

Energy, Minerals and Natural Resources Department
Oil Conservation Division

Sundry Notices and Reports on Wells

1. Type of Well
GAS

2. Name of Operator
SOUTHLAND ROYALTY COMPANY

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M
910' FNL, 1840' FWL, Sec.35, T-25-N, R-2-W, NMPM, Rio Arriba County

API # (assigned by OCD)
30-039-23339
5. Lease Number
Fee
6. State Oil&Gas Lease #
7. Lease Name/Unit Name
Hawk Federal
8. Well No.
2
9. Pool Name or Wildcat
Blanco Mesaverde *EXT*
Gavilan Mancos
10. Elevation:

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 plug back the subject well according to the attached procedure and wellbore diagram.

RECEIVED
JUN 15 1995
OIL CON. DIV.
DIST. 3

SIGNATURE *[Signature]* (CAN9) Regulatory Affairs June 8, 1995

(This space for State Use)

Approved by *[Signature]* Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 JUN 15 1995

District I
PO Box 1988, Hobbs, NM 88241-1988
District II
P.O. 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

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-1
Revised February 21, 1988
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-23339	Pool Code 72319	Pool Name Blanco Mesaverde <i>EXT</i>
Property Code 10506	Property Name Hawk Federal	Well Number 2
GRID No. 21281	Operator Name SOUTHLAND ROYALTY COMPANY	Elevation 7319'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
C	35	25N	2W		910	North	1840	West	Rio Arriba

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres N/320	Joint or Infill	Consolidation Code	Order No.
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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

Not resurveyed, prepared
from a plat dated 11-11-88
by Fred B. Kerr, Jr.

1840'

910'

35

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DIST. 3

17 OPERATOR CERTIFICATION

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

Peggy Bradford
Signature
Peggy Bradford
Printed Name
Regulatory Affairs
Title
6-12-95
Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief.

6-9-95
Date of Survey
Signature and Title of Professional Surveyor:
NEAL C. EDWARDS
NEAL C. EDWARDS
8857
8857
Certificate Number

Pertinent Data Sheet - Hawk Federal #2

Location: NE/NW Section 35, T-25-N, R-02-W, Rio Arriba Co., NM
Lat. 36 - 22 - 17 Long. 106 - 59 - 52

Current Field: Gavilan Mancos

Spud: 1/30/84

Completed: 3/25/84

Elevation: 7319' @ GL
7331' @ KB

TD/PBTD: 8160'/8116'

Casing Record:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/Grade</u>	<u>Depth Set</u>	<u>Cmt Vol./Top</u>
12-1/4"	9-5/8"	32.30#/K-55	400'	212 sks/surface
8-3/4"/7-7/8"	5-1/2"	15.5 & 17#/K-55	8160'	790 sks (3 stg.)/2750' (TS)
Stage Tool	5-1/2"		5860'	
Stage Tool	5-1/2"		3579'	

Tubing Record:

<u>Size</u>	<u>Weight/Grade</u>	<u>Depth Set/Jts.</u>
2-3/8"	4.7#/J-55	7423'/243 jts.

Formation Tops:

Nacimiento	2040'
Ojo Alamo	3050'
Pictured Cliffs	3398'
Chacra	4235'
Cliff House	5108'
Menefee	5224'
Point Lookout	5583'
Mancos Shale	5815'
Greenhorn	7650'
Graneros	7728'
Dakota	7839'

Logging Record: IEL, GR-CNL/FDC, TEMP. SURVEY

Present Completion: Mancos
Perforations: 6766' - 7039' (selective)
7312' - 7448' (selective)

Pertinent Data Sheet - Hawk Federal #2 con't

Completion History:

(3/21/84-3/25/84) Moved in Rig. Pulled tubing. Set a cement retainer @ 7730' to TA Dakota. Cut off casing to lower wellhead 18". Perforated the Lower Mancos with 10 hole S.F.(referenced above). Fraced Lower Mancos. (3/23/84) Perforated the Mancos with 27 hole S.F. (referenced above). Fraced Mancos. (3/25/84) Landed 243 joints 2-3/8" @ 7453 and released rig.

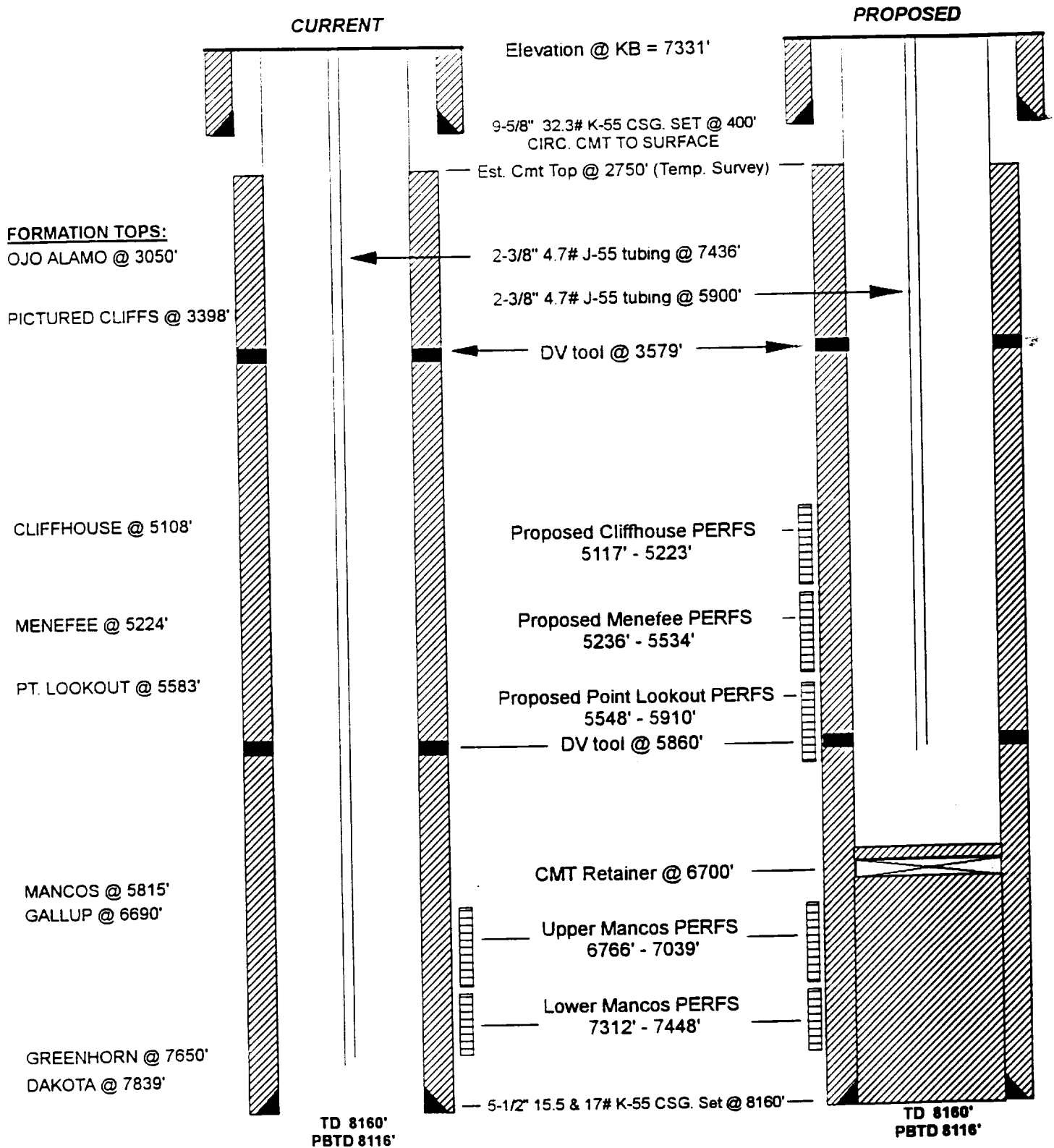
Transporter:

Condensate:	Ciniza Pipeline
Gas:	El Paso Natural Gas Co.

Hawk Federal #2

Unit C, Sec. 35, T25N, R02W, Rio Arriba County, NM
Lat. 36 - 21 - 33 Long. 107 - 1 - 18

Mesaverde Recompletion



Hawk Federal #2
Unit C. Sect. 35, T25N, R02W
Mesaverde Recompletion

Inspect location and install and/or test rig anchors. Install 1 -400 bbl rig tank.
Comply with all BLM, NMOCD, Forestry, and MOI rules and regulations. **BE SAFE**

*******All vendors/service companies on location will be responsible for protection of the environment, any questions call _____ at ____-_____.*******

1.0 Load Hole with 2% KCl and Pull Production Tubing

- 1.1 Hold Safety Meeting. MIRU. Place fire and safety equipment in easily accessible locations. NU relief line and blooie line to laydown flow tank. Obtain and record all wellhead pressures.
- 1.2 Blow well down and load hole with 2% KCl water. ND WH, NU BOP. PU one joint of 2-3/8" tubing and drop below perforations. Circulate hole clean with 2% KCl water. PBTD is 8,116'.
- 1.3 TOH with 7,436' of 2-3/8" 4.7# tubing. Visually inspect and tally tubing on TOH. Lay down any bad joints and leave approximately $\pm 6,500'$ (103 stands) in the derrick for the Mesaverde recompletion.
- 1.4 MIRU electric line unit. RIH with 5-1/2" 15.5# gauge ring to 6,700' (15.5# x 17# x-over at $\pm 6,934'$ - 17# on bottom). POOH. RIH with 5-1/2" cement retainer and set same at 6,700'. POOH and RD electric line unit.

2.0 Abandon Existing Mancos Completion

- 2.1 PU retainer stinger and TIH on 2-3/8" tubing. Sting into retainer at 6,700' and test backside to 1,000 psi surface pressure.
- 2.2 MIRU cement company. Test surface lines to 3,000 psi. Establish injection rate into Mancos perms.
- 2.3 Perform running squeeze on perforations with 150 sks of neat cement + additives. Sting out and balance 10' of cement on top of retainer. Pull above plug top and reverse out two tubing volumes. TOH and lay down stinger. WOC.

3.0 Run Cement Bond Log and Evaluate Cement Coverage

- 3.1 Top off casing with 2% KCl water and test casing and cement retainer to 3,000 psi surface pressure (DO NOT exceed 3,800 psi = 80% of burst rating of 5-1/2" 15.5# K-55 csg). If leak is detected, contact production engineer for procedure to repair casing.
- 3.2 RU electric line unit. Run GR/CBL/CCL inside 5-1/2" liner from PBTD to 2,700' with 500 psi surface pressure. Top of cement across Mesaverde must be at least 5,067' (50' above top shot) to continue. Top of cement across Ojo Alamo must be at least $\pm 3,050'$ to continue. If remedial cementing is necessary, contact production engineer for squeeze procedure.
- 3.3 POOH and RD electric line unit. Send copy of bond log to production engineer and drilling superintendent for evaluation.

4.0 Perforate and Stimulate Point Lookout

- 4.1 TIH w/ 2-3/8" tubing and spot 7.5% HCl acid across the Point Lookout interval. TOH w/ tubing.
- 4.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf, 90° phasing:

5,524' - 5,910'. (202 holes)

Actual select fire settings will be provided to the perforators prior to moving on the well.

POOH and RD electric line unit.

- 4.3 TIH w/ one stand 2-3/8" tubing and 5-1/2" packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 3,000 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 300, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 4.4 RD stimulation company and TIH w/ 2-3/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.

Hawk Federal #2
Recompletion Procedure
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- 4.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Lower Point Lookout interval according to attached procedure. Immediately upon completion of the stimulation, shut-in well to keep in static condition. TOH w/ tubing and packer.
- 4.6 RU electric line unit. RIH with 5-1/2" RBP and set same at 5,300'. Pressure test bridge plug to 3,000 psi for 15 minutes. POOH and RD electric line unit.

5.0 Perforate and Stimulate Menefee/Cliffhouse

- 5.1 TIH w/ 2-3/8" tubing and spot 7.5% HCl acid across the Menefee/Cliffhouse interval. TOH w/ tubing.
- 5.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf, 90° phasing:
- 5,117' - 5,260' selective (142 holes)**
- POOH and RD electric line unit.
- 5.3 TIH w/ one stand 2-3/8" tubing and packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 2,500 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 210, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 5.4 RD stimulation company and TIH w/ 2-3/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.
- 5.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Menefee/Cliffhouse interval according to attached procedure. Immediately upon completion of the stimulation, flow back well until it flow rate is low enough to come out of the hole. TOH w/ tubing and packer.

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6.0 Clean Out, Test Intervals, and Land Tubing

- 6.1 Stage in the hole with retrieving head and 2-3/8" tubing and clean out to RBP @ 5,300' with air mist then pull above perforations and flow naturally. Continue this cycle until sand production and water production are minimal. **Obtain flow gauge.** Latch on to the RBP @ 5,300', TOH, and LD RBP.
- 6.4 TIH with one joint 2-3/8" tubing, seating nipple and expendable check valve, (1.810" ID) and 2-3/8" production tubing for the MV. Rabbit production tubing and record final tubing talley for well file. Blow check and clean out to PBTD @ 6,690'. **Obtain final gauge of entire Mesaverde interval.** ND BOP and NU WH. Rig down and release rig.

Approved: _____
Drilling Superintendent

Suggested Vendors/Contacts:

Water haul:	Chief Transport	325-2396
Wireline:	Blue Jet	325-5584
Tubing:	MOI, District Tools	326-9826
Stimulation:	DS	325-5096
Packer/RBP:	Mountain States	326-5141
Rig Supervisor:	_____	_____
Production Oper.:	Bruce Voiles	326-9571
Engineering:	Curtis Newstrom	326-9710 w 327-0722 h