Form, 3160-5 (November 1983) (Formerly 9-331)	UNITED STATES DEPARTMENT OF THE INTER BUREAU OF LAND MANAGEMEN		b. LEARE DESIGNATION AND BREIAL BO.  Jicarilla Contract #47
	IDRY NOTICES AND REPORTS  form for proposals to drill or to deepen or plug  Use "APPLICATION FOR PERMIT—" for such		Jicarilla Apache
OIL X CAB WELL	OTHER		7. UNIT AGREEMENT NAME
Chace Oil Co	mpany, Inc.		S. PARM OR LEASE NAME  Jicarilla Tribal Cont. #47
At surface	on, SE, Albuquerque, NM 8710 Report location clearly and in accordance with an	47-10 10. FIELD AND POOL, OR WILDCAT  South Lindrith, Gallup Dakota 11. SEC., T., E., M., OB BLE. AND BURYET OR AREA	
14. PERMIT NO.	15 ELEVATIONS (Show whether I	BUREAU OF LAND MANAGEMENT	Section 11, T23N,R4W  12. COUNTY OR PARISH 18. STATE  Rio Arriba New Mexico
16	Check Appropriate Box To Indicate	FARMINGTON RESOURCE AREA Nature of Notice, Report, or C	
TEST WATER SHUT-OF FRACTURE TREAT SHOOT OF ACIDIZE REPAIR WELL (Other)	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON* CHANGE PLANS  COMPLETED OPERATIONS (Clearly state all pertine well is directionally drilled, give subsurface loc  See Well Histor Page 8 through	WATER SHUZ-OFF  FRACTURE TREATMENT  SHOOTING OR ACIDIZING  (Other)  (NOTE: Report results Completion or Recomple  int details, and give pertinent dates, ations and measured and true vertical	REFAIRING WELL ALTERING CABING ABANDONMENT*  of multiple completion on Well etion Report and Log form.) including estimated date of starting any 1 depths for all markers and zones perti-
8. I hereby certhy that the SIGNED (This space for Federal APPROVED BY CONDITIONS OF APPROVED STATES OF APPROVED BY CONDITIONS OF APPROXED BY CONDIT	TITLE	resident	ACCETTED/EOR RECORD  FEB U 6 1986  DATE FARMINGTON MESONGE AREA  BY

\*See Instructions on Reverse Side

Well:Jica	rilla Apache 47-	CHACE	<del>- OIL</del> COMPANY		Page: 8
Date: 1/11		Albuquer	3 Washington S. que, New Mexico		
24 hour foot Drill Collar Rotary: RPM:	Present or age: s: No: S: Weight or	ze:	Tormation: Weight: Presen	Bor	e:
Pump: Liner size: Pressure: Much: Vis: Wt.: W. Much additives last 24 hours:			Strokes per minute.		
Deviation sur Bit:					
Break down:	1/2 hour 4 1/2 hours 2 1/4 hours 1 1/2 hours 3 hours 1 1/4 hours 4 hours 7 hours	lay down dri run casing rig up and c cement 1st s open D. V. t cement 2nd s nipple down rig down	irculate tage ool and circu		l:00 p.m. 1/10/86
Ran 196 join	ts of 4 1/2", 11	.6 lb/ft, N-8	0 casing set	at 7602' KB. Guid	le

Ran 196 joints of 4 1/2", 11.6 lb/ft, N-80 casing set at 7602' KB. Guide shoe at 7601' KB. Float collar at 7559'. D. V. tool at 3199'. Cement baskets at 6865', 4948', 4593', 1950'. First stage: pumped 10 bbls Flo-chek 21. Cemented 1st stage with 1150 sks (1646 CF) 50/50 pozmix, 2% gel, 6 1/4 lb/sk Gilsonite, 6 lb/sk salt. Plug down at 3:47 p.m. Opened D. V. tool. Circulated upper stage 3 hours. Second stage: pumped 10 bbls Flo-chek 21. Cemented 2nd stage with 550 sks (1166 CF) 65/35 pozmix, 6% gel, 12 1/4 lb/sk Gilsonite. Tailed in with 50 sks (59 CF) Class B neat. Plug down at 6:52 p.m. on 1/10/86. Circulated 3 bbls cement to surface.

#### 1/16/86:

Move in. Rig up.
Pick up 2 3/8" tubing with 3 7/8" rock bit.
Drill out D. V. tool at 3199' KB.
Circulate casing clean. Shut down for the night.

### 1/17/86:

Pick up remaining tubing. Clean out casing to float collar at 7559' KB. Shut down for weekend.

### 1/20/86:

7:45 a.m. Pressure test casing to 4000 PSI.
Circulate casing with 2% Kcl water.
Spot 250 gal 7 1/2% acetic acid from 7481' KB up hole.

8:55 a.m. Trip out of hole with tubing.

Rig up loggers.

Loggers' T. D. = 7548'

# Jicarilla Apache 47-10 Completion Procedure:

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Run CBL and correlation log from T. D. to 5900' KB 5500' - 5150' KB 3250' - 2900' KB

2:10 p.m. Perforate Dakota 'D' zone at:

7452', 7454', 7457', 7460', 7463', 7466', 7472', 7475', 7478', 7481', 4 SPF, 40 holes.

2:30 p.m. Break down Dakota 'D' perfs:

Broke at 2200 PSI.

Establish rate 50 BPM @ 3200 PSI

Shut down. ISIP = 1000 PSI.

Start balls. 2 balls/bbl for 35 bbls @ 10 BPM (Total of 70 balls)

Increase rate to 42 BPM @ 2500 PSI

Have ball off at 4200 PSI

Go in hole with junk basket. Recovered 70 balls.

3:35 p.m. Start pad. 56 BPM @ 3500 PSI

3:45 p.m. Start 1/2 lb/gal sand 55 BPM @ 3400 PSI.

3:47 p.m. 1/2 lb/gal sand

on formation 52 BPM @ 3400 PSI

3:48 p.m. Start 1 lb/gal sand 51 BPM @ 3100 PSI

3:50 p.m. 1 lb/gal sand

on formation 52 BPM @ 3150 PSI

4:00 p.m. Start 1 1/2 lb/gal sand 50 BPM @ 3300 PSI

4:02 p.m. 1 1/2 lb/gal sand

on formation 51 BPM @ 3300 PSI

4:07 p.m. On 1 1/2 lb sand 46 BPM @ 3400 PSI

4:20 p.m. On 1 1/2 lb/sand 45 BPM @ 3200 PSI

4:22 p.m. Cut sand. Go to flush

4:24 p.m. Flush away. Shut down.

ISIP = 1400 PSI

5 min = 1225 PSI

 $10 \min = 1175 PSI$ 

 $15 \, \text{min} = 1150 \, \text{PSI}$ 

Total sand = 81,550 lbs

Total water = 2,300 bbls

## Jicarilla Apache 47-10 Completion Procedure:

5:12 p.m. Set Howco bridge plug at 7385' KB.

5:33 p.m. Pressure test plug to 4000 PSI.

Trip in hole with tubing.

Spot 300 gal 7 1/2% Hcl from 7340' up hole.

11:30 p.m. Perforate Tocito at:

7006', 7008', 7010', 3 SPF, 9 holes.

Perforate Greenhorn at:

7187', 7206', 7215', 7218', 7221', 7224', 7233', 7238', 3 SPF, 24 holes.

# 1/21/86:

12:05 a.m. Perforate Dakota 'A' at:

7293', 7295', 7297', 7299', 7301', 7303', 7305', 7307', 7309',

7340', 3 SPF, 30 holes.

1:05 a.m. Break down perforations.

Broke at 1800 PSI.

Establish rate

46 BPM @ 3600 PSI

Shut down. ISIP = 1400 PSI.

Start balls. 3 balls/bbl for 33 bbls (Total of 100 balls)

Increase rate to

38 BPM @ 2250 PSI

No ball off.

Go in hole with junk basket. Recover 99 balls.

2:14 a.m. Start pad.

60 BPM @ 3300 PSI

2:18 a.m. On pad.

42 BPM @ 3300 PSI

2:22 a.m. Start 1/2 lb/gal sand

51 BPM @ 3400 PSI

2:24 a.m.

1/2 lb/gal sand

on formation

51 BPM @ 3300 PSI

2:26 a.m. Start 1 lb/gal sand

50 1/2 BPM @ 3200 PSI

2:28 a.m. 1 lb/gal sand on

formation

51 BPM @ 3100 PSI

Broke at 850 PSI.

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2:38 a.m. Start 1 1/4 lb/gal sand
                                       50 BPM @ 3200 PSI
 2:40 a.m.
            1 1/4 lb/gal sand on
            formation
                                       50 BPM @ 3225 PSI
 2:45 a.m. On 1 1/4 lb/gal sand
                                       50 BPM @ 3400 PSI
 2:47 a.m.
            Go back to 1 lb/gal sand
                                       48 BPM @ 3600 PSI
 2:49 a.m.
            1 lb/gal sand on
            formation
                                       46 BPM @ 3650 PSI
 2:58 a.m. On 1 lb/gal sand
                                       46 BPM @ 3625 PSI
 3:00 a.m.
            Cut sand. Go to flush
                                       42 BPM @ 3800 PSI
 3:03 a.m.
           Flush away. Shut down.
            ISIP
                  = 1900 PSI
            5 \min = 1750 PSI
            10 \min = 1700 PSI
            15 \min = 1650 \text{ PSI}
            Total sand = 75,900 lbs
            Total water = 2,300 bbls
            Go in hole with Baker bridge plug.
 4:00 a.m.
           Set plug at 6555' KB.
 4:21 a.m. Pressure test plug to 4000 PSI.
            Trip in hole with tubing.
            Spot 450 gal 7 1/2% Hcl from 6505' up hole.
            Trip out of hole with tubing.
           Perforate Gallup zone at:
            5967', 5990', 6033', 6037', 6039', 6041', 6051', 6053', 6086', 6090',
 9:30 a.m.
            6093'.
10:05 a.m.
            6095', 6100', 6142', 6154', 6194', 6240', 6257', 6280', 6291', 6323',
10:30 a.m.
            6327', 6329', 6398', 6403', 6430', 6432', 6434', 6439', 6441', 6444',
            6505', 3 SPF, 96 holes.
10:47 a.m.
           Break down Gallup perforations.
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# Jicarilla Apache 47-10 Completion Procedure:

Establish rate

59 1/2 BPM @ 3100 PSI

Shut down. ISIP = 450 PSI

10:50 a.m. Start balls. 4 balls/bbl for 37 1/2 bbls at 12 BPM at 600 PSI.

Total of 150 balls.

Increase rate to 40 BPM @ 1600 PSI.

Have good ball action at 30 BPM @ 2500 PSI

Pressure increased to 3000 PSI.

No ball off.

Recover 148 balls.

 $10 \min = 325 PSI$  $15 \min = 300 PSI$ 

## Gallup frac:

11:54 a.m.	Start pad.	69 BPM @ 3575 PSI.
12:01 p.m.	On pad	68 BPM @ 3000 PSI
12:02 p.m.	Start 1/2 lb/gal sand	74 BPM @ 3200 PSI.
12:03 p.m.	1/2 lb/gal sand on formation	76 BPM @ 3200 PSI.
12:05 p.m.	Start 1 lb/gal sand	77 BPM @ 3175 PSI.
12:06 p.m.	l lb/gal sand on formation	77 BPM @ 3150 PSI
12:15 p.m.	On 1 lb/gal sand	77 1/2 BPM @ 3100 PSI
12:21 p.m.	Start 1 1/2 lb/gal sand	75 BPM @ 3100 PSI
12:22 p.m.	1 1/2 lb/gal sand on formation	77 BPM @ 2950 PSI
12:25 p.m.	On 1 1/2 lb/gal sand	74 BPM @ 3200 PSI
12:32 p.m.	On $1 \frac{1}{2}$ lb/gal sand	74 BPM @ 3225 PSI
12:36 p.m.	Cut sand. Go to flush.	
12:37 p.m.	Flush away. Shut down. ISIP = 400 PSI 5 min = 375 PSI	

Total sand = 125,000 lbs.

Total water = 3,400 bbls.

3:00 p.m. Open well up. Flow Gallup formation back.

Go in hole with tubing and retrieving head.

Retrieve Baker bridge plug set at 6555' KB.

# 1/22/86:

Mill up Howco bridge plug at 7385' KB. Clean out casing to float collar at 7559' KB.

Land 229 joints of 2 3/8" tubing with seating nipple and 4' perforated sub below seating nipple, and a 32' tail joint below perforated sub.

Seating nipple at 7351' KB.

End of tubing at 7387' KB.