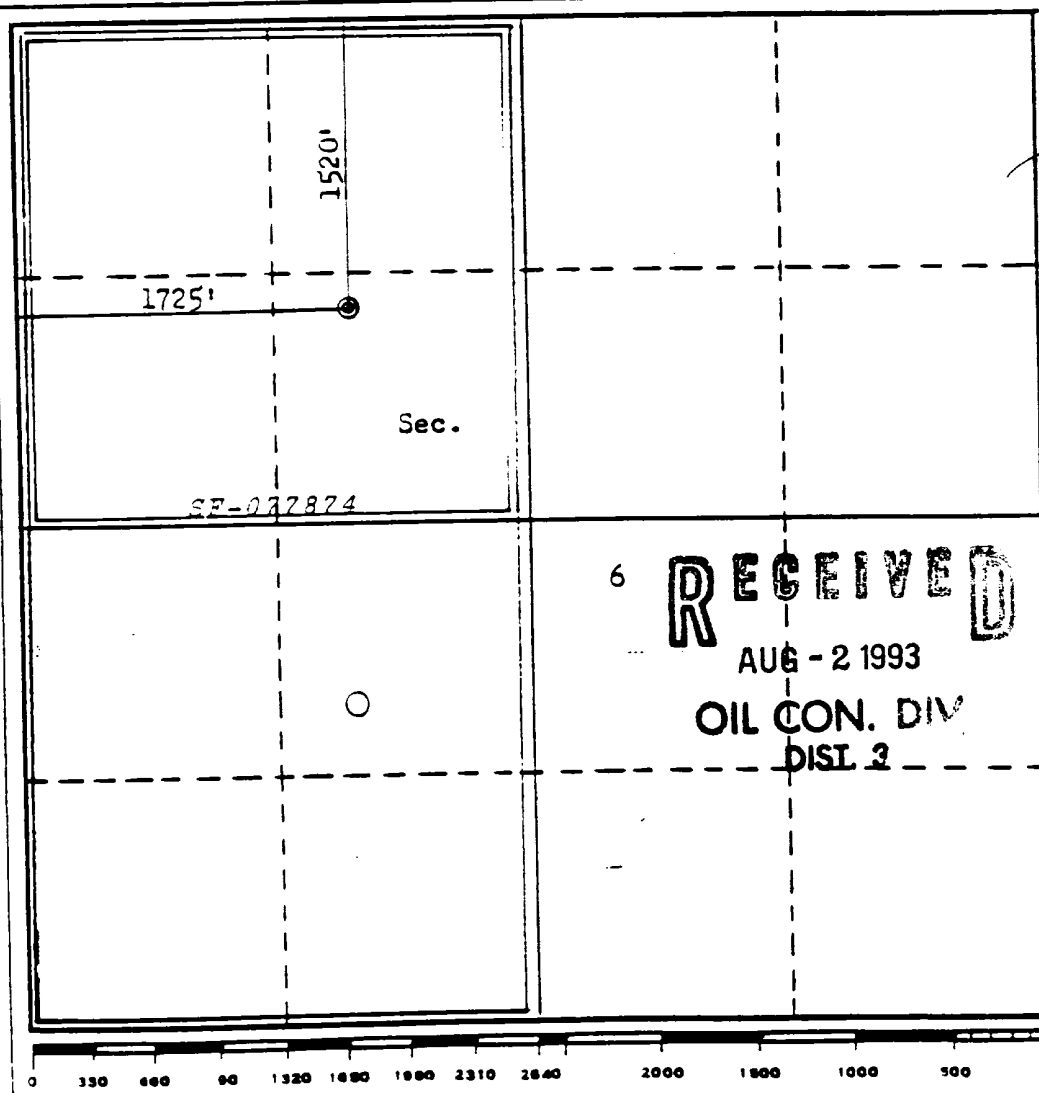
January 14, 1993

Registered Professional Engineer and/or Land Surveyor

Fred E. Kerr Jr.

Certificate No.

3950

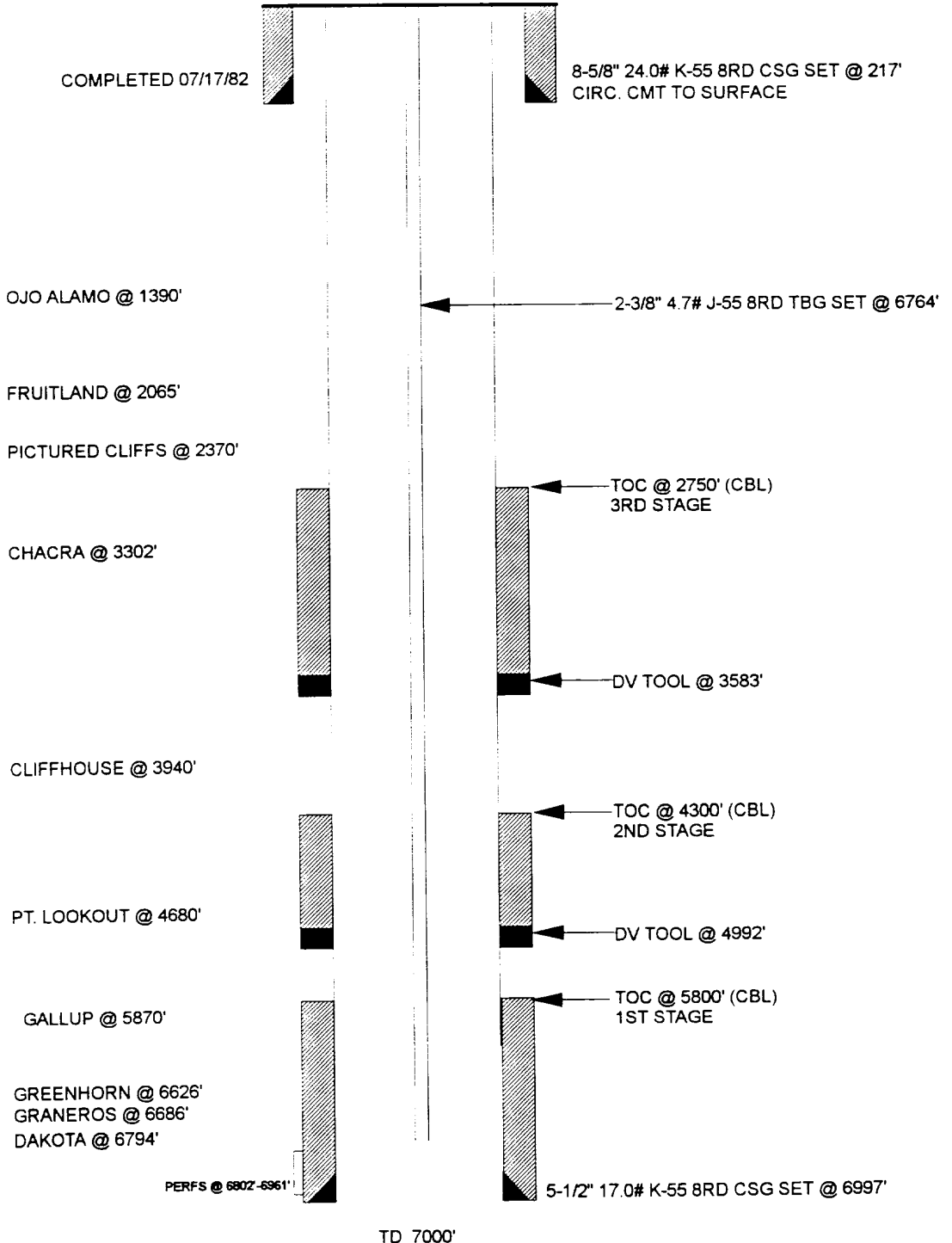


HANKS #16E

CURRENT

BASIN DAKOTA

UNIT F, SEC 6, T27N, R09W, SAN JUAN COUNTY, NM

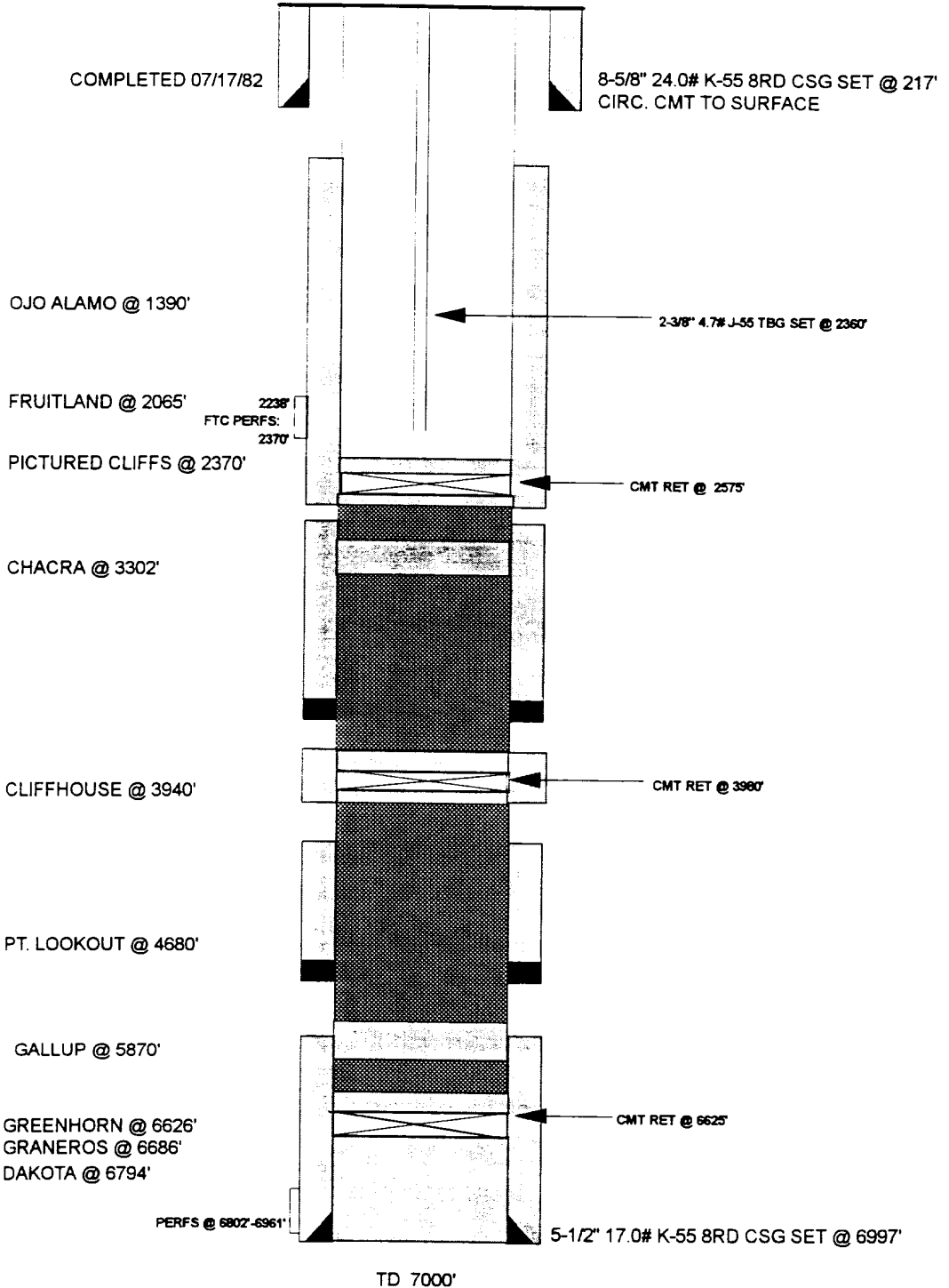


HANKS #16E

PROPOSED

BASIN DAKOTA

UNIT F, SEC 6, T27N, R09W, SAN JUAN COUNTY, NM



Hanks # 16E
Recommend Recompletion Procedure
Unit F Section 6 T27N R9W

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 & regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.

*****P&A Procedure*****

- NOTE • 24 Hours before activity, notify BLM (326-6201) & NMOCD (327-5344).
• Cement volumes are 100% excess outside pipe and across perforations & 50% excess inside pipe.
3. TOOH w/ 6764' of 2-3/8" tbg. Visually inspect for and replace all bad jts. TIH w/ 5-1/2" 17# csg scraper and 4-3/4" bit and CO to 6650'. Load hole with water. TOOH.
 4. TIH w/ 2-3/8" tubing & set 5-1/2" cmt ret @ 6625'. Plug # 1 from 6997' - 6575' w/ 76 sxs cmt (70 sxs below ret, 6 sxs on top of ret). Follow cmt with 25 bbls water. Pull tbg up 3 stands and reverse circ 2 tbg volumes.
 5. Pump approx 23 bbls mud: 15# sodium bentonite w/ non fermenting polymer, 9# gal weight & 50 sec/qt vis or greater to fill hole from 6575' to 5920'. PU to 5920'. Plug # 2 from 5920' to 5820' w/ 17 sxs cmt. Follow w/ 23 bbls water. Pull tbg up 3 stands and reverse circ 2 tbg volumes. WOC.
 6. Pump approx 64 bbls mud: 15# sodium bentonite w/ non fermenting polymer, 9# gal weight & 50 sec/qt vis or greater to fill hole from 5820' to 3990'. TOOH. RU wireline and perf 4 sq holes @ 3990' (50' below the top of the Cliff House).
 7. TIH w/ 5-1/2" cmt ret and set @ 3980'. Plug # 3 from 3990' - 3890' w/ 47 sxs cmt (below ret w/ 32 sxs cmt, displaced on top of ret w/ 15 sxs). Follow cmt w/ 15 bbls water. Pull tbg up 3 stands and reverse circ 2 tbg volumes.
 8. Pressure test csg to 500 psi. If pressure test fails locate holes and use cmt ret for Chacra plug. Contact Production Engineering if holes are above 2600'.
 9. Pump approx 18 bbls mud: 15# sodium bentonite w/ non fermenting polymer, 9# gal weight & 50 sec/qt vis or greater to fill hole from 3890' to 3352'.
 10. TIH to 3352' (50' below top of CH). Plug # 4 from 3352' - 3252' w/ 17 sxs cmt. Follow cmt with 13 bbls water. Pull 2 stands and reverse circ 2 tbg volumes.

Hanks # 16E
Recommend Recompletion Procedure
Unit F Section 6 T27N R9W
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11. WOC. POH to 2000'. RIH to 3252'. Tag Plug # 4. Pump approx 23 bbls mud: 15# sodium bentonite w/ non fermenting polymer, 9# gal weight & 50 sec/qt vis or greater to fill hole from 3252' to 2600'.
12. TOOH w/ tbg. Perf 4 sq holes @ 2600'. TIH w/ 5-1/2" cmt ret and set @ 2575'. Open bradenhead and establish circulation. After circulation is established, pump 370 sxs below retainer, and displace 6 sxs on top of retainer. WOC.

*****STAGE ONE*****

13. Circ hole w/ 2% KCL water. RU wireline and run CBL - CCL - GR from 2400' - 1300'. If bond appears inadequate, rerun CBL with 1000 psi on csg. Pressure test csg to 3000 psi.
14. RU wireline and perf the following coal interval w/ 4" HSC w/ 9.8 gram charges @ 4 SPF (correlate depths to neutron density log).

2348' - 2370'

Total: 22 feet: 88 holes

*****LOWER COAL*****

15. RU hydraulic tree saver. RU treatment company for frac. Hold safety meeting with **all** personnel. Pressure test surface lines to 4000 psi. Fracture treat lower coal according to attached schedule w/ 70Q foam at 30 BPM with 80,000 lbs of 20/40 mesh Arizona sand. Flush with 51 bbls gel. Estimated treating pressure is 1600 psi. **MAXIMUM PRESSURE IS LIMITED TO 3000 PSI!** Monitor braden head pressure during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight **only**.
16. SI well for 3 hours for gel break.
17. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
18. Re-fill 400 bbl frac tank with 2% KCl water and filter to 25 microns.
19. When well ceases to flow, TIH w/ 2-3/8" tbg and csg scraper to 2300'. TOOH. RU wireline and set 5-1/2" RBP @ 2290'.
20. RU tree saver & pressure test csg & RBP to 3000 psi. RD tree saver.

*****UPPER COAL*****

21. RU wireline and perf the following coal interval w/ 4" HSC w/ 9.8 gram charges @ 4 SPF (correlate depths to neutron density log).

2238' - 2254'

Total: 16 feet: 64 holes

22. RU hydraulic tree saver. RU treatment company for frac. Hold safety meeting with **all** personnel. Pressure test surface lines to 4000 psi. Fracture treat upper coal according to attached schedule w/ 70Q foam at 30 BPM with 50,000 lbs of 20/40 mesh Arizona sand. Flush with 48 bbls gel. Estimated treating pressure is 1800 psi. **MAXIMUM PRESSURE IS LIMITED TO 3000 PSI!** Monitor backside and braden head 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.
24. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
25. When well ceases to flow, TIH w/ 2-3/8" tbg and retrieving head and clean out upper zone until sand flow stops. **Take Pitot gauge before drilling out BP.** Retrieve BP set @ 2290' and TOOH.
26. TIH w/ 2-3/8" tbg w/ F nipple 1 jt off bottom and expendable check on bottom and CO to PBTD(2500'). PU tbg and land tbg string @ 2360'.
27. ND BOP and NU independent wellhead. Pump off check. **Take final Pitot gauge and gas & water samples.** Rig down & release rig.

Approve:

J. A. Howieson

VENDORS:

Wireline:	Petro	326-6669
Fracturing:	Western	327-6222
Tree Saver	WIT	599-5609

KAS:kas