# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

	Bodget Bureau No. 42-R14				
	5. LEASÉ CONTRACT 36				
	6/ IF INDIAN, ALLOTTEE OR TRIBE NAME				
-	/ JICARILLA APACHE				
	7. UNIT AGREEMENT NAME				
_	8. FARM OR LEASE NAME				
Ì	NORTHEAST HAYNES				
_	9. WELL NO.				
-	10. FIELD OR WILDCAT NAME BASIN DAKOTA				
_	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC. 16, T-24N R-5W				
	12. COUNTY OR PARISH 13. STATE RIO ARRIBA NM				
-	14. API NO.				
	15. ELEVATIONS (SHOW DF, KDB, AND WD)				

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil gas well other

2. NAME OF OPERATOR
CONOCO INC.

3. ADDRESS OF OPERATOR
P. O. Box 460, Hobbs, N.M. 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: IGGO FSL + 990 FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF FRACTURE TREAT

PULL OR ALTER CASING MULTIPLE COMPLETE

(other) DOWNHOL

SHOOT OR ACIDIZE REPAIR WELL

CHANGE ZONES

ABANDON\*

SUBSEQUENT REPORT OF:

RECEIVED

DECEMBER OF THE PROPERTY OF TH

NOV 1 4008 Report results of multiple change on Form 9-330.)

N9V 1 8 1983

BUREAU OF THE DEMENT FARMINGTON RESOURCE AREA

OIL COS

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

PLEASE SEE ATTACHED PROCEDURE. AN APPLICATION FOR APPROVAL TO DOWNHOLE COMMINGLE WILL BE SUBMITTED TO THE NMOCD AT A LATER DATE.

Approved subject to State approval.

Subsurface Safety Valve: Manu. and Type	Set @	Ft.		
18. I hereby certify that the foregoing is		DATE _	11/9/83	···
	(This space for Federal or State office use)			
APPROVED BYCONDITIONS OF APPROVAL, IF ANY:	TITLE	_ DATE .	DD	

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\*See Instructions on Reverse Side

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## NORTHEAST HAYNES NO. 3E

#### GALLUP RECOMPLETION

OIL CON. DIV.

# WELL DATA:

TD: 6970' PBTD: 6855' ELEV: 6615' ZERO: 16' AGL

LOCATION: 1660' FSL & 990' FWL of Section 16, T24N-R5W, Rio Arriba County, NM

CASING: 8-5/8", 24#, K-55, ST&C @ +301' w/209 sxs Class "B" neat (circ) 5-1/2", 15.5#, K-55, ST&C @ +6944' w/1st stage: 606 sxs 50-50 Pozmix and 393 sxs Class 'B' neat. 2nd stage: 1321 sxs 50-50 Pozmix and 100 sxs Class "B" neat.

PERFORATIONS: Dakota: 6731', 33', 35', 37', 39', 41', 56', 58', 60', 62', 64', 66', 68', 70', 72', 74', 76', 78', 80', 82', 84', 86', 88', 90', 92', 94', 96', 98', 6800', 02'w/l JSPF (30 holes)

TUBING: 2-3/8", 4.7# 8rd @ +6751' w/SN @ +6720'

## RECOMMENDED PROCEDURE:

- 1. Rig up pulling unit and kill well w/2% KCL TFW, N.D. wellhead, and N.U. BOP.
  - A. Tag for fill w/2-3/8" tbg.
  - B. POOH w/2-3/8" tubing and tally.
  - C. If fill is above +6802':
    - 1. GIH w/wireline and sand pump.
    - 2. Clean out to +6855' (PBTD).
- 2. GIH w/Model 'C' retrievable bridge plug, setting tool and wireline.
  - A. Set retrievable bridge plug @ +6200'.
  - B. Pressure test bridge plug and casing to 4000 psi.
  - C. Dump 5' sand on top of bridge plug at +6200'.
- 3. Rig up wireline unit.
  - A. GIH w/GR-CCL-CBL log on wireline. (If bond is questionable, run w/1000 psi on wellhead).
  - B. Log from +6000' to +4000'.
  - C. POOH w/GR-CCL-CBL log and wireline.

NOTE: Contact Engineering for possible squeeze procedure if poor cement bond is encountered from +5900' to +5500'. If not, go to step 4.

- 4. GIH w/2-3/8" tubing.
  - A. Spot 294 gals (7 bbls) 15% HCl-NE-FE (inhibit acid for 48 hrs @ 155°F) acid from +5825' to +5530'.
  - B. POOH  $\overline{w}/2-3/8$ " tubing.
- 5. GIH w/4" decentralized select-fire perforating gun (Premium Charges, 0° phasing, 0.40" EHD, 1 JSPF), collar locator and wireline.

A. Perforate at +5593', 5597', 5611', 16', 24', 27', 63', 68', 72', 84', 86', 96', 98', 5751', 60', 70', 74', 80', 88', and 5792' (Total: 20 holes).

B. POOH w/wireline, collar locator and perforating gun.

NOTE: Perforate from top to bottom.

6. Breakdown the Gallup formation from  $\pm 5593$ ' to  $\pm 5792$ ' down the 5-1/2'' casing.

A. Establish frac rate (41 BPM) w/2% KCL TFW.

- B. Pump 2520 gals (60 bbls) 7-1/2% HC1-NE-FE and 25 lbs/1000 gals citric acid, and clay stabilizer (inhibit acid for 48 hr @ 155°F) at 8-10-bbls/min.
- C. Drop 1 ballsealer after every 2 bbls acid pumped (Total: 30 7/8" ballsealers, S.G. = 1.1).

D. Surge balls off and finish pumping flush.

- E. Overflush w/6090 gals (145 bbls) 2% KCL TFW w/l gal Adomal1/1000 gals.
- 7. GIH w/wireline and junk basket and retrieve balls. If less than 14 holes appear open, contact Engineering.
- 8. Foam frac the Gallup formation from  $\pm 5593$ ' to  $\pm 5792$ ' down 5-1/2" casing as follows:

Total Foam Rate = 41 BPM
Estimated Surface Treating Pressure: 3120 psi @ 41 BPM (20 perfs open)
Casing Burst: 4810 psi

- A. Pump 7140 gals (170 bbls) 75 quality foam, 25 lbs/1000 gals silica flour and 20 lbs/1000 gals HPG gel.
- B. Shut down and record ISIP (calculate number of holes open: Minimum 14 holes)
- C. Pump 12,726 gals (303 bbls) 75 quality foam, 25 lbs/1000 gals silica flour and 20 lbs/1000 gals HPG, gel, pad.
- Pump 6510 gals (155 bbls) 75 quality foam and 20 lbs/1000 gals HPG gel w/l lb/gal 20/40 sand.
- E. Pump 4284 gals (102 bbls) 75 quality foam and 23 lbs/1000 gals HPG gel w/2.0 lbs/gal 20/40 sand.
- F. Pump 3696 gals (88 bbls) 75 quality foam and 20 lbs/1000 gals HPG gel w/3.0 lbs/gal 20/40 sand.
- G. Pump 3696 gals (88 bbls) 75 quality foam and 20 lbs/1000 gals HPG gel w/4.0 lbs/gal 20/40/ sand.
- H. Pump 3696 gals (88 bbls) 75 quality foam and 20 lbs/1000 gals HPG gel w/5.0 lbs/gal 20/40 sand.
- I. Pump 4704 gals (112 bbls) 75 quality foam and 20 lbs/1000 gals HPG get w/6.0 lbs/gal 20/40 sand.

J. Flush w/4704 gals (112 bbls) 75 quality foam to  $\pm 4700$ .

K. Record ISIP and pressures every 5 minutes for 15 minutes. Leave well shut-in for 2 or 3 hours.

NOTE: Total Foam: 51,156 gals (1218 bbls)
Total Water: 12,789 gals (305 bbls)

Total Nitrogen: 954,608 scf @ BHTP = 3400 psi and Tbh = 145°F

Total Sand: 87,646 lbs 20/40 sand (In Form: 81,094 lbs)

#### NORTHEAST HAYNES NO. 3E

Gallup Recompletion Page 3

- 9. Open well through 3/8" choke and allow to clean up through 5-1/2" casing until well loads up.
  - A. GIH w/seating nipple and 2-3/8" tubing and set at +5800' (If fill is over perfs, clean out w/nitrogen to +6000'.
  - B. Rig down pulling unit, R.D. BOP, R.U. wellhead and rig up swab unit.
  - C. Swab well to flow, to pit.
- 10. Shut well in for 7 day buildup.
- 11. Rig up pulling unit, kill well w/2% KCL TFW, R.D. wellhead and rig up BOP.
  - A. Tag for fill and clean out w/nitrogen to top of retrievable bridge plug at +6200'.
  - B.  $\overline{P}OOH \text{ w}/2-3/8"$  tubing.
  - C. GIH w/mill shoe guide, Model'H' washover type retrieving head, and 2-3/8" tubing.
  - D. Release 5-1/2" retrievable bridge plug @ +6200'.
  - E. POOH w/2-3/8" tubing, retrieving head, mill show guide and 5-1/2" retrievable bridge plug.
- 12. GIH w/1 jt tubing, seating nipple and 2-3/8" tubing and set @ +6751'.

  A. Place well on production.
  - 75 quality foam consisting of 75% nitrogen and 25% 2% KCL TFW w/6 gals Adofoam/1000 gals, 20 lbs/1000 gals HPG gel and demulsifying surfactant.

NOTE: Pad should contain 25 lbs/1000 gals silica flour and 20 lbs/1000 gals HPG gel.