Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 well [X] gas well [ ] other

2. NAME OF OPERATOR
Chace Oil Company, Inc.

3. ADDRESS OF OPERATOR
313 Washington, S. E., Albuquerque, NM 87108

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: Unit 'N' - 665' FSL & 1925' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
Tribal Contract #71

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Jicarilla Tribal Contract #71

9. WELL NO.
#-16

10. FIELD OR WILDCAT NAME
S. Lindrith Gallup Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 3, T23N, R4W

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7247' GL

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	[ ]		[ ]
FRACTURE TREAT	[ ]		[ ]
SHOOT OR ACIDIZE	[ ]		[ ]
REPAIR WELL	[ ]		[ ]
PULL OR ALTER CASING	[ ]		[ ]
MULTIPLE COMPLETE	[ ]		[ ]
CHANGE ZONES	[ ]		[ ]
ABANDON*	[ ]		[ ]
(other)			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

Well History attached - 9/12/83 through 9/21/83.

OIL CON. DIV.
DIST. 3

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED D. W. Mullins TITLE President DATE September 27, 1983

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD
SEP 30 1983
FARMINGTON RESOURCE AREA
BY

*See Instructions on Reverse Side

NMOCC

JICARILLA APACHE 71-16 COMPLETION:

9/12/83:

12:33 P. M. Tag cement 60' above D. V. Tool at 3251' KB.
101 joints with 15' stickup.
Drill out D. V. Tool.
Tag cement with 229 jt with 10' stickup at 7370'.
Have ± 138' of cement and stringer.

6:30 P. M. Clean out casing to 7510'.
Circulate hole with 2% Kcl water.

7:07 P. M. Pressure test casing to 4000 PSI.
Spot 250 gal 7½% acetic acid from 7442' up hole.
Trip out of hole with tubing.

10:20 P. M. Start in hole with logging tools.

9/13/83:

1:45 A. M. Out of hole with logging tools.

2:20 A. M. Perforate Dakota 'D' zone @ 7418', 7420', 7423', 7427', 7429', 7431', 7433', 7435', 7438', 7440', 7442' - 4 SPF, 44 holes.

2:47 A. M. Break down perforations.
Broke @ 2900 PSI.
Establish rate 44 BPM @ 2200 PSI
ISIP = 600 PSI

2:50 A. M. Start balls.
3 balls/bbl in 22 bbls.
Increase rate to 52 BPM @ 2500 PSI
Have ball action at capacity.
Have ball off at 4000 PSI.

3:15 A. M. Start in hole with junk basket.
Recover 62 balls.

Jicarilla Apache 71-16 Completion:

9/13/83: DAKOTA 'D' FRAC

3:56 A. M.	Start pad.	60 BPM @ 3000 PSI
4:02 A. M.	Start 0.5 lb sand	66 BPM @ 3400 PSI
4:04 A. M.	0.5 lb sand on formation	65 BPM @ 3500 PSI
4:05 A. M.	Start 1.0 lb sand	65 BPM @ 3500 PSI
4:06 A. M.	1.0 lb sand on formation	65 BPM @ 3400 PSI
4:12 A. M.	On 1.0 lb sand	64.5 BPM @ 3400 PSI
4:19 A. M.	Start 1.5 lb/gal sand	64 BPM @ 3400 PSI
4:21 A. M.	1.5 lb/gal sand on formation	64 BPM @ 3350 PSI
4:25 A. M.	On 1.5 lb/gal sand	62 BPM @ 3400 PSI
4:27 A. M.	On 1.5 lb/gal sand	61 BPM @ 3500 PSI
4:29 A. M.	On 1.5 lb/gal sand	60 BPM @ 3600 PSI
4:31 A. M.	Slow rate to	52 BPM @ 3600 PSI
	Cut sand. Go to flush.	
		43 BPM @ 3800 PSI
4:34 A. M.	Reach max. pressure. Shut down.	
	Total fluid = 2,223 bbls.	
	Total sand in = 85,000 lbs.	
	89 bbls short of displacement	
5:30 A. M.	Flow back sand.	
5:38 A. M.	Displace hole with 2% Kcl water.	
6:30 A. M.	Start in hole with bridge plug.	
7:15 A. M.	Get to 7354' with plug. Setting tool will not fire.	
	Come out of hole with plug.	
8:25 A. M.	Start in hole with new plug.	
9:10 A. M.	Set plug @ 7354'.	

Jicarilla Apache 71-16 Completion:

9:29 A. M. Pressure test plug to 4000 PSI.

Trip in hole with tubing. Spot 400 gal. 7½% Hcl from 7306' up hole.

1:50 P. M. Perforate Tocito @ 6963', 6965', 6968', 6970', 6972', 4 SPF, 20 holes.

Perforate Greenhorn @ 7188', 7192', 7194', 7198', 7204', 7206', 4 SPF, 24 holes.

2:30 P. M. Got to 6597' with 2nd perforating gun. Gun got stuck.

3:00 P. M. Pulled out of rope socket.

Rig up over-shot to fish perforating gun.

6:30 P. M. Out of hole with gun.

6:45 P. M. Run in hole with junk basket to recover junk that stuck gun.

Recover 1 Bluejet perforating gun bolt.

7:53 P. M. Perforate Greenhorn @ 7220', 7222', 4 SPF, 8 holes.

Perforate Dakota 'A' @ 7262', 7265', 7267', 7269', 7271', 7273', 7276', 7279', 7306', 4 SPF, 36 holes.

8:17 P. M. Break down formations.

Broke @ 1400 PSI

Establish rate 52 BPM @ 3000 PSI

ISIP = 1300 PSI

8:20 P. M. Start balls. 3 balls/bbl for 47 bbls - 140 balls.

Increase rate to 45 BPM @ 2500 PSI

Have ball action. Have ball off at 4000 PSI

8:35 P. M. Start in hole with junk basket.

Recovered 142 balls.

TOCITO, GREENHORN, DAKOTA 'A' FRAC:

9:29 P. M. Start pad 61 BPM @ 3400 PSI

Jicarilla Apache 71-16 Completion:

9:35 P. M.	Start 0.5 lb/gal sand	61 BPM @ 3450 PSI
9:37 P. M.	0.5 lb/gal sand on formation	61 BPM @ 3375 PSI
9:38 P. M.	Start 1.0 lb/gal sand	61 BPM @ 3300 PSI
9:40 P. M.	1.0 lb/gal sand on formation	58 BPM @ 3000 PSI
9:45 P. M.	On 1.0 sand	60 BPM @ 3200 PSI
9:54 P. M.	Start 1.5 lb/gal sand	58.5 BPM @ 3300 PSI
9:56 P. M.	Start 1.5 lb/gal sand on formation	58 BPM @ 3250 PSI
10:00 P. M.	On 1.5 lb/gal sand	58 BPM @ 3300 PSI
	On 1.5 lb/gal sand	55 BPM @ 3600 PSI

10:08 P. M. Start flush.

10:10 P. M. Flush away. Shut down.

Total fluid = 2,422 bbls.
Total sand = 90,000 lbs.

ISIP = 1500 PSI
5 min. = 1390 PSI
10 min. = 1350 PSI

10:30 P. M. Start in hole with Baker retrievable bridge plug.

11:12 P. M. Set plug @ 6465'.

11:30 P. M. Pressure test plug to 4000 PSI.

Spot 7 gal. sand on plug.

Spot 450 gal 7½% Hcl acid from 6407' up hole.

9/14/83:

5:45 A. M. Perforate Gallup @ 5841', 5868', 5897', 5901', 5905', 5919', 5925', 5927', 5931', 5935', 5973', 2 SPF, 22 holes.

6:24 A. M. Perforate Gallup @ 5976', 5978', 5982', 5985', 5988', 5991', 5993', 6003', 6019', 6023', 2 SPF, 22 holes.

Jicarilla Apache 71-16 Completion:

6:45 A. M. Perforate Gallup @ 6051', 6061', 6073', 6079', 6088', 6094', 6098', 6123', 6127', 6135', 6143', 2 SPF, 22 holes.

7:32 A. M. Perforate Gallup @ 6147', 6150', 6154', 6173', 6178', 6190', 6197', 6201', 6205', 6208', 6225', 2 SPF, 22 holes.

8:06 A. M. Perforate Gallup @ 6230', 6232', 6235', 6247', 6287', 6291', 6293', 6330', 6343', 6351', 6357', 2 SPF, 22 holes.

8:41 A. M. Perforate Gallup @ 6361', 6363', 6380', 6390', 6394', 6396', 6400', 6403', 6407', 2 SPF, 18 holes.

9:02 A. M. Break down Gallup formation.

Broke @ 1500 PSI.

Establish rate 74 BPM @ 2600 PSI

ISIP = 300 PSI

Start balls - 4 balls/bbl for 50 bbls. Total: 200 balls.

Increase rate to 60 BPM @ 1400 PSI

Have ball action.

Have ball off at 4000 PSI

Start in hole with junk basket.

Recovered 191 balls.

GALLUP FRAC:

11:01 A. M.	Start pad.	98.5	BPM @ 2800 PSI
11:05 A. M.	On pad.	98	BPM @ 3000 PSI
11:10 A. M.	Start 0.5 lb/gal sand	98	BPM @ 3000 PSI
11:11 A. M.	0.5 lb/gal sand on formation	98	BPM @ 3050 PSI
11:14 A. M.	Start 1.0 lb/gal sand	97	BPM @ 3200 PSI
11:15 A. M.	1.0 lb/gal sand on formation	97	BPM @ 3200 PSI
	On 1.0 lb/gal sand	94	BPM @ 3400 PSI

Jicarilla Apache 71-16 Completion:

11:33 A. M.	Start 1.5 lb/gal sand	91 BPM @ 3400 PSI
	3200 bbls. @ 84,000 lbs.	
11:34 A. M.	1.5 lb/gal sand on formation	91 BPM @ 3400 PSI
	Have a leak. Shut down.	
	ISIP = 300 PSI	
11:49 A. M.	Start up.	83 BPM @ 3700 PSI
	At 3940 bbls start 1.0 lb/gal sand	
11:53 A. M.	1.5 lb/gal sand on formation	84 BPM @ 3600 PSI
11:54 A. M.	Start 1.5 lb/gal sand	BPM @ PSI
11:56 A. M.	1.5 lb/gal sand on formation	82 BPM @ 3800 PSI
11:58 A. M.	On 1.5 lb/gal sand	73 BPM @ 3500 PSI
	On 1.5 lb/gal sand	72.5 BPM @ 3600 PSI
12:05 P. M.	On 1.5 lb/gal sand	67 BPM @ 3650 PSI
12:13 P. M.	Cut sand.	
12:14 P. M.	Start flush	67 BPM @ 3600 PSI
12:15 P. M.	Flush away. Shut down.	
	ISIP = 650 PSI	
	5 min = 450 PSI	
	10 min = 400 PSI	
	15 min = 375 PSI	
	Total sand = 230,000 lbs.	
	Total fluid = 5,447 bbls.	
	Open well up. Flow Gallup formation back.	
	Retrieve bridge plug @ 6465'. Trip out of hole with tubing and plug.	

Jicarilla Apache 71-16 Completion:

9/15/83:

Go in hole with tubing and mill. Tag sand @ 7234' - 120' above bridge plug.

Clean out 3 joints of sand with tubing.

Stripping rubber on wellhead starts leaking.

Circulate 15-20 min. - Shut down to change out stripping rubber. While shut down to change out rubber, sand falls back on tubing, and tubing gets stuck in hole.

Have 33' of sand on plug.

Bottom of tubing is 60' from bridge plug. Call for free point tool and wash over pipe.

1:00 P. M. Start in hole with free point tool. Got down to 850', started dragging. Work it down to 1857'. Could not get any further. Come out of hole with tubing. Go in hole with 1 1/2" sinker bar. Got to 3500' without tagging anything. Come out of hole.

Run 2nd free point tool. Got to 1860'. Tool stopped. Come out of hole with tool.

2:00 P. M. Run 1 11/16" sinker bar in tubing. Tag T. D. @ 7284'.

Tubing tally T. D. = 7276'.

2:51 P. M. Start in hole with free point tool.

T. D. with free point tool - 7285'.

3:16 P. M. Try free point @ 7277'. Tubing is stuck solid @ 7277'.

3:24 P. M. Try free point @ 7222'. Tubing stuck solid @ 7222'.

3:26 P. M. Try @ 7100'. Tubing stuck solid.

3:28 P. M. Try @ 7000'. Tubing stuck solid.

3:34 P. M. Try @ 6754'. Tubing stuck solid.

Try @ 6403'. Tubing stuck solid.

Jicarilla Apache 71-16 Completion

3:43 P. M. Try @ 6317'. Tubing stuck solid.

Try @ 5802'. Have tubing movement, but it isn't free.

3:58 P. M. Try @ 5702'. Have movement, but tubing isn't totally free.

4:00 P. M. Try free point @ 5650'. Have tubing movement, but isn't completely free.

4:04 P. M. Try @ 5602'. Have tubing movement, but isn't completely free.

4:10 P. M. Try @ 5402'. Have tubing movement, but tool indicates that it isn't totally free. Tools could be malfunctioning.

4:12 P. M. Try free point @ 5200'.

Tools are malfunctioning. Come out of hole with tools.

4:55 P. M. Try a free point with a different tool @ 4001'. 80% free.

5:05 P. M. Try free point @ 3002'. Tools aren't working. Come out of hole with tools.

5:37 P. M. Run free point @ 3012'. Tubing is free.

5:40 P. M. Run free point @ 4003'. Tubing is free.

5:44 P. M. Run free point @ 5000'. Tubing is free.

5:50 P. M. Run free point @ 6005'. Tubing appears to be stuck.

5:55 P. M. Run free point @ 5521'. Tubing is free.

5:58 P. M. Run free point @ 5800'. Tubing is free.

6:01 P. M. Run free point @ 5900'. Tubing is partially stuck.

6:04 P. M. Run free point @ 5869'. Tubing is free.

Run free point @ 5902'. Tubing is stuck.

6:10 P. M. Come out of hole with tools.

6:45 P. M. Run in hole with 1st chemical cutter.

Jicarilla Apache 71-16 Completion

1. Cut tubing @ 7272'. (TD logging tools 7287'). After tubing was cut, could not get to T. D. Tag bottom @ 7258'.

8:30 P. M. 2. Cut tubing @ 7071'. Come out of hole with tools. Pull 70,000 lbs on tubing. Tubing didn't move.

9:49 P. M. 3. Cut tubing @ 6876'.

9/16/83: Pull 70,000 lbs on tubing. Make 2'.

12:05 A. M. 4. Cut tubing @ 6679'. Pull 70,000 lbs on tubing. No movement.

1:14 A. M. 5. Cut tubing @ 6474', collar @ 6479'. Pull 70,000 lbs on tubing. No movement.

2:20 A. M. Run in hole with cutters. Set down @ 6151'. Spud. Get to 6183'.

2:35 P. M. Decide to come out of hole with cutting tool. Run sinker bar to try to clear tubing of obstruction.

3:20 A. M. 6. Tag T. D. 6284'. Cut @ 6279' (410' from free point). Pull 70,000 lbs on tubing. No movement.

7. Cut tubing @ 6067'. Pull 70,000 lbs on tubing.

5:40 A. M. Back off tubing @ 5869'. Work tubing up and down with only 1' of movement up hole.

11:50 A. M. Start in hole with tubing cutter.

12:07 P. M. 9. Cut tubing @ 5694' with 45,000 lbs of pull on it. Tubing came loose. Pull 1 stand of tubing. Circulate hole with gel water. Got partial returns with ± 60 bbls. Shut down. Mixed another pit of gel.

4:30 P. M. Pumped pit into formation with partial returns. Pull 10 stands of tubing. Shut down. Wait for Western

to mix two tanks of heavy viscosity gel.

10:30 P. M. Western starts mixing gel.

12:00 A. M. Run in with 10 stands that were pulled earlier. Start pumping high viscosity gel. Get partial circulation. Pump 1 1/4 pits of gel. Shut down. Pick up 1 joint of tubing. Start pumping. Get partial returns. (± 3/4 BPM) Pumping ± 4 BPM.

3:28 A. M. Stop pumping gel. Pull 10 stands of tubing.

4:25 A. M. Call Halliburton. Order 500 lbs of bridging agent.

9/17/83:

7:30 A. M. Mix up 200 lbs of bridging agent in 30 bbls gel. Pump down tubing. Follow with gel. Get partial returns. Shut down. Pump gel down casing. Get 50%+ returns.

9:00 A. M. Trip out of hole with tubing. 88 stands + ± 21' cut off.

10:00 A. M. Start in hole with washover pipe, jars, drill collars, accellerator, and tubing.

5:00 P. M. Wash over 195' tbg. Circulate 1 hour.

6:00 P. M. Pull out of hole with wash pipe.

8:00 A. M. Trip in hole with drill collar and overshot. Caught fish jar on fish at 55,000 lbs. Call Homco. Wireline 70° free @ 5869'. Back off @ 5869'. Pull out of hole.

9/18/83:

8:30 A. M. Out of the hole with 5 joints and 11' - 5869'. Trip in hole with washpipe. Broke circulation. Run out of gel.

10:30 A. M. Call Western and water truck.

3:00 P. M. Mix 1000 bbls 30 lb gel.

4:00 P. M. Start washing over fish.

Jicarilla Apache 71-16 Completion:

6:00 P. M. Washed over. Fish dropped 32'?
Circulated hole clean.

7:30 P. M. Trip out of hole with wash pipe.

9:00 P. M. Trip in hole with overshot. Caught fish.
Trip out of hole with fish. 5 joints and 6' - 6097'

9/19/83:

1:30 A. M. Trip in hole with overshot. Couldn't set on fish.
Trip out of hole.

5:00 A. M. Trip in hole with tubing spear.

6:30 A. M. Trip out of hole.

8:00 A. M. Out of the hole with fish. 6 joints - 6277'.
Trip in hole with spear.

11:40 A. M. Out with spear. No fish.

11:50 A. M. Go in hole with overshot.

3:30 P. M. Out of hole with 6 stands and 2 cutoffs ± 399' of tubing.
3-200' sections and 1 45' section.
Go in hole with spear.

7:45 P. M. Out of hole with 3 stands of tubing.

8:15 P. M. Start in hole with spear.
Have ± 2-200' sections and 1 45' section.

9/20/83:

12:30 A. M. Out of hole with fish.
1-200' section left and 1 45' section left in hole.

1:15 A. M. Start in hole with spear.

4:40 A. M. Out of hole with fish.
Have 1-45' section left in hole.

5:00 A. M. Start in hole with spear.

Jicarilla Apache 71-16 Completion:

6:30 A. M. Can't get to fish. Have ± 20' sand on fish. Trip out of hole with tubing and spear.

Trip in hole with tubing and washover pipe.

11:30 A. M. At 5800' - break circulation.

Get ± 65% returns.

Run in to 7240'. Break circulation.

Wash down over fish 3.

Come out of hole with tubing and wash pipe.

Fish was stuck in wash pipe mill and all.

8:00 P. M. Start in hole with mill.

Mill up plug @ 7354'.

9/21/83: Chase plug to bottom. Mill on plug.

9:49 A. M. Milling on plug.

11:00 A. M. Cleaned out to 7520'.

Land production tubing @ 6509' KB - 2 3/8" - 202 joints.