5. LEASE

Jicarilla 70

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
	Jicarilla Apache
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
(Do ne: 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.)	8. FARM OR LEASE NAME
reservoir. Use Form 9–331–C for Such proposals.	Jicarilla 70
1. oil gas other	9. WELL NO.
Well	11
2. NAME OF OPERATOR CHACE OIL COMPANY, INC.	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	South Lindrith Gallup Dakota
313 Washington SE Albuquerque, NM 87108	11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA Sec. 34, T24N, R4W
below.) Unit "K" 1850' WL and 1850' SL	
AT SURFACE:	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL: AT TOTAL DEPTH:	Rio Arriba New Mexico 14. API NO.
	14. AFI NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
•	7042' GR
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	, , , , , , , , , , , , , , , , , , ,
TEST WATER SHUT-OFF	
FRACTURE TREAT	
SHOOT OR ACIDIZE	(NOTE: Report results of multiple completion or zone
REPAIR WELL PULL OR ALTER CASING	
MULTIPLE COMPLETE	change on Form 9-330.) DEC 1 - 1981
CHANGE ZONES	OIL CON. COM.
ABANDON* (other) Progress Report X	DIST. 3
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state of the control of th	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is a measured and true vertical depths for all markers and zones pertined.  See attached two sheets	nt to this work.)*
Subsurface Safety Valve: Manu. and Type	Set @ Ft
18. I herefly certify that the foregoing is true and correct	
18. Thereby Certify that the forest don't	11/24/81
SIGNED TITLE President (This space for Federal or State of	DATE TITE TO
(This space for Federal or State o	ffice use)
APPROVED BY TITLE	DATE ACCEPTED FOR PERMAN
APPROVED BY TITLE TO CONDITIONS OF APPROVAL, IF ANY:	Herrer red ton nuevanu
	th, ₹ 0.0 1981
AR A American	Side
*See Instructions on Reverse	FARMETON (15.mc)



- 11/02/81 Blue Jet ran cement bond log. 100% bond from DV tool to 1460.

  Ran Halliburton RTTS packer. Set packer at 3089'. Cemented with 350 sxs Class "B", 2% calcium chloride. Pumped in at 400 psi on displacement. Staged cement. Cement was holding at 1000 psi. Released packer and pulled 20 joints and reset packer. Pressured up to 800 psi. Shut down overnight.
- 11/03/81 Pressure tested to 2500 psi. Pulled out of hole with tubing. Halliburton cemented 150 sxs, 2% calcium chloride. Staged the cement. Shut in with 800 psi on casing. Shut down.
- 11/04/81 Pressure tested to 1250 psi. Ran 3-7/8" bit and tubing. Tagging cement at 869'. Drilled out cement to 1183'. Shut down overnight.
- 11/05/81 Drilled out cement to 1301'. Pulled out of hole and pressure tested. Plug down at 2800 psi. Pumping 5 bbls per min. at 1500 psi. Cemented with 400 sxs Class "B", 3% calcium chloride. Staged cement to 1000 psi. Shut in overnight.
- 11/06/81 50 psi on casing. Ran 3-7/8" bit and tubing. Packed cement at 1053'. Drilled out cement to 1271'. Pressure tested to 1250 psi. Shut down overnight.
- 11/07/81 Drilled out cement to 1301'. Pressure tested to 2000 psi. Bled off to 1500 psi in 10 minutes. Ran bit to 3266'. Drilled out cement to 3518'. Circulated hole clean. Pulled out of hole for new bit. Ran new bit and tubing to 7100'. Western pressure tested to 2000 psi. Bled to 1400 psi in 10 minutes. Shut down overnight.
- Pulled out of hole with bit. Ran Halliburton RTTS packer and tubing to 1433'. Pressure tested tubing to 3000 psi for 10 minutes. Pressure tested casing to 2000 psi for 10 minutes. Both held good. Pulled out of hole with packer. Ran bit and tubing to 7150'. Displaced casing with 1% Kcl water. Shut down overnight.
- 11/10/81 Drilled out bridge plug. Circulated casing clean. Pushed bridge plug to bottom. Pulled out of hole. Waited and unloaded 3½" pipe.
- 11/11/81 Stand by waiting on pipe connection.
- 11/12/81 Standing by.
- 11/14/81 Picked up and ran two 3-1/2" flush joints for tail pipe and RTTS packer. 148 3-1/2" flush joints tail piped at 4968'. Packer at 4908'.
- 11/15/81 Shut down

11/16/81 Western fracked Dakota "C" and "D" zones with 60,000 of 20-40 sand and 23,000 gallons slick water.
12,000 gallon slick water pad

5,000 1/2# sand per gallon

5,000 1# " " "

35,000 1-1/2"" " "

5,000 Flush

Treating pressure Min. 3800, max. 4000. 30 bbls min. injection rate. 23 bbls min on flush. Instant shut down pressure 1500 psi. Bled down to 12,000 psi in 60 min. to 1020 psi in 4 hours. Started flowing back at 1PM.

- 11/17/81 Killed well with 60 bbls. 10# salt water. Released packer and pulled out of hole with tubing. Blue Jet perforated at 7084-7100', 7072'-7076', 7030-7034' and 7008'-7012', one shot per foot (28 holes). Ran tail pipe and tubing. Set packer at 4875'. Broke down perforations at 2200 psi. Attempted to ball off. Balls bridged and wellhead choked. Could not get any rate of flow. Backside pressure (casing side) dropped off indicating a new hole in the casing. Packer and 3½" liner pipe raised up some eight inches indicating the packer had released. However, there was no sign of communication between the casing side and the tubing. Broke off wellhead, flowed back to pit to check for bridge in line pipe. Could not see any balls at all. Shut down to come out of hole with tubing.
- 11/18/81 Killed well with 100 bbls salt water. Released packer and pulled out of hole with tubing. Ran new packer and tubing. Set packer at 4908'. Tailpipe at 4968'. Western fracked with 67,000 slick water. 65,000 20-40 sand. 12,000 gallon pad. 5,000 gallon 1/2# sand per gallon 10,000 gallon 1# sand per gallon 35,000 gallon 1-1/2# sand per gallon 5,000 flush Treating pressure Min. 3600, Max. 3900, avg. 3700. 31 bbls per min. Instant shut in pressure 1800, 15 min. 1500, 1 hr. 1225#, 2 hrs. 1150#, 3hrs. 1100#, 4 hrs. 1000#. Opened well up and flowed to pit.
- 11/19/81 Killed well. Released packer and pulled out of hole with packer, Blue Jet set drillable bridge plus at 6300'. Perforated at: 6228-40', 6080-94', 6069-71', 5974-77', one shot per foot; and 6180' at 4 shots per foot. Total 35 holes. Ran tubing and packer at 4908'. Tailpipe at 4968'. Broke down perforations 1200 psi. Balled off with 250 gallons of Hcl acid. Bled well back overnight.
- 11/20/81 Western started frac on Gallup first. Sanded off and cleaned with sand and Nowsco endless tubing. Fracked as follows: 16,632 gallon pad, 93,080 ½# sand per gallon; 16,716 1# sand per gallon, 11,214 1-1/2# sand per gallon, 38,724 1# sand per gallon and 3780 gallon flush.