5. LEASE

UNITED STATES DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR	Jicarilla 70
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
	Jicarilla Apache 7. UNIT AGREEMENT NAME
SUNDRY NOTICES AND REPORTS ON WELLS	1
o not use this form for proposals to drill or to deepen or plug back to a different servoir. Use Form 9-331-C for such proposals.)	8. FARM OR LEASE NAME
servoir. Use Form 9–331–C for such proposals,	Jicarilla 70
oil gas other	9, WELL NO.
well KX well Collection	70-15
Chace Oil Company, Inc.	10. FIELD OR WILDCAT NAME
ADDRESS OF OPERATOR 8/108	S. Lindrith Gallup Dakota 11. SEC., T., R., M., OR BLK. AND SURVEY OR
212 Washington SE. Albuquerque, NM	
1. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	Sec. 34, T24N,R4W
below.) 775 FGT. S.	12. COUNTY OR PARISH 13. STATE
AT SURFACE: Unit 10 = 7/3 135 & AT TOP PROD. INTERVAL: 2175' FEL	Rio Arriba New Mexico
AT TOTAL DEPTH:	14. API NO.
5. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	TO AND WED
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
TOUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	
EQUEST FOR ALTHORIS	
EST WATER SHUT-OFF	
RACTURE TREAT SHOOT OR ACIDIZE	(NOTE: Report results of multiple completion or zone change on Form 9–330.)
REPAIR WELL	(NOTE: Report results of multiple completion of 2010)
PULL OR ALTER CASING	SURVEY
MULTIPLE COMPLETE	LI SUM.
CHANGE ZONES	1. 65. 1. 4. 1.
ABANDON*	
 DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly stincluding estimated date of starting any proposed work. If well is measured and true vertical depths for all markers and zones perting the starting and true vertical depths for all markers. 	nent to this work.)*
See Well History attached. 4/13/03	
	DE E E E E E E DE E DE LE COMPANIE D
	OIL CON. DIV.
	DIST. 3
	. —
Subsurface Safety Valve: Manu. and Type	Set @
18. I hereby pertify that the foregoing is true and correct	
Presiden	t DATE4/20/83
SIGNED TO THE TOTAL TO THE TOTAL TOT	
(This space for Federal or State	
TITLE	DATE
APPROVED BY TITLE CONDITIONS OF APPROVAL, IF ANY:	DATE

PED FOR RECORD

*See Instructions on Reverse Side

Jicarilla Apache 70-15 Recompletion

4/13/83:

- 2:00 P. M. Unseat pump. Hot oil tubing with 40 bbl.
- 2:45 P. M. Start out of hole with rods.
- 4:30 P. M. Out of hole with rods.
 Nipple up BOP
- 6:30 P. M. Pick up 2 joints of tubing. Tag bottom.
- 7:55 P. M. Try to circulate hole with Kcl H₂O. Could not establish circulation.
 Wash Dakota perfs with 300 gal. 7½% Hcl.
- 8:44 P. M. Pull 7 stands. Pump acid into Dakota perforations.
- 9:05 P. M. Trip out of hole with tubing. Rig Western up to well head. Rig Bluejet up.

4/14/83:

- 1:36 A. M. Go in hole with correlation log.
- 3:06 A. M. Trip out of hole with logging tool.
- 3:15 A. M. Go in hole with EZ Drill Bridge Plug.
- 3:43 A. M. Set plug @ 7140'.
- 4:00 A. M. Go in hole to perforate Greenhorn zone.
- 4:25 A. M. Perforate <u>Greenhorn</u> @ 7120', 7117', 7115', 7112', 7109', 7106', 7100', 7097', 7093', 7080'. Fluid level @ 5600'/misfire on 7074', 7080'.
 - 4:41 A. M. Go in hole to perforate Greenhorn zone @ 7072', 7080'. Eliminate 7074', 7065'.
 - 4:53 A. M. Perforate <u>Tocito</u> Zone @ 6871', 6869', 6823', 6813', 6807', 6782', 6770', 6754', 6750'.

TOCITO GREENHORN FRAC

- 5:23 A. M. Load hole. 94 bbl.
- 5:26 A. M. Establish rate. 49 BPM @ 3100 PSI 1300 PSI. ISIP
 Bullhead 200 gal. 75% Hcl with 90 frac balls Run 20 bbl spacer
 Drop 5 balls/bbl in 18 bbl.
 At 3200 PSI shut down.

70-15 Recompletion

Start pad. Shut down. Gate box showing no rate. 7:15 A. M.

50 BPM @ 3750 PSI 7:38 A. M. Start pad.

50 BPM @ 3400 PSI 7:41 A. M.

> 50 BPM @ 3200 PSI Start 1/2 lb. sand

> > 1/2 lb. sand on formation

50 BPM @ 3200 PSI

50 BPM @ 3550 PSI Stay at 1/2 lb. sand

50 BPM @ 3600 PSI 7:48 A. M.

On 1/2 lb. gal sand 50 BPM @ 3750 PSI 7:49 A. M.

7:50 A. M. Slow rate due to high 42 BPM @ 3550 PSI pressure

> Slow rate due to high pressure

34 BPM @ 3800 PSI

Cut sand. Go to flush 34 BPM @ 3700 PSI 7:52 A. M.

> 30 BPM @ 3700 PSI On flush

> > 26 BPM @ 3700 PSI

Flush away. 7:56 A. M.

1750 PSI Shut down. ISIP

856 bbl. slurry Pump 5 min. Shut in 10,400 lbs sand

1400 PSI

744 bbls. slurry

8:15 A. M. Go in hole with retrievable bridge plug.

Set RBP @ 6380' 8:58 A. M.

9:18 A. M. Pressure test plug to 4000 PSI.

Go in hole with dump bailer.

10:11 A. M. Spot 7 gal. sand on bridge plug.

11:00 A. M. Go in hole with tubing to spot acid over Gallup formation.

Spot acid from 6318' to 5629'.

Come out of hole with tubing. 1:30 P. M.

Out of hole with tubing. Flange up frac head. 1:45 P. M.

Rig up Bludjet.

70-15 Recompletion

- 3:05 P. M. Go in hole with perforating guns to shoot Upper Gallup
- 3:35 P. M. Perforate Upper Gallup @ 5806', 5809', 5823', 5841', 5844, 5849', 5863', 5871', 5876', 5880', 5888' 4 SPF.

 Have 5 misfires
- 4:59 P. M. Reperforate @ 5863', 5871', 5876', 5880', 5888'
- 5:18 P. M. Break down Upper Gallup perforations.

Broke @ 1900 PSI

Establish rate.

52 BPM @ 2700 PSI

ISIP = 750 PSI

- 5:30 P. M. Run in hole with guns to perforate Lower Gallup
- 5:42 P. M. Perforate Gallup @ 6302', 6307', 6311', 6314', 6316', 6319'.

Break down Upper and Lower Gallup perforations.

Broke @1700 PSI.

Establish rate

70 BPM @ 3500 PSI

ISIP = 700 PSI

6:02 P. M. Start balls. 5 balls/bbl in 10 bbl, 12 BPM

20 bbl spacer

22 BPM

5 balls/bbl in 10 bbl, 12 BPM

Increase rate

43 BPM @ 1700 PSI

- 6:06 P. M. Balls should be on. Have ball action.
- 6:10 P. M. Pressure increases to 3700 PSI. Shut down.
- 6:45 P. M. Go in hole with junk basket to pick up balls.
- 7:25 P. M. Out of hole with junk basket.

GALLUP FRAC

7:36 P. M. Start pad.

79 BPM @ 2800 PSI

77 BPM @ 2900 PSI

7:44 P. M. Start 1/2 lb sand

77₺ BPM @ 2900 PSI

Sand on formation

78 BPM @ 2900 PSI

7:47 P. M. Start 1 lb sand

78 BPM @ 2900 PSI

70-15 Recompletion

7:49 P. M. 1 lb sand on formation 78 BPM @ 2900 PSI

7:51 P. M. On 1 lb sand 79 BPM @ 2850 PSI

7:57 P. M. On 1 lb sand 78 BPM @ 2900 PSI

8:05 P. M. Start 1.5 lb sand 78 BPM @ 2900 PSI

8:06 P. M. 1.5 lb sand on formation 77.5 BPM @ 2900 PSI

8:12 P. M. On 1.5 lb sand 78.5 BPM @ 2850 PSI

8:25 P. M. Go to flush - 3694 bbl slurry

8:26 P. M. Flush away. Shut down.

ISIP = 500 PSI

5 min. shut in - 400 PSI 15 min. shut in - 400 PSI

155,000 lbs. sand 3627 bbls H₂0 pumped

10:30 P. M. Open well up. Flow back Gallup formation.

4/15/83:

- 2:30 A. M. Go in hole with tubing and retrieving head to retrieve bridge plug.
- 3:45 A. M. Come out of hole with plug.
- 6:30 A. M. Go in hole with tubing and mill. Mill up EZ drill bridge plug @ 7140'.

Clean casing out to 7390'.

Come out of hole with mill.

7:30 P. M. Go in hole with tubing and seating nipple.

Land 2 3/8" tubing @ 7316'.

10:30 P. M. Blow hole down with nitrogen.

4/16/83:

- 4:11 A. M. Hang rods on pump.
- 7:30 A. M. Start pump jack.