Form 9-330
(Rev. 5-63)

# UNITED STATES
# DEPARTMENT OF THE INTERIOR
## GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] 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 and in accordance with any State requirements)
At surface: Unit "O" 775' FSL and 2175' FEL
At top prod. interval reported below
At total depth

RECEIVED JUL 12 1982 U. S. GEOLOGICAL SURVEY FARMINGTON, N. M.

14. PERMIT NO. — DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO: Jicarilla 70
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla Apache
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Jicarilla 70
9. WELL NO.: 15
10. FIELD AND POOL, OR WILDCAT: S. Lindrith- ~~Tocito~~ Dakota (GAS)
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 34 - T24N,R4W
12. COUNTY OR PARISH: ~~Rio Arriba~~
13. STATE: NM

| 15. DATE SPUDDED | 16. DATE T.D. REACHED | 17. DATE COMPL. (Ready to prod.) | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* | 19. ELEV. CASINGHEAD |
|---|---|---|---|---|
| 5-13-82 | 5-27-82 | 7-1-82 | 7108 GR 7120 KB | 7109 GR |

| 20. TOTAL DEPTH, MD & TVD | 21. PLUG, BACK T.D., MD & TVD | 22. IF MULTIPLE COMPL., HOW MANY* | 23. INTERVALS DRILLED BY | ROTARY TOOLS | CABLE TOOLS |
|---|---|---|---|---|---|
| 7450 KB | 7398 KB | | → | 0-7450' | |

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Dakota "D" 7295-7348 Greenhorn 7065-7120
Dakota "A" 7149-7172 Tocito 6818-6875

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
Induction - Density logs

27. WAS WELL CORED: No

RECEIVED JUL 27 1982 OIL CON. COM. DIST. 3

28. CASING RECORD (Report all strings set in well)

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|---|---|---|---|---|---|
| 8 5/8" | 23 | 225' KB | 9 5/8" | 225 Sxs | None |
| 4 1/2" | 11.6 | 7442 KB | 7 7/8" | 1185 Sxs | |
| | | | | | |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) |
|---|---|---|---|---|
| | | | | |

30. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|---|---|---|
| | 7267' KB | |

31. PERFORATION RECORD (Interval, size and number)
Dakota "D" - 7295, 7328, 7330, 7334, 7336, 7340, 7346, 7348 - 4 SPF
Dakota "A" - 7149, 7160, 7162, 7164, 7169, 7172 - 4 SPF
Greenhorn - 7065, 7100, 7106, 7109, 7112, 7120 - 1 SPF
Tocito - 6818, 6863, 6864, 6867, 6872, 6875 - 4 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---|---|
| SEE | ATTACHED WELL HISTORY |

33.* PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | WELL STATUS (Producing or shut-in) |
|---|---|---|
| 7-1-82 | Swabbing | Producing - flow |

| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'N. FOR TEST PERIOD → | OIL—BBL. | GAS—MCF. | WATER—BBL. | GAS-OIL RATIO |
|---|---|---|---|---|---|---|---|
| 7-1-82 | 24 | 2" | | 150 | 230 | 15 | 1533 |

| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE → | OIL—BBL. | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) |
|---|---|---|---|---|---|---|
| 60 | 1025 | | 150 | 230 | 15 | 43 |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
Vented during test, Hooked up to temp. Salesline 6/28/82

TEST WITNESSED BY: Andy Birdsell

35. LIST OF ATTACHMENTS

ACCEPTED FOR RECORD
JUL 30 1982
FARMINGTON DISTRICT

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Royce McCary TITLE President DATE July 6, 198

*(See Instructions and Spaces for Additional Data on Reverse Side)

NM000

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. |
|---|---|---|---|
| Ojo | 2455 | 2636 | Sand - wet |
| P. C. | 2916 | 3024 | Sd w/ sh. - poss. gas |
| Chacra | 3285 | 3905 | Shale w/ sd strks |
| Cliff House | 4484 | 4568 | Sd w/ sh strks - Wet |
| Pt. Lookout | 4989 | 5197 | Sdy w/ coal and sh. strks |
| Gallup | 6110 | 6344 | Shaley w/ sd strks. poss oil and gas |
| Tocito | 6746 | 6876 | Sd w/ sh strks; oil show |
| Greenhorn | 7064 | 7124 | Limy sd hd; shows |
| Dakota "A" | 7146 | 7191 | Sd w/ sh strks; oil and gas |
| Dakota "D" | 7286 | 7368 | Sd w/ sh strks; oil and gas |
| Burro Canyon | 7389 | - | Sd - Wet |

38. GEOLOGIC MARKERS

| NAME | TOP MEAS. DEPTH | TOP TRUE VERT. DEPTH |
|---|---|---|

871-233

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636
GPO 837-497

*CHACE OIL COMPANY, INC.*

313 Washington S.E.

Albuquerque, New Mexico 87108

(505) 266-5562



## WELL HISTORY

NAME OF WELL: Jicarilla 70-15

LOCATION: Unit "O" - 775 FSL and 2175 FEL
Section 34, T24N-R4W, Rio Arriba County, NM

ELEVATION: 7108' GR

PROPOSED DEPTH: 7390' GR

ESTIMATED FORMATION TOPS:

| | |
|---|---|
| Ojo | 2460' |
| Pictured Cliffs | 2910' |
| Chacra | 3275' |
| Cliffhouse | 4475' |
| Point Lookout | 4970' |
| Gallup | 6100' |
| Greenhorn | 7010' |
| Dakota "A" | 7100' |
| Dakota "D" | 7240' |

3/30/82 Application submitted.

5/3/82 Application approved.

5/6/82 Road and pad construction commenced.

5/12/82 Arapahoe Drilling Company. Rig moving in.

5/13/82 Arapahoe Drilling Company says nothing to report. Haven't spudded yet.

5/14/82 Moved in and rigged up Arapahoe Drilling Company rig #11. Spudded at 1:00 P. M. on May 13, 1982. Ran 5 joints of 23# 8 5/8" casing. 210.60 feet set at 225' KB. Woodco cemented with 225 sxs Class B cement, with 1/4# Flowseal. 3% calcium chloride per sack. Circulated 2 barrels of cement to surface. Plugged down at 5:30 P. M. on May 13, 1982.

Drilled out from under surface at 6:00 A. M., May 14, 1982. Present operation is drilling at 318'.

Phoned in by Ernestine at Arapahoe Drilling: Drilling cement depth 225. Formation sand. Drill collar #6, 6 1/16 x 2 1/4. Weight on bit is all. Present drilling rate is 0. Mud viscosity is water. Mud additives 30 gel, 1 lime. Deviation record is 1/4 of a degree at 225'. Bit record is run #1, size 12 1/4, type OSG-3. Footage 225'. Hours 2 3/4.
2 hours rig idle - 4 hours rig up - 1 hour drill rat and mouse hole - 2 3/4 hours drilling surface - 1 1/4 hours trip out of hole to run 8 5/8" casing - 1/2 hour with Woodco - 11 hours wait on cement - 1/2 hour pressure test, 600#, held okay - 1/2 hour trip in hole - 1/2 hour drilling cement casing.

5/15/82 Day #2. Present operation is drilling, depth 2256'. 24 hour footage 2031'. Rotary rpm 60. Weight on bit is 40,000. Drilling rate 65' per hour. Pump on hole liner size 5 1/2 x 15. Pressure 1,000#. 60 strokes per minute. Mud vis is 35 MW is 9.0 WL is 8.0. 3% oil.
Deviation surveys: 532' depth - 1/4 degree
1088' depth - 1/4 degree
1581' depth - 1/2 degree
2136' depth - 1/2 degree

Bit #2, size 7 7/8", Type J-22 2031' - 22 1/2 hours
1/4 hour RS - operate BOP
1 1/4 hours - surveys
22 1/2 hours - drilling

5/16/82 Day #3. Operation drilling - depth 3490'. 24 hour progress 1234. Rotary rpm 60. Weight on bit is 40,000. Drilling 30 feet per hour. Pump on hole liner size is 5 1/2 x 15. Pressure 1,000#. 57 strokes per minute. Mud vis 36 - WT 9.0 - WL 6.2. 3% oil.
Deviation surveys: 2659' depth - 1/2 degree
3120' depth - 1/2 degree

Bit #2, size 7 7/8", Type J-22. 3265' - 45 3/4 hours
1/4 hour RS - operate BOP
1/2 hour - survey
23 1/4 hours - drilling

5/17/82 Day #4. Operation drilling. Depth 4030'. 24 hour progress 540'. Rotary rpm 60. Weight on bit is 40,000. Drilling 30' per hour. Pump on hole liner size 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute.
Mud vis is 35 WT is 9.0 WL is 8.0. 3% oil.
Deviation surveys: 3552' depth - 3/4 degree
4019' depth - 1/2 degree

Bit #2, size 7 7/8", Type J-22 3327' at 48 1/4 hours

Bit #3 - size 7 7/8", Type J-22 - 478' at 16 1/2 hours
18 3/4 hours - drilling
2 1/2 hours - trip for bit
1/2 hour survey
1/4 hour RS - Operate BOP
2 hours - reaming 120' to bottom

5/18/82 Day #5. Operation drilling. Depth - 4575'. 24 hour footage is 545'. Rotary rpm 60. Weight on bit is 40,000. Drilling rate 23 feet per hour. Pump on hole liner size is 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute. Mud vis is 41 WT 9.1 WL 8.0 Wallcake 2/32's. Deviation survey: 4513' 3/4 degree Bit #3, 7 7/8", Type J-22. 1223' - 39 hours.

23 1/4 hours - drilling
1/4 hour - RS operate BOP
1/2 hour - survey

5/19/82 Day #6. No accidents. Operation drilling. Depth - 5070'. 24 hour progress 495'. Sand and shale. Drill tolerance - 20 - Size 6/1/16 - Bore 2 1/4 - Weight 55,000 - rpm 60 - Weight on bit 40,000 - Drilling 20' per hour. Pump on hole liner size 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute. Mud vis is 41 - WT is 9.2 - WL is 8.0 - Cake is 2/32's. Mud additives - 7 bnex, 13 starch, 1 1/2 soda ash, 3 caustic, 42 gel, 3 1/2 thinner, 2 cedar, 10 barrels of oil. Run #3. 7 7/8" - J-22 - Hughes bit. Footage - 1518' hours - 62 3/4.
23 3/4 hours drilling
1/4 hour SR BOP
Butane 75%

5/20/82 Day #7. No accidents. Trip and look for hole in pipe. Depth - 5473'. Operation drilling. 24 hour footage is 403'. Sand and shale. Drill collar 20. Size 6 1/16. Bore 2 1/4. Weight 55,000. Rpm 60. Weight on bit is 40,000. Drilling 18' an hour. Pump on hole liner size 5 1/2. Pressure 1,000#. 54 strokes per minute. Mud vis is 40 - WT 9.0 - WL 9.0. Mud additives - 12 starch, 26 gel, 5 1/2 thinner, 4 bnex, 1 preservative, 3 caustic, 1 1/2 soda ash, 10 barrels of oil. Deviation 1 degree at 5129'. Run #3 - 7 7/8" - J-22 - 1921' at 85 1/4 hours.
1/2 hour RS and survey
22 1/2 hours drilling
1 hour trip and look for hole

5/21/82 Day #8. Operation drilling - Depth 5802'. 24 hour footage is 329'. Sand and shale. Drill collar 19. Weight 52,000. 60 rpm. 40,000 weight on bit. Drilling 18' per hour. Pump on hole liner size 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute. Mud vis 41 - WT 9.1 - WL 7.8. Deviation 1 degree at 5473'. Bit #4 - 7 7/8" - J-22. 329' at 16 hours.
6 1/2 hours trip and look for hole
1 1/2 hours lay down 2 drill collars and pick up 1.
16 hours drilling.

May 22, 1982

Day #9. Operation drilling. Depth - 6092'. 24 hour footage is 290'. Sand and shale. Rotary rpm 60. Weight on bit is 40,000. Drilling rate is 20' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 52 strokes per minute. Mud vis is 43 - WT is 9.1 - WL 8.0. LCM 4%. Deviation 1 degree at 5985'. Bit #4. 7 7/8" - J-22. 619' 32 1/2 hours.
9 hours - trip - look for hole in pipe. Laid down 2 cracked drill collars. Picked up 3 new ones. Tripped in hole TIH.
1 hour - wash 90' to bottom
13 1/2 hours - drill
1/2 hour - survey

May 23, 1982

Day #10. Operation drilling. Depth - 6488'. 24 hour footage is 396'. Sand and shale. Rotary rpm 60. 40,000 weight on bit. Drilling rate is 15' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute. Mud vis is 47. WT is 9.2 - WL is 8.0. Wallcake 2/32's. LCM 5%. No surveys. Bit #4. 7 7/8", J-22. 1015' 55 3/4 hours.
1/4 hour - RS - Check BOP
23 3/4 hours - drilling

May 24, 1982

Day #11. Operation drilling. Depth 6845'. 24 hour footage is 357'. Sand and shale. Rotary rpm 60. 40,000 weight on bit. Drilling rate is 26' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 52 strokes per minute. Mud vis is 44 - WT 9.1 - WL 10.0 - Wallcake 2/32's. LCM 4%. Survey 1 degree at 6574'. Bit #4. 7 7/8", J-22. 1372' - 78 1/2 hours.
23 1/4 hours - Drilling
1/4 hour - RS - Check BOP
1/2 hour - survey

May 25, 1982

Day #12. Operation drilling. Depth 7205'. 24 hour footage is 360'. Formation - Dakota. Rotary rpm 55. 40,000 weight on bit. Drilling rate is 11' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 52 strokes per minute. Mud vis is 51. WT is 9.3. WL is 7.2. LCM 7%. Bit #4. 7 7/8", J-22. 1832' - 102 1/4 hours.
23 3/4 hours - drilling
1/4 hour - RS BOP

May 26, 1982

Day #13. Operation drilling. Depth 7334'. 24 hour footage is 129'. Dakota Formation. Rotary rpm 50. 35,000 weight on bit. Drilling rate is 8' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 57 strokes per minute. Mud vis is 57. WT is 9.5. WL is 6.2. LCM is 7%. Deviation record: 3/4 degree at 7208'.
Bit #4 - 7 7/8" - J-22. 1835' - 102 1/4 hours.
Bit #5 - 7 7/8" - FP62. 126' - 17 1/4 hours.
1/4 hour survey
6 1/2 hour trip for bit - 17 1/4 hours drilling

May 27, 1982

Day #14. Operation: Rigging up to log with Schlumberger Well Services. 7450' TD. 24 hour footage is 116'. Dakota Formation. Rotary 50 rpm. 35,000 weight on bit. Drilling rate 12' per hour. Pump liner size is 5 1/2 x 15. Pressure 1,000#. 55 strokes per minute. Mud vis is 75. WT is 9.5. WL is 7.8. LCM 12%. Bit #5. 7 7/8" - FP62. 242' 27 hours.

9 3/4 hours - drilling
1/4 hour - RS - Operate BOP
1 hour - circulate at TD a lost circulation.
6 hours - polled 16 stands and mixed mud. Tripped back to bottom.
1 3/4 hours - circulate and condition mud, with full returns.
1/2 hour - Short trip
4 1/4 hours - Strap out of hole
1/2 hour - Rig up to log with Schlumberger.

May 28, 1982

Day #15. Operation: Running 4 1/2" casing. 7450' FTD.
7 hours - log with Schlumberger
1 1/4 hours - run in 30 stands. Plug bit.
3 hours - trip out of hole
3 hours - trip in hole. Break circulation.
2 hours - circulate.
5 1/2 hours - laid down drill pipe and drill collars.
2 1/4 hours - rig up casing crew. Run 2150' of 4 1/2" casing.

Ran 172 jts. 4 1/2" 11.6# to 7442' KB, with shoe on bottom 7442' KB and float collar @ 7398.5' KB, centralizers @ 7420', 7335', 7291', 7203', 7116', 7029', 6734', 6343', 6115' and 3001'.
Cement baskets 7049' - 6493' - 5996' - 3113'.
Short joint @ 6102'. DV Tool 3064'. Pipe in hole at 8:15. Started circulating. Halliburton started cementing process at 8:45. First stage pumped 730 sxs of 50-50 Posmix, 2% gel, 6 1/4# Gilsonite, and 6# salt per sack. Plug down at 10:10. Dropped bomb to close off DV Tool. Opened D V Tool. Circulated for 3 hours. Pumped in 405 sxs of 65-35 Posmix, 12% gel, and 6 1/4# Gilsonite per sack, followed by 50 sxs Class B regular cement. Plug down at 1:35. Circulated 5 bbls. to surface. WORT.

June 16, 1982

Moved in Spartan Well Service. Drilled out D. V. Tool @ 3104', (previously reported at 3064' when pipe was set). Cleaned well out to plug back depth of 7399'. Spotted 250 gallons 7½% Hcl over Dakota "D" interval. Blue Jet set up and ran correlation log, and perforated the Dakota "D" zone interval from 7286-7350 with 4 shots per foot at the following depths: 7295', 7328', 7330', 7334', 7336, 7338', 7347' and 7349'.

June 17, 1982

COOH with perf. gun, and broke formation down with Nasco pumping unit. Pumped in 20 bbls. Kcl water. Formation broke at 1400 psig. Established 31 BPM rate. Dropped 60 balls. Balled off. Released pressure. WIH with ball catcher, and retrieved 60 balls. Frac'd with slick water, (2½# FR-2 per thousand gals. water) clay stabilizers and adamite. Pumped in 16,000 gal pad. Pumped in 48,000# 20-40 sand, along with 2030 barrels of slick water. ISIP 1800# - after 15 min. 1500# min. rate 24 - Max. rate 30 BPM. Max press 3600# - Min. 2700#. Set Halliburton drillable bridge plug at 7220'. Tested B. P. to 4000 psig. WIHWT and spotted 250 gallons over Greenhorn and Dakota "A" sand. COOH with tbg. and WIH with perf. gun and perforated the Dakota "A" zone (interval 7148-7190) at the following per foot intervals: 7148', 7160', 7162', 7164', 7169' and 7172'. Each foot interval shot with 4 holes, using deep penetration bullets with diameter of .32 inch. These same shots were used on the "D" zone described above. COOH with perf. gun. WBIH with perf. gun and shot the Greenhorn interval (7065-7124') with one shot per foot at 7064', 7099, 7105, 7108', 7111', and 7119'. COOH W/P/G. Went back in hole with perforating gun, and shot the Dakota "A" interval, (7148-7180) at the following depths: 7148', 7159', 7161', 7163', 7168', and 7171' with 4 shots per foot. Hooked up NASCO to frac both the Greenhorn and Dakota "A". Broke down formations. Pumped in 50 bbls. Hcl water to break down formation. Formation broke at 2200#, with max. rate of 40 bbls. per mir Dropped 60 balls, 3 second spacing. Balled off completely. Released pressure. Went in with ball catcher, and picked up balls. COOH and frac'd zones with 56,000# of 20-40 Ottowa sand, and 2782 bbls. of slick water. (2½# FR-2 per thousand gals. water) with clay stabilizers and adamite. Min. rate 28 BPM - Max 34 BPM. Max pressure 3600 psig - Min. 2780 psig. Instant SIP. 1900 psig. After 15 min 1700 psig. WIH with bridge plug and set at 7050'. Tested BP to 4000 psig. Came up hole to lower Mancus zone, sometimes called Tocito, Sanastee, Toldillo, etc. to test. Ran tbg. in, and spotted 250 gallons acid over perfs, (7050-6700). COHWT and went in with perf. gun to perf the interval from 6800-6875. Shot the following depths: 6815', 6860', 6862', 6864', 6869', and 6872, with 4 shots at each interval or depth. COOH WPG, and hooked up nitrogen and water pumps.

June 18, 1982

Pumped in 70,000 SCF of nitrogen, 11 bbls. slick water. Broke formation at 2800 psig. Dropped 40 balls. Partial ball off. Flowed nitrogen and water to surface. Had blow of gas and some oil to surface within 55 minutes. Hooked up to frac with slick water, and sand. Pumped in 16000 gals. pad. Started sand (20-40) at 1/2# per gallon. Sanded off after 8000 gallons and 4000# sd. Max. pressure reached 3900 psig, with 1 bbl. per minute

rate. Shut in. Flowed pressure off. Well flowing by heads. Mostly water. Some gas and oil. Died after 4 hours. WIHWT and bit. Drilled out BPs at 7050' and 7220'. Cleaned hole of all sand. COOHWT and bit. Went back in with tubing, and seating nipple, and landed at 7267' KB. Flanged up well head.

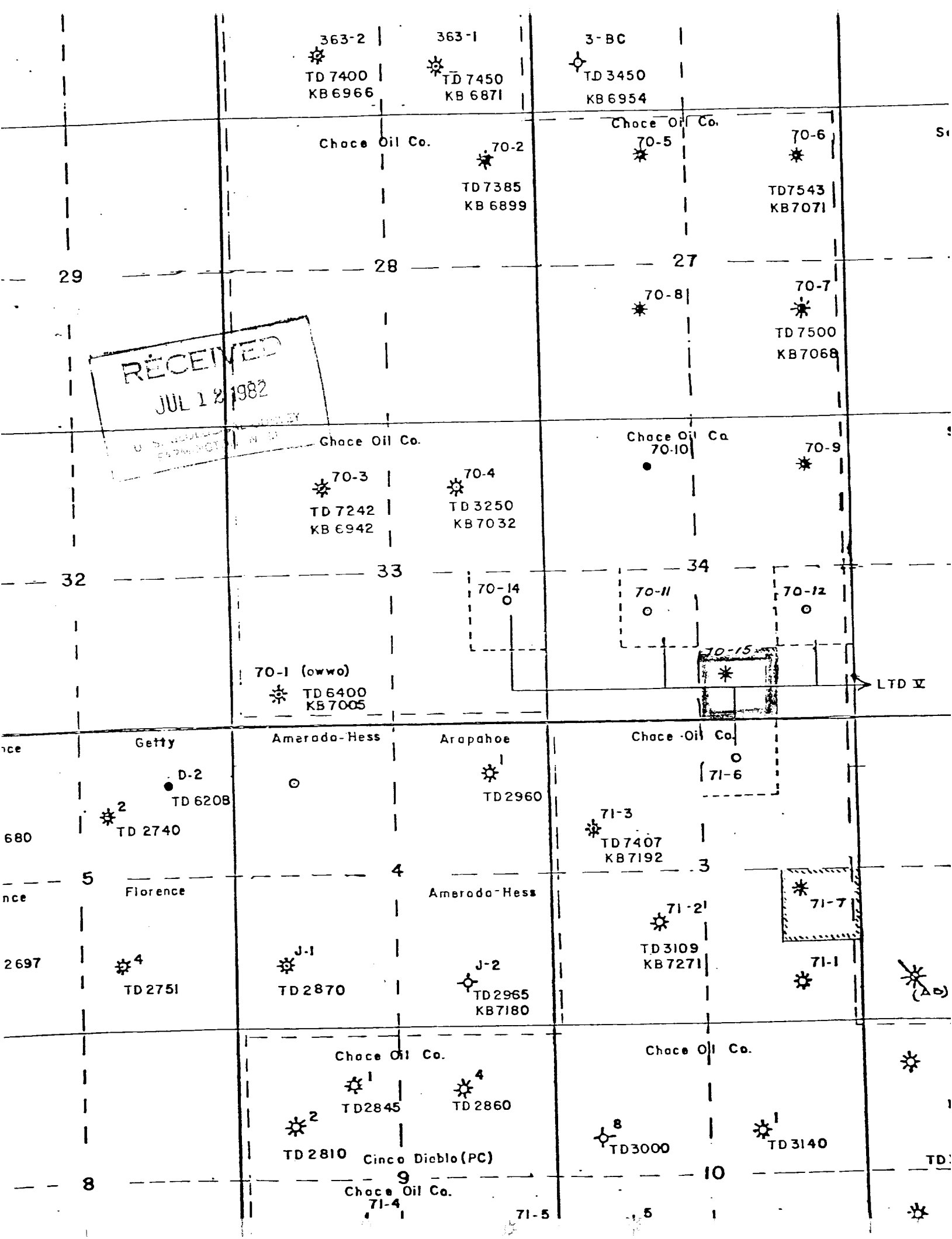
June 19, 1982 Swabbing well till 12:00 P. M. Mostly water. Oil improving. Fluid level about 600' from surface. Shut down to move and hook up tanks.

June 20, 1982 Swabbing well. Gas and oil increasing. Pulled about 10 barrels oil and 100 barrels water. Shut down completion rig to get swabbing unit on tomorrow.

June 21, 1982 Swabbing Unit, (Silver Star), moved on well. Had 400# on csg. and 100 on tbg. Swabbed all day. No bbls water. 10 bbls. oil.

June 22, 1982 Swabbing csg. P. 900# - Tbg. 250#. 190 bbls. water. 50 bbls. oil. Fluid level about 1,200 feet from surface.

June 23, 1982 Swabbing csg. pressure 1,100# - Tbg. 450#. Well flowing by head. Est. 220 bbls. water. Gauged 50 bbls. oil.


363-2
TD 7400
KB 6966
363-1
TD 7450
KB 6871
3-BC
TD 3450
KB 6954
Chace Oil Co.
70-2
TD 7385
KB 6899
70-5
70-6
TD7543
KB7071
29
28
27
70-8
70-7
TD 7500
KB7068
RECEIVED
JUL 12 1982
Chace Oil Co.
70-3
TD 7242
KB 6942
70-4
TD 3250
KB7032
Chace Oil Co.
70-10
70-9
32
33
34
70-14
70-11
70-12
70-15
70-1 (owwo)
TD 6400
KB 7005
LTD V
Getty
D-2
TD 6208
2
TD 2740
Amerada-Hess
Arapahoe
TD 2960
Chace Oil Co.
71-6
71-3
TD 7407
KB 7192
5
4
3
Florence
Amerada-Hess
71-7
71-2
TD 3109
KB 7271
4
TD 2751
J-1
TD 2870
J-2
TD 2965
KB 7180
71-1
Chace Oil Co.
Chace Oil Co.
1
TD 2845
4
TD 2860
2
TD 2810
Cinco Diablo (PC)
8
TD 3000
1
TD 3140
8
9
10
Chace Oil Co.
71-4
71-5