REPAIR WELL

PULL OR ALTER CASING

(NOTE: Report results of multiple completion or zone

UNITED STATES	5. LEASE					
DEPARTMENT OF THE INTERIOR	Jicarilla 15-3					
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache					
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.)	7. UNIT AGREEMENT NAME					
1 all goe -	8. FARM OR LEASE NAME Chace Apache					
1. Oil WR Well Other 2. NAME OF OPERATOR	9. WELL NO. 15-3					
Chace Oil Company, Inc. 3. ADDRESS OF OPERATOR	10. FIELD OR WILDCAT NAME Chacon Dakota					
313 Washington, SE, Albuquerque, NM 87108 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 20, T23N, R3W					
below.) AT SURFACE: Unit "F" 1850' NL & 1850' WL AT TOP PROD. INTERVAL: AT TOTAL DEPTH:	12. COUNTY OR PARISH 13. STATE Sandoval New Mexico 14. API NO.					
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)					
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORTED TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE DEC 20	1982					

GEOLOGICAL SURVENIANGE on Form 9-330.) MULTIPLE COMPLETE CHANGE ZONES ABANDON* (other) Progress Report

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.)*

See attached recompletion report.



OIL CON. DIV.

Subsurface Safety Valve: Manu. and Type 18. I hereby certify that the foregoing is true and correct SIGNED TITLE President			Set @					
			December 1	6, 1982				
	(This space for Federal or State office use)			<u>.</u>				
CONDITIONS OF APPROVAL, IF ANY:	TITLE	_ DATE		1				

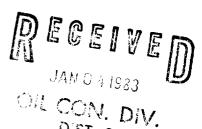
DEC 3 1982

*See Instructions on Reverse Side

15-3 RECOMPLETION REPORT:

12/6/82:

- 9:30 A. M. Rig up workover rig.
- 10:45 A. M. Start pulling 2 3/8" tubing.
 - 2:30 P. M. Start in hole with bit and scraper. Hydro-test tubing in hole to 4000 PSI.
 - 8:30 P. M. Rig down. Hydro-test truck couldn't test last 15 stands of tubing due to paraffin buildup in tubing.
 - 9:20 P. M. Tag bottom with bit and scraper.
 - 9:35 P. M. Come out of hole with bit and scraper.
- 11:25 P. M. Go in hole with packer.



12/7/82:

- 1:00 A. M. Set packer above Dakota perforation @ 7000'.
- 4:30 A. M. Pressure test casing to 1200 PSI @ 2 BPM.
 Pressure dropped to O PSI with a rate of 3.5 BPM.
- 4:45 A. M. Pull 3 stands of tubing. Try to pressure test casing again. Pumped 23 bbls. H₂O with 0 pressure. Shut down.
- 5:04 A. M. Pull 10 stands. Pressure test casing again.
 Packer starts leaking. Set more weight down on it.
 Pump on it again. Still have flow out tubing.
- 5:35 A. M. Shut tubing valve. Pump on it again. 3 BPM @ 800 PSI. Shut down.
 Pull 10 more stands of tubing.
- 5:54 A. M. Pump on it again. Have flow out tubing. Shut tubing in. Keep pumping. 2 BPM @ 700 PSI. Shut down.
- 6:24 A. M. Pull 20 more stands of tubing. Set packer. Try to pressure test casing. Tubing starts flowing. Shut tubing valve.

 Pump @ 2 BPM @ 800 PSI. Leaking by packer. Pull packer out of hole.

 26 stands from bottom found a split joint of tubing.
- 8:25 A. M. Pressure test tubing with 56 stands in hole. 2000 PSI.
- 9:18 A. M. Load tubing with 16 bbls. H₂O.

 Load back side with 4 bbls. H₂O. Pressure test casing to 3500 PSI. Bleed off to 500 PSI in 2 min.

 Held 500 PSI for 6 min. without any leakoff.

 Test to 3500 PSI again with a rate of 2 BPM.

 Bleed off to 500 PSI in 1 min.

- 10:26 A. M. Pull 2 stands. Pressure test again. 2 BPM 0 pressure.
- 10:45 A. M. Reset packer. Pump on it again. 2 BPM 0 PSI. No returns up tubing.
- 11:07 A. M. With 88 stands in hole, reset packer. Try to pressure test.

 Pump 20 bbls. H₂0. 3.2 BPM @ 1300 PSI.

 4.5 BPM @ 1800 PSI.

 Shut down. Pressure dropped to 800 PSI in 10 sec.

 Held 800 PSI for 2 min. No leak off.
- 11:35 A. M. Reset packer with 72 stands in hole. Try to pressure test. Pressure tested to 3500 PSI. Held with no leak off.
- 11:56 A. M. Reset packer with 80 stands in hole. Pressure test casing. While pumping, packer unseated @ 800 PSI.
- 12:05 P. M. Come out of hole with packer.
- 1:25 P. M. Out of hole with tubing and packer.

 Go in hole with logging tools. Run gas spectrum and cement bond log from 7300' to 6000'.
- 4:29 P. M. Out of hole with logging tools. CBL showed good cement from 7300' to 5550'.
- 4:45 P. M. Go in hole with EZ drill bridge plug.
- 5:04 P. M. Set plug @ 7000'.
- 5:27 P. M. Test casing. Pumped 20 bbls. 4 BPM @ 1300 PSI. Shut down. Go in hole with RTTS packer.
- 6:52 P. M. Close tubing testing valve in top of RTTS. Pressure test tubing to 3500 PSI.
- 6:59 P. M. 79 stands of tubing in hole. Set packer @ 4935'. Try to pressure up on casing. Pumped into hole in casing at 2.5 BPM 1100 PSI.

 Test casing below packer. Casing held.
- 7:18 P. M. Pull 4 stands of tubing. Set packer. Test casing to 3500 PSI. It held.

 Test below packer. Would not hold pressure.

 Hole is between 75 and 79 stands of tubing.
- 7:43 P. M. Pull 5 more stands of tubing. Set packer @ 4373'.

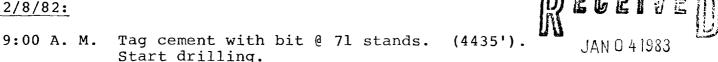
 Pressure up to 700 PSI on back side of tubing.
- 7:51 P. M. Establish rate @ 2 BPM 1300 PSI with 5 bbls. H₂O.
- 7:52 P. M. Start cement. 24 BPM 1325 PSI.
- 7:54 P. M. Increase rate to 3.0 BPM @ 1500 PSI.
- 7:58 P. M. 3.5 BPM @ 1350 PSI



OIL CON. DIV.

- 8:01 P. M. 26 bbls. slurry mixed. Cement on formation, (4952'). 1500 PSI, 3½ BPM.
- 8:05 P. M. 1600 PSI, 3½ BPM.
- 8:09 P. M. Start displacement. 2100 PSI, 3 BPM. Mixed total of 50 bbls. of slurry With 15 bbls. displacement in slow rate to ½ BPM, 900 PSI.
- 8:12 P. M. Shut down. Wait 5 min. Pump @ 2 BPM, 1300 PSI. 20 bbl. disp. away.
- 8:14 P. M. Shut down for 10 min. Then pump & BPM, 2100 PSI. 21 bbl. disp. away.
- 8:49 P. M. Release packer; reverse circulate tubing. Come out of hole with tubing and packer. W. O. C. 12 hours.

12/8/82:



12:48 P. M. Drilled out cement in casing @ 4950'. OIL CON. DIV. DIST. 3

- 1:15 P. M. Pressure tested casing to 1500 PSI. Held pressure.
- 1:30 P. M. Come out of hole with tubing. Go in hole with tubing and mill.
- 4:30 P. M. Tag EZ drill bridge plug @ 7000'.
- 7:00 P. M. Milled plug out, and pushed to bottom - 7314'. Circulate hole for 12 hours.
- 8:30 P. M. Start out of hole with tubing and mill.
- 9:48 P. M. Out of hole with tubing. Go in hole with perforating guns to perforate Dakota "B", Dakota "A", and Greenhorn formations.
- Perforate Dakota "B" zone @ 7150, 7152, 7154, 7156', 7158, 10:19 P. M. 7210', 7212', 7214', 7216', 7218', 7220' - 4 SPF. 44 holes.
- Perforate Dakota "A" zone @ 7106', 7108', 7110', 7112', 7114', 7119', 7123', 7125', 7127', 7129' 4 SPF 40 holes. 10:51 P. M.
- Perforate Greenhorn zone @ 7055', 7057', 7061', 7063', 7066', 11:30 P. M. 7068', 7070', 7072', 7074' - 4 SPF - 36 holes.

12/9/82:

- 12:00 A. M. Go in hole with 2 7/8" tubing and RTTS packer.
 - 4:45 A. M. On bottom with tubing and packer - 6515'.
 - 6:15 A. M. Western pressure tests lines.

- 6:36 A. M. Try to circulate hole. Pressure went to 1000 PSI with no rate. Must have a plug in the tubing.
- 6:45 A. M. Try to pump on it again. Pressure started climbing. Took it to 3500 PSI. Shut down.
- 7:15 A. M. Pull 10 stands. Try to pump on it again. Pressure went up to 3500 PSI. Still have a plug in the tubing.
- 8:00 A. M. Run in tubing with sand line and sinker bar. Tag plug in tubing @ 3000'.
- 8:25 A. M. Pull tubing to find plug.
 Found a joint of tubing with a rabbit stuck in it.
- 8:56 A. M. Go back in hole with tubing.
- 9:52 A. M. Tubing and packer @ 6500'. Circulate hole @ 2 BPM with 89 bbls.

Carrier of

- 10:40 A. M. Set packer @ 6500'.
- 10:55 A. M. Pressure up to 1000 PSI on back side.

DAKOTA FRAC

- 11:09 A. M. Break down. Broke @ 2000 PSI. Establish rate 16 BPM @ 3700 PSI. ISIP = 1750 PSI.
- ll:14 A. M. Start acid. Drop 8 balls/bbl in 9 bbls. of acid.
 1800 PSI @ 3.0 BPM
 Drop 8 balls/bbl in 9 bbls.
 Run 10 bbl spacer
 Drop 6 balls/bbl in 58 bbls. 3000 PSI @ 9 BPM.
- 11:23 A. M. Balls on formation. 9 BPM @ 2670 PSI.
 Ball action 10 BPM @ 2600 PSI.
- 11:32 A. M. Surge balls off. Packer lets loose. Casing pressure goes to 1400 PSI. Bleed casing pressure off. Casing @ 0. Tubing @ 850 PSI.
- 12:09 P. M. Pressure up to 1000 PSI on back side.
- 12:57 P. M. Start pad. 3500 PSI 14.5 BPM
- 1:07 P. M. 3400 PSI 14.0 BPM
- 1:32 P. M. 3500 PSI 14.0 BPM
- 1:39 P. M. 595 bbls. pad away. Start 1/2 lb/gal sand 3450 PSI 14.0 BPM
- 1:42 P. M.

 1/2 lb/gal sand
 on formation 3400 PSI 14.0 BPM
 Checked back side pressure. Showed 1800 PSI.
 Bleed pressure back to 1500. Climbs to 1900 PSI.
 Cut sand. 2500 lbs. sand in formation.

- 1:47 P. M. Go to flush. Slow rate to 8 BPM, 2500 PSI. Casing pressure stabilizer @ 1800 PSI.
- 1:56 P. M. Flush away. 54 bbls. Shut down. ISIP = 1750 PSI.
- 2:50 P. M. With 1000 PSI on tubing and casing, bleed tubing pressure off.
- 3:10 P. M. Unseat packer. Come out of hole.
- 4:50 P. M. Come out of hole with tubing and packer. Packer appeared to be in new condition.
- 5:19 P. M. Go in hole with different packer, tightening every joint of tubing as we go in the hole.
- 6:42 P. M. @ 6500' with tubing and packer. Set packer.

6:51 P. M. Pressure up to 1000 PSI on back side.

OIL CON. DIV.

			DAKOTA	RE-FRAC					DIST. 3
7:08	Ρ.	М.	Start	pad			BP M BP M	3500 3450	
7:25	Р.	М.	Start	1/2 lb/gal	sand	15	BPM	3500	PSI
7:28	Р.	М.		1/2 lb/gal on formati		15	BP M	3400	PSI
7:37	Р.	М.	Start	l lb/gal	sand	15	BP M	3400	PSI
7:41	Ρ.	М.		l lb/gal on forma	tion		BPM BPM	3250 3300	
7:46	Ρ.	М.				15	BP M	3300	PSI
7:52	P.	М.				15	BP M	3350	PSI
7:55	Р.	М.				15	BP M	3400	PSI
8:04	Р.	М.				15	BP M	3500	PSI
8:19	Р.	М.				15	ВР М	3500	PSI
8:28	Ρ.	М.				15	BP M	3400	PSI
8:45	P.	М.				15	врм .	3400	PSI
9:02	Р.	М.				15	BP M	3400	PSI
9:14	Р.	М.				15	BP M	3600	PSI
9:16	Р.	м.				15	BP M	3500	PSI

9:18 P. M. 15 BPM 3600 PSI

9:23 P. M. 15 BPM 3700 PSI

9:30 P. M. 14 BPM 3700 PSI

9:35 P. M. Blender went down
ISIP = 1950 PSI
Try to flush without blender on line.
Got 80,000 lbs. sand in pipe and formation.

9:51 P. M. Blender on line. 8 BPM, 3300 PSI on flush. Shut down. Flush away.

12/10/82:

- 12:30 A. M. Tubing pressure down to 900 PSI. Open tubing up. Making sand.
 - 2:15 A. M. Well still flowing gas-cut water. Still making sand.
- 4:00 A. M. Rig broke drive chain while pulling to release packer.
- 11:00 A. M. Rig is fixed.
 Worked packer and tubing string between string wt. and
 40,000 lbs total. Came free from sand pack after 15
 min. of working it.
- 1:20 P. M. Came out of hole with tubing and packer.
 Rig up Western to displace capacity of casing.
- 1:29 P. M. Start pumping. 3 BPM 1000 PSI
- 2:56 P. M. Shut down. Casing displaced.
- 3:11 P. M. Go in hole with EZ drill B. P.
- 3:44 P. M. Set B. P. @ 7030'.



- 4:00 P. M. Pressure test plug to 1500 PSI.

 Held pressure for 2½ min. without any leak off.

 Bleed pressure off.
- 4:22 P. M. Perforate Tocito formation @ 6876', 6874', 6872', 6870', 6868', 6866', 6864', 6854', 6852', 6849' 6846' 4 SPF.
- 4:52 P. M. Perforate Tocito formation @ 6827', 6825', 6821', 6805', 6803', 6801', 6783', 6776', 6773', 6767', 6759' 4 SPF Total 88 holes

TOCITO FRAC:

- 5:25 P. M. Go in hole with RTTS packer.
- 6:57 P. M. Set packer @ 6250'.
- 7:07 P. M. Pressure up on back side to 1000 PSI.
- 7:15 P. M. Break down. Broke @ 2300 PSI.



Establish rate 3400 PSI @ 9 BPM ISIP = 1700 PSI

7:22 P.	М.	Start acid with 8 balls/bbl Start water with 8 balls/bbl Start 10 bbl spacer Water with 4 balls/bbl		8 BPM	3000	PSI PSI PSI	
7:30 P.	М.	Balls on formation	1	O BPM	2600) PSI	
7:33 P.	М.	Second set of balls on formation Balled off @ 3400 PSI	ation	10	BP M	3000	PSI
7:37 P.	М.	Surge balls off. Let balls Wait 20 minutes.	fall	to b	ottom o	of hol	le.
		TOCITO FRAC					
7:58 P.	Μ.	Start pad.	13	BPM	@ 3450	PSI	
8:01 P.	М.		14.5	BP M	@ 3450	PSI	
8:06 P.	М.		13.5	BPM	@ 3400	PSI	
8:07 P.	М.		14.0	BP M	@ 3500	PSI	(and
8:17 P.	М.		13.0	врм	@ 3450	PSI	E Common
8:23 P.	М.	Start 1/2 lb/gal sand	13.0	BPM	@ 3350	PSI	Carrier S
8:26 P.	М.	<pre>1/2 lb/gal sand on formation</pre>	13.0	BP M	@ 3300	PSI	
8:33 P.	М.		13.0	врм	@ 3400	PSI	
8:39 P.	М.		12.0	врм	@ 3450	PSI	
8:41 P.	М.		12.5	BPM	@ 3600	PSI	
8:44 P.	М.	on 1/2 lb/gal sand	12.0	врм	@ 3650	PSI	
8:45 P.	м.		12.5	BPM	@ 3700	PSI	
8:47 P.	М.	Reach 3750 - Slow rate to	10.0	BP M	@ 3300	PSI	
8:48 P.	М.		10.0	врм	@ 3400	PSI	
8:49 P.	М.		10.0	BP M	@ 3450	PSI	
8:50 P.	М.		10.0	BPM	@ 3500	PSI	
8:52 P.	М.	on 1/2 lb/gal sand	10.0	BP M	@ 3550	PSI	
8:56 P.	М.		10.0	BPM	@ 3600	PSI	
					3650	PSI	

8:57 P. M.

Slow rate to 8.0 BPM @ 3750 PSI (pressure)

- 8.0 BPM @ 3550 PSI
- 8:58 P. M.
- 8.0 BPM @ 3600 PSI
- 8:59 P. M. Have break. 8 BPM Pressure broke to 3450 PSI
- 9:01 P. M. 8.0 BPM @ 3450 PSI
- 9:04 P. M. 8.0 BPM @ 3450 PSI
- 9:07 P. M. 8.0 BPM @ 3550 PSI
- 9:13 P. M. 8.0 BPM @ 3600 PSI Slow rate 6 BPM - Pressure went to 3800 PSI
- 9:15 P. M. Cut sand @ 852 bbls. slurry
- 9:16 P. M. 5.0 BPM @ 3500 PSI
- 9:17 P. M. On flush
 Shut down
 29 bbls. flush away
- 9:29 P. M. ISIP = 2100 PSI 15 min. shut in 2000 PSI Total sand: 11,000 lbs.
- 11:00 P. M. Flow well back through 1/2 inch choke.

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12/11/82:

- OIL CON. DIV.
- 4:30 A. M. Remove 1/2" choke. Have show of oil and gas to surface. Unseat RTTS packer.
- 6:24 A. M. Circulate hole down tubing with 83 bbls. Fr H₂0 3.0 BPM @ 650 PSI²
- 7:00 A. M. Come out of hole with tubing and packer.
- 8:14 A. M. Out of hole with tubing and packer.
 Rig up Bluejet to set retrievable bridge plug.
- 8:35 A. M. Go in hole with retrievable bridge plug.
- 9:11 A. M. Set plug @ 6300'.
- 9.28 A. M. Test plug to 1500 PSI. Held pressure for 5 minutes with no bleed off.
- 9:38 A. M. Go in hole with perforating gun. Hit something in hole @ 540'. Come out of hole with gun.
- 9:45 A. M. Go in hole with junk basket. Run to 6250'.
- 10:13 A. M. Come out of hole with junk basket. Picked up 8 frac balls that Western must have pumped in casing while pressure testing bridge plug.

10:20 A. M. Go in hole with perforating gun. 10:29 A. M. Perforate Gallup formation @ 6215', 6213', 6208', 6206', 6204', 6200', 6193', 6191', 6189', 6187', 6175'. 4 SPF - 44 holes 10:44 A. M. Go in hole with perforating gun. Perforate Gallup formation @ 6173', 6171', 6169', 6167', 6165', 10:56 A. M. 6163', 6085', 6081', 6073', 6054', 6052' - 4 SPF - 44 holes 11:25 A. M. Go in hole with RTTS packer and tubing 12:35 P. M. Set packer @ 5700'. E8814 G MAL Pressure up to 1000 PSI on casing. 12:50 P. M. OIL CON. DIV. GALLUP FRAC: DIST. 3 Break down. Broke @ 1300 PSI and 3200 PSI 12:58 P. M. 18 BPM @ 3200 PSI Establish rate ISIP = 300 PSI1:01 P. M. Start acid (7½% Hcl) - 6 bbls. with 6 balls/bbl Run 5 bbls. H₂O with 6 balls/bbl - 6 BPM @ 1000 PSI Run 10 bbl H₂0 spacer 6 BPM @ 1000 PSI 5 bbl H₂O with 6 balls/bbl 12 BPM @ 1300 PSI Total: 96 balls 10 BPM @ 2500 PSI Increase rate to 9 BPM @ 2600 PSI Have ball action Balls hit 2 BPM @ 3700 PSI 1:15 P. M. Surge balls off perforations. Wait 20 minutes for balls to fall. 22 BPM @ 3400 PSI 1:38 P. M. Start pad 24 BPM @ 2900 PSI 24.5 BPM @ 3200 PSI 25 BPM @ 3200 PSI 1:47 P. M. 310 bbls pad away 1:51 P. M. Start 1/2 lb/qal sand 25 BPM @ 3200 PSI 1:53 P. M. 1/2 lb/gal sand on formation 25 BPM @ 3200 PSI 24 BPM @ 3400 PSI 24.5 BPM @ 3300 PSI 25 BPM @ 3400 PSI 2:01 P. M. Start 1 lb/gal sand 2:03 P. M. 1 lb/gal sand on formation 25 BPM @ 3300 PSI

2:07 P. M.

2:16 P. M.

2:20 P. M.

25 BPM @ 3400 PSI

24 BPM @ 3500 PSI

24 BPM @ 3600 PSI

23 BPM @ 3800 PSI

2:21 P. M.	On 1 lb/gal sand	24	BPM	@	3700	PSI
2:25 P. M.		23	BPM	@	3800	PSI
2:28 P. M.	Pump starts leaking-Shut it down. With 1 pump on line, rate falls to	17	вР м	@	2400	PSI
2:42 P. M.				-	2600 2600	
3:00 P. M.	On 1 lb/gal sand	13	BP M	9	2600	PSI
3:06 P. M.		13	BP M	@	3000	PSI
3:21 P. M.	Start 1 1/2 lb/gal sand	13	BPM	@	2700	PSI
3:25 P. M.	1 1/2 lb/gal sand on formation	13	BPM	@	260 0	PSI

3:30 P. M. Pressure went to 4500 PSI.

Shut down.

ISIP = 200 PSI

10 min shut in - 100 PSI

65,000 lbs sand in

2021 bbls. slurry pumped

Shut well in for 1.5 hours.

Tubing pressure falls to 50 PSI.



OIL CON. DIV.

- 5:15 P. M. Flow well back. Have show of oil and gas during flow back.
- 8:15 P. M. Flow slows down enough to pull tubing and packer.
- 9:45 P. M. Go in hole with retrieving head and tubing to retrieve bridge plug @ 6300'. Tag sand @ 6176'. Start to circulate sand out of casing. Circulate down to 6180'. Gallup formation starts flowing $\rm H_2O$ and sand. Sand covers retrieving head.

12/12/82:

Tubing is stuck in hole.
Cut off 150' of tubing.
Go in hole with wash-over pipe.
Wash over tubing down to retrieving head. Come out of hole with washover pipe.

12/13/82:

Out of hole with washover pipe. Go in hole with overshot to latch on tubing. Get ahold of tubing. Move it 5-6' up hole. Overshot grip lets go.

- 12/14/82: Come out of hole with 24" overshot. Go in hole with 36" overshot.

 Get back on tubing with 36" overshot. Jar stuck tubing 50' up hole. Tubing becomes unstuck. Come out of hole with tubing.
- 12/15/82: Retrieve bridge plug @ 6300'. Mill out EZ Drill plug @ 7030'. Clean out to T. D. 7314'. Land tubing @ 7243'.