Form: 3160-5 (November 1983) (Formerly 9-331)  UNITED STATES  BUBMIT IN TRIPLICATE* (Other instructions on recommendation)  BUREAU OF LAND MANAGEMENT	born approved.  Budget Bureau No. 1004-0135 Expires August 31, 1985  5. LEASE DESIGNATION AND SERIAL NO.  Jicarilla Contract #47
SUNDRY NOTICES AND REPORTS ON WELLS  (1)c not use this form for proposals to drill or to deepen or plug back to a different reservoir.  Use "APPLICATION FOR PERMIT—" for such proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAME  Jicarilla Apache  7. UNIT AGREEMENT NAME
WELL CAB CAB OTHER	(. UNIT AGREEMENT NAME
Chace Oil Company, Inc.	8. PARM OR LEAST NAME  Jicarilla Tribal Contract #47  9. WELL NO.
313 Washington, SE, Albuquerque, NM 87108  1 Ocation of Well (Report location clearly and in accordance with any State requirements.*  See also space 17 below.)	10. PIBLD AND POOL, OR WILDCAT
At surface RECEIVED	South Lindrith, Gallup Dakota:
Unit 'F', 1761' FWL & 1873' FNL UL 011985	SURVEY OR AREA
14. PERMIT NO.  15. BLEVATIONS (Show wIRLINGTON RESOURCE AREA  7375 GR	Section 13, T23N, R4W 12. COUNTY OF PARISE 18. STATE Rio Arriba New Mexico
Check Appropriate Box To Indicate Nature of Notice, Report, or O	•
none or management and	ENT EBPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT	REPAIRING WELL ALTERING CABING
REFAIR WELL CHANGE PLANS (Other)  (Other)  (Other)	of multiple completion on Well
See Well History attached, 6/14/85 through 6/19/85.	
OIL CONDITIONS OF APPROVAL, IF ANY:	CENED  LO5 1985  ON. DIV./ ST. 3  DATE June 28, 1985  ACCEPTED FOR RECORD  DATE
	FARAMOTON NESSONUE AREA

NMOCC

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any motion within its included.

\*See Instructions on Reverse Side

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## 47-16 Completion

6/14/85: Drill out D. V. tool at 3187' KB.

Clean out casing to 7549' KB.

## 6/17/85:

7:15 a.m. Pressure test casing to 4000 PSI.

Circulate casing with 2% Kcl water.

Spot 250 gal 7 1/2% acetic acid from 7400' up hole.

Trip out of hole with tubing.

10:30 a.m. Run CBL and correlation log (Logger's TD: 7495').

From TD to 5800'
5450'-5100'
3200'-2850'.

1:20 p.m. Perforate Dakota 'A' zone at:
7229', 7231', 7233', 7235', 7237', 7239', 7241', 4 SPF, 28 holes.

1:25 p.m. Perforate Dakota 'D' zone at: 7392', 7394', 7398', 7400', 4 SPF, 16 holes.

1:49 p.m. Break down Dakota perforations.

Broke at 3000 PSI.

Establish rate 36 BPM @ 3900 PSI.

Shut down. ISIP = 900 PSI.

Start balls. 2 balls/bbl for 36 bbls. Total of 72 balls.

Increase rate to 45 BPM @ 2900 PSI.

Have ball off at 4200 PSI.

Surge balls off perforations.

Go in hole with junk basket.

Recover 71 balls.

DAKOTA 'A' AND 'D' FRAC:

2:50 p.m. Start pad. 50 BPM @ 3200 PSI.

2:58 p.m. On pad. 49 BPM @ 3500 PSI.

3:03 p.m. Start 1/2 lb/gal sand 47.5 BPM @ 3400 PSI.

1/2 lb/gal sand on formation 44 BPM @ 3000 PSI.

3:05 p.m. Start 1 lb/gal sand 46 BPM @ 3100 PSI. 3:09 p.m. 1 lb/gal sand on formation 49 BPM @ 3100 PSI. On 1 lb/gal sand 3:16 p.m. 48.5 BPM @ 3000 PSI. Start 1 1/2 lb/gal sand 3:34 p.m. 50 BPM @ 3300 PSI. 3:36 p.m. 1 1/2 lb/gal sand on formation 50 BPM @ 3300 PSI. 3:41 p.m. On  $1 \frac{1}{2}$  lb/gal sand 46 BPM @ 3000 PSI. On 1 1/2 lb/gal sand 3:48 p.m. 43 BPM @ 3500 PSI. 3:54 p.m. Shut down. Repair pressure transducers. 4:00 p.m. Start back on 1 1/2 lb sand 40 BPM @ 3100 PSI. 4:03 p.m. Ball gun starts leaking. Cut sand. Go to flush. Flush away. Shut down. = 1600 PSI ISIP  $5 \min = 1550 PSI$  $10 \min = 1525 PSI$ Total sand = 110,000 lbsTotal fluid = 3,300 bbls 4:52 p.m. Set Howco bridge plug at 7200' KB. 5:12 p.m. Pressure test plug to 4000 PSI. Trip in hole with tubing. Spot 300 gal of 7 1/2% Hcl from 7169' up hole. Run in hole with perforating gun. 10:00 p.m. Perforate Tocito at: 6941', 6943', 6945', 6947', 4 SPF, 16 holes. 10:02 p.m. Perforate Greenhorn at: 7152', 7157', 7160', 7163', 7165', 7169', 4 SPF, 24 holes. 10:20 p.m. Break down perforations.

Broke at 1200 PSI.

Establish rate.

40 BPM @ 3000 PSI.

Shut down. ISIP = 1500 PSI.

10:24 p.m. Start balls. 2 balls/bbl for 30 bbls. Total of 60.

Increase rate

42 BPM @ 3000 PSI. Have ball off at 4000 PSI.

Go in hole with junk basket. Recover 51 balls.

## GREENHORN, TOCITO FRAC:

11:38 p.m. Start pad. 48 BPM @ 3400 PSI.

11:44 p.m. Start 1/2 lb/gal sand 46 BPM @ 3400 PSI.

11:47 p.m. 1/2 lb/gal sand

on formation 48 BPM @ 3400 PSI.

11:49 p.m. Start 1 lb/gal sand 46 BPM @ 3450 PSI.

11:51 p.m. 1 lb/gal sand on

formation 47 BPM @ 3300 PSI.

11:57 p.m. Start 1 1/2 lb/gal sand 46 BPM @ 3350 PSI.

11:59 p.m. 1 1/2 lb/gal sand

on formation 46 BPM @ 3400 PSI.

#### 6/18/85:

12:00 a.m. At 1017 go to 1 lb/gal

sand. 35 BPM @ 3600 PSI.

12:02 a.m. At 3800 PSI, cut sand.

Go to flush.

12:15 a.m. Flush away. Shut down.

ISIP = 2200 PSI

 $5 \min = 1600 PSI$ 

 $10 \min = 1525 PSI$ 

Total sand = 31,500 lbs.

Total fluid = 1,300 bbls.

Go in hole with Baker bridge plug.

1:00 a.m. Set plug at 6430' KB.

## Jicarilla Apache 71-42 Completion:

1:18 a.m. Pressure test plug to 4000 PSI.

Spot 400 gal 7 1/2% Hcl from 6376' up hole

5:30 a.m. Perforate Gallup zone at:

6134', 6142', 6228', 6244', 6248', 6252', 6254', 6256', 6258',

6260', 6262', 3 SPF, 33 holes.

Perforate Gallup zone at:

6271', 6273', 6276', 6283', 6329', 6331', 6340', 6342',

6344', 6346', 3 SPF, 30 holes.

Break down Gallup perfs

7:40 a.m. Broke at 1000 PSI.

Establish rate

70 BPM @ 3100 PSI.

Shut down. ISIP = 600 PSI.

Start balls. 3 balls/bbl for 33 bbls.

Increase rate to

60 BPM @ 2500 PSI.

Have a ball off at 4000 PSI.

8:00 a.m. Go in hole with junk basket.

Recover 98 balls.

Trip in hole with tubing and packer.

Set packer at 6000'.

Swab Gallup perfs to clean up drilling mud.

Have good oil and gas show.

Pull tubing out of hole.

Gallup frac:

4:04 p.m. Start pad.

73 BPM @ 3550 PSI.

4:14 p.m. Start 1/2 lb/gal sand 74 BPM @ 3650 PSI.

# Jicarilla Apache 47-16 Completion:

Jicarilla Apache 47-16 Completion:		
4:15 p.m.	1/2 lb/gal sand on formation	73 BPM @ 3700 PSI.
4:16 p.m.	Start 1 lb/gal sand	74 BPM @ 3600 PSI.
4:17 p.m.	l lb/gal sand on formation	73 BPM @ 3650 PSI.
4:18 p.m.	Pressure climbs to 3900 PS. Slow rate to	I. 20 BPM @ 3700 PSI.
	Cut sand. Try to clean up	perfs.
4:22 p.m.	Pressure climbs to 4000 PS	I. Shut down.
	Flow sand and water back.	
	Trip in hole with tubing. Wash out 4 stands of sand.	
	Trip out of hole with tubing.	
	Gallup frac attempt #2:	
10:02 p.m.	Start pad	50 BPM @ 3800 PSI.
10:07 p.m.	Start 1/2 lb/gal sand	54 BPM @ 3600 PSI.
10:09 p.m.	1/2 lb/gal sand on formation	56 BPM @ 3300 PSI.
10:10 p.m.	Start 1 lb/gal sand	56 BPM @ 3300 PSI.
10:11 p.m.	1 lb/gal sand on formation	56 BPM @ 3300 PSI.
10:14 p.m.	On 1 lb/gal sand	44 BPM @ 3700 PSI
10:18 p.m.	On 1 lb/gal sand	26 BPM @ 3900 PSI
	On flush	27 BPM @ 3900 PSI.
	Slow rate to	23 BPM @ 3800 PSI.
10:23 p.m.	Start 1/2 lb/gal sand	22 BPM @ 3750 PSI
10:27 p.m.	1/2 lb/gal sand on formation	22 BPM @ 3650 PSI
10:32 p.m.	Pressure reaches 4000 PSI.	Shut down.
	Pressure falls to 1000 PSI.	
	Start pumping.	7 BPM @ 3800 PSI

6 BPM @ 3900 PSI

# Jicarilla Apache 47-16 Completion:

10:34 p.m. Shut down.

ISIP = undetermined.

 $5 \min = 300 PSI$ 

total sand = 35,300 lbs

total fluid = 1,350 bbls

11:00 p.m. Flow Gallup formation back.

6/19/85: Go in hole with tubing. Retrieve Baker bridge plug.

Mill up Howco drillable bridge plug.

Clean out casing to 7507' KB.

Land production tubing, seating nipple at 7326' KB.

Have a 4' perforated sub and a 32' tail jt. of tubing below seating nipple.

End of tubing at 7362' KB.