

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-P855.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO

Jicarilla 71

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Jicarilla 71

9. WELL NO.

7

10. FIELD AND POOL, OR WILDCAT

S. Lindrith ^{GAL} Dakota

11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA

Sec. 3 -- T23N, R4W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. LESVR. ☐ 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 "I" 2310' FSL and 990' FEL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

5-29-82

16. DATE T.D. REACHED

6-10-82

17. DATE COMPL. (Ready to prod.)

6-28-82

18. ELEVATIONS (DF, REB, RT, GR, ETC.)*

7211 GR

7225 KB

19. ELEV. CASINGHEAD

7212 GR

20. TOTAL DEPTH, MD & TVD

7545' KB

21. PLUG, BACK T.D., MD & TVD

7499' KB

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS

0-7525'

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

Dakota "D" 7385-7443

Greenhorn 7183-7205

Dakota "A" 7259-7271

Tocito 6956-6972

25. WAS DIRECTIONAL SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Induction - Density

27. WAS WELL CORED

No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	BOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24	229' KB	9 5/8"	175 SXS	None
4 1/2"	11.6	7543 KB	7 7/8"	1185 SXS	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	7267' KB	

31. PERFORATION RECORD (Interval, size and number)

Dakota "D" 7385, 7410, 7414, 7423, 7426, 7429, 7432, 7437, 7443, -- 4 SPF

Dakota "A" 7259, 7261, 7263, 7265, 7268, 7271, 4 SPF

Greenhorn - 7183, 7187, 7192, 7194, 7199, 7204, 7205 -- 1 SPF

Tocito: 6956, 6961, 6963, 6965, 6971, 6972 -- 1 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 6-28-82 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Swabbing

WELL STATUS (Producing or shut-in)
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"	→	250	190	20	760
FLOW. TURNING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
80	850	→	250	190	20	43	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented during test, Hooked up to comp. Sales line 7/1/82

TEST WITNESSED BY

Andy Birdsell

35. LIST OF ATTACHMENTS

ACCEPTED FOR RECORD

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

SIGNED

Raymond M. Cary

TITLE

President

DATE

July 6, 1982

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

SAN JUAN DISTRICT

PL 20-1-102

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.

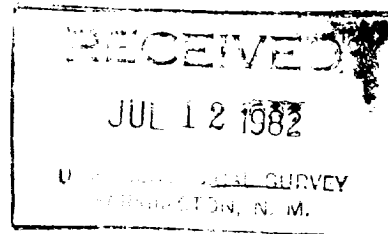
Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for Items 22 and 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			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Ojo	Not Logged					
P. C.						
Chacra		4002	Shale w/ sd strks			
Cliff House.	4567	4660	Sd w/ sh strks - wet			
Point Lookout	5088	5295	Sdy w/ coal and sh strks			
Gallup	6190	6435	Shaley w/ sd strks; poss. oil and gas			
Tocito	6843	6975	Sd w/ sh strks			
Greenhorn	7159	7219	Limy sd; Hd			
Dakota "A"	7245	7289	Sd w/ sh strks; oil and gas			
Dakota "D"	7384	7465	Sd w/ sh strks; oil and gas			
Burro Canyon	7491	-	Sd - Wet			



CHACE OIL COMPANY, INC.

313 Washington S.E.
Albuquerque, New Mexico 87108
(505) 266-5562



WELL HISTORY

NAME OF WELL: Jicarilla 71-7
LOCATION: Unit "I" 2310 FSL and 990 FEL
Section 3, T23N-R4W, Rio Arriba County, NM
ELEVATION: 7211' GR
PROPOSED DEPTH: 7510' (Dakota Test)
ESTIMATED FORMATION TOPS:

Ojo	2560'
Pictured Cliffs	3000'
Chacra	3375'
Cliffhouse	4585'
Point Lookout	5095'
Gallup	6185'
Greenhorn	7100'
Dakota "A"	7225'
Dakota "D"	7360'

3/30/82 Application submitted.

5/3/82 Application approved.

5/30/82 Day #1. Present operation WOC and nipple up. Depth is 230'. Rotary 80 rpm. Weight on bit is 15,000. No drilling rate. Liner size 5 1/2 x 15. Pressure 800#. 60 strokes per minute. Spud mud. Deviation record: 1/4 degree at 230'. Bit #1 - 12 1/4 - OSC-3. 230', 3 hours.
1 hour - rig idle
8 hours - move and rig up
1/2 hour - drill rat and mouse hole
3 hours - drilling surface
1 hour - circulate, survey and trip out of hole
3/4 hour - run 8 5/8" casing
1/2 hour - cement with Woodco
9 1/4 hours - WOC and nipple up
Spud time 3:30 P. M., 5/29/82. Ran 5 joints 8 5/8" casing 24#, K-55. Total length 215', set at 229' KB. Cement 175 sxs of Class B cement, with 3% calcium chloride, with 1/4# Floseal per sack. Circulated 10 barrels.

5/31/82 Day #2. Operation: drilling. Depth 2189'. 24 hour

footage is 1959'. Rotary rpm is 65. 35,000 weight on bit. Drilling rate 60' per hour. Liner size 5 1/2 x 15. 1,000# pressure. 60 strokes per minute. Mud vis is 31. WT is 8.9. WL is 10. Deviation record is 1/4 degree at 775'; 1/4 degree at 1267'; 1/2 degree at 1791' and 3/4 degree at 2008'. Bit #2 - 7 7/8" - F-2. 1778' - 15 1/4 hours. Bit #3 - size 7 7/8" - Type F2. 181' - 3 hours.
3 hours - WOC
1/4 hours - drill cement and plug
3/4 hour - survey
2 1/4 hours - survey, trip and wash 30' to bottom
18 hours - drilling
12 loads of water.

June 1, 1982 Day #3. Operation: drilling. Depth, 3487'. 24 hour footage is 1298'. Rotary 65 rpm. 35,000 weight on bit. Drilling rate is 40' per hour. Liner size 5 1/2 x 15. 1,000# pressure. 56 strokes per minute. Mud vis is 33. WT is 8.7. WL is 7.2. Deviation record: 3/4 degree at 2530'; 1 degree at 3148'. Bit #3. 7 7/8". Type F2. 1479' - 26 1/4 hours.
1/4 hour RS BOP
1/2 hour - survey
23 1/4 hours - drilling
15 loads of water

June 2, 1982 Day #4. Operation: drilling. Depth: 4321'. 24 hour footage is 834'. Rotary 60 rpm. 40,000 weight on bit. Drilling rate is 30' per hour. Liner size 5 1/2 x 15. Pressure 1,000#. 56 strokes per minute. Mud vis is 35. WT is 8.9. WL is 9.2. Deviation record: 1/2 degree at 3641'. 3/4 degree at 4134'. Bit #3. 7 7/8" - Type F-2. 2313' - 49 1/4 hours.
1/4 hour - RS BOP
1 hour - Survey
22 3/4 hours - Drilling
11 loads of water.

June 3, 1982 Day #5. Operation: drilling. Depth: 5063'. 24 hour footage is 742'. Sand and shale. Rotary 60 rpm. 40,000 weight on bit. Drilling rate is 30' per hour. Liner size 5 1/2 x 15. Pressure #1,000#. 56 strokes per minute. Mud vis is 35. WT is 9.0. WL is 9.6. 2% oil. Deviation record: 3/4 degree at 4660'. Bit #3 - 7 7/8". F-2. 3055', 72 1/4 hours.
1/4 hour - RS BOP
1/2 hour - survey
23 1/4 hours - drilling
8 loads of water.

June 4, 1982 Day #6. Operation: Drilling. Depth: 5386'. 24 hour footage is 323'. Sand and shale. Rotary 60 rpm. 40,000

weight on bit. Drilling rate is 25' per hour. Liner is 5 1/2 x 15. Pressure 1,000#. 56 strokes per minute. Mud vis is 38. WT is 9.0. WL is 8.0. Oil 3%. Deviation record: 3/4 degree @ 5243'. Bit #3, 7 7/8", F-2. 3235', 77 1/4 hours. Bit #4, 7 7/8", F-2. 110', 4 3/4 hours. Bit #5, 7 7/8", F-2. 33', 2 1/4 hours.

9 hours - Trips

1 1/2 hours - Wash to bottom around junk

1 1/2 hours - Wait on bit

12 hours - Drilling

6 loads of water.

6/5/82

Day #7. Operation: drilling. Depth: 5956'. 24 hour footage is 570'. Sand and shale. Rotary 60 rpm. 40,000 weight on bit. Drilling rate is 16' per hour. Liner size 5 1/2 x 15. Pressure 1,000#. 52 strokes per minute. Mud vis is 40. WT is 9.0. WL is 8.4. Mud additives: 60 barrels of oil, 3 thinner, 17 gel, 1 1/2 soda ash, 6 starch, 4 bnex, 1 preservative, 1/2 caustic. Deviation record: 3/4 degree at 5799'. Bit #5 - 7 7/8", F-2, 603', 25 hours.

1/4 hour - service rig

1/2 hour - replace drawwork chain

1/2 hour - survey

22 3/4 hours - drill

7 loads of water

6/6/82

Day #8. Operation: drilling. Depth: 6456'. 24 hour footage is 500'. Sand and shale. Rotary 60 rpm. 40,000 weight on bit. Drilling rate is 15' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 52 strokes per minute. Mud vis is 44. WT is 9.1.

WL is 8.0. 4% LCM. Mud additives 40 barrels oil, 11 starch, 2 1/2 thinner, 2 soda ash, 2 bnex, 1 caustic, 1 preservative, 86 LCM. Bit #5. 7 7/8", F-2. 1101', 46 3/4 hours.

1/4 hour - rig service

1 hour - survey and replace input chains torque converter

22 3/4 hours - drilling

8 loads of water.

6/7/82

Day #9. Operation: drilling. Depth 6857'. 24 hour footage is 400'. Sand and shale. Rotary 60 rpm. 40,000 weight on bit. Drilling rate is 17' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 52 strokes per minute. Mud vis is 45. WT is 9.0.

WL is 8.2. 3% LCM. Additives: 40 barrels oil, 80 LCM, 42 gel, 6 starch, 1 1/2 soda ash, 2 thinner, 1 caustic, 1 preservative. Bit #5. 7 7/8". F-2. 1504' - 71 1/2 hours.

1/4 hour - rig service

23 3/4 - drilling

6 loads water.

6/8/82

Day #10. Operation: drilling. Depth: 7159'. 24 four footage is 302'. Sand and shale. Rotary 60 rpm. 35,000 weight on bit. Drilling rate is 16' per hour. Liner size is 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute. Mud vis is 46.

WT is 9.3. WL is 6.4. 4% LCM. Mud additives: 20 bbls. oil, 6 starch, 1/2 soda ash, 1 caustic, 1 preservative, 2 thinner, 2 bnex. Deviation record: 1/2 degree at 6940'.

Bit #5. 7 7/8", F-2. 1587', 75 hours.
Bit #6. 7 7/8", F-3. 219', 14 1/2 hours.
1/4 hour - Rig Service
5 3/4 hours - Trip for bit
18 hours - Drilling
55% propane.

6/9/82 Day #11. Operation: trip for bit. Depth 7400'. 24 hour footage is 241'. Dakota Formation. Rotary 60 rpm. 35,000 weight on bit. Liner size 5 1/2 x 15. Pressure 1,000#. 54 strokes per minute. Mud vis is 50. Wt. is 9.5. W. L. is 7.4. LCM 4%. Bit #6. 7 7/8", F-3. 460', 36 1/4 hours.
1/4 hour - RS BOP
21 3/4 hours - Drill
2 hours - Trip
2 loads water.

6/10/82 Day #12. Operation: logging with Schlumberger. 7525' TD. 24 hour footage is 125'. Dakota Formation. Rotary 55 rpm. 40,000 weight on bit. Liner size 5 1/2 x 15. 1,000# pressure. 54 strokes per minute. Mud vis is 75. Wt. is 9.6. W. L. is 6.0. Deviation record: 3/4 degree at 7400'. Bit #7 - 7 7/8". F-3. 125', 12 1/4 hours.
12 1/4 hours - Drill
7 1/4 hours - Trip
2 hours - circulate
2 1/2 hours - log with Schlumberger
2 loads water.

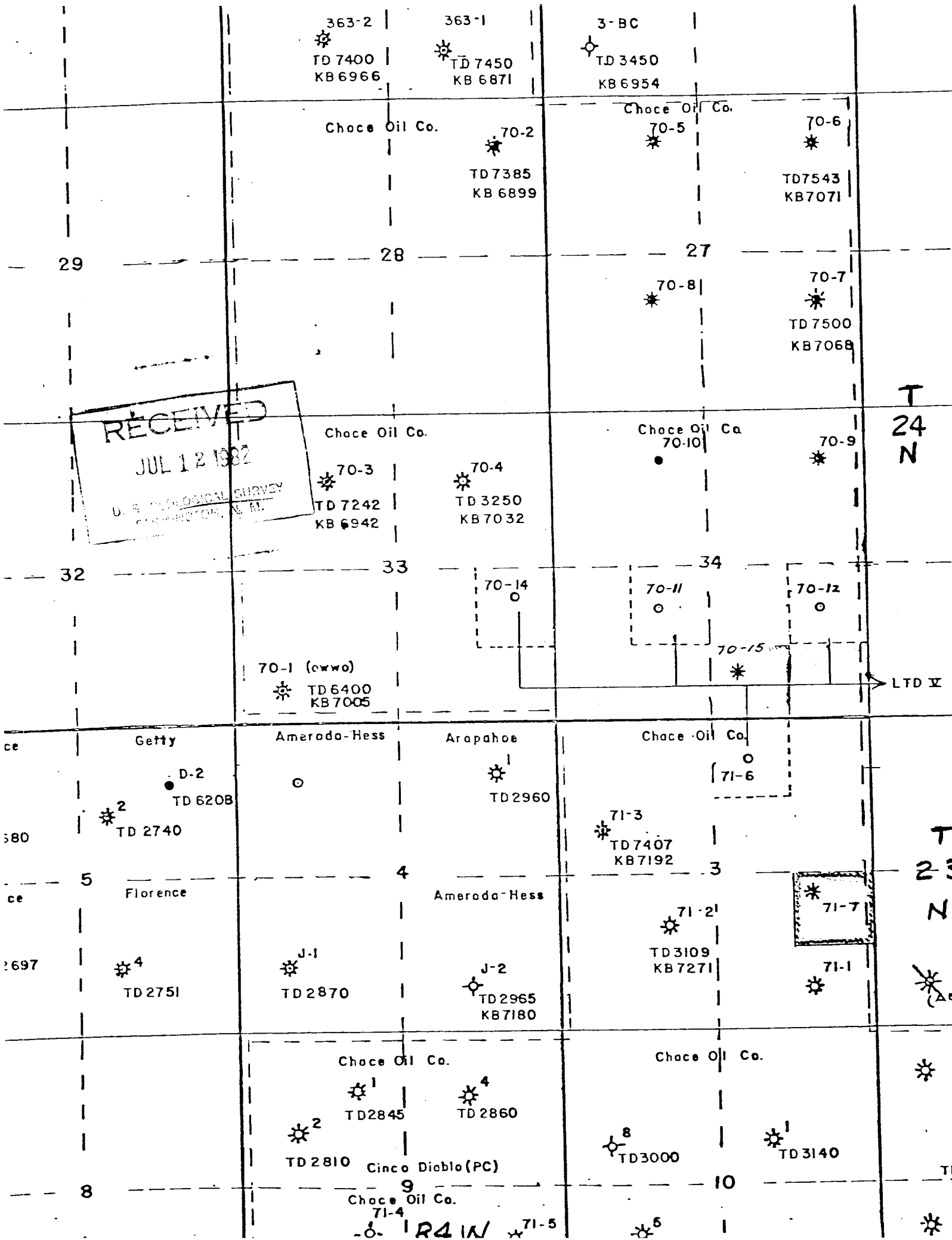
Ran 174 joints of 11.6, 4 1/2" casing. Shoe set at 7543'. 43.73' shoe joints. Float collar @ 7499'. Short joint @ 6128' to 6149'. D. V. Tool @ 3281' to 3284'. Cement basket at 7155', 6456', 6193', 3368', and 2542'. Circulated 25 minutes. Pumped 1,000 gals. of mud flush. Cemented with 730 sxs of 50/50 posmix, 2% gel, 6 1/4 gilsonite, and 6# salt per sack. Plugged down at 3:00 A. M., June 11, 1982. Lost circulation with 80 barrels of displacement in top of cement approximately 3400'. Second stage - Opened D. V. Tool and circulated 3 hours. Pumped 1,000 gals. of mud flush. Cemented with 405 sxs of 65/35 poxmix. 12% gel, 6 1/4# gilsonite per sack. Followed by 50 sxs Class B neat. Plugged down 7:14 A. M., June 11, 1982. Circulated 12 barrels of cement to surface. Release rig.

6/11/82 Day #13. Operation: circulating between stages. Depth: 7545' TD. 24 hour footage is 20'. Dakota Formation. Bit #7 - 7 7/8", F-3, 145' - 13 3/4 hours.
4 1/4 hours - Log
3 hours - Trip
1 1/2 hours - Drill
1 1/2 hours - Circulate
5 1/2 hours - Lay down drill pipe and collars
4 hours - Run 4 1/2" casing
1 1/4 hours - Cement first stage
3 hours - Open D. V. Tool and circulate
6 loads of water.

- 6/12/82 Day #14.
3 1/4 hours - Cement second stage with 405 sxs 65/35 poz,
2% gel; 100 sxs Class B neat
Plugged down at 7:15 A. M., June 11, 1982. Circulated
12 barrels of cement to surface. Released rig at noon
6/11/82.
- 6/21/82 Moved Spartan Well Service in to complete well. Drilled out
D. V. Tool at 3281', and cleaned out hole to 7499'. Spotted
250 gals. 7½% Hcl acid. Tested csg. to 4000 psig. COOH with
tbq. Ran correlation log in preparation for perforating.
WIHWPG to perforate Dakota "D" zone, (Interval 7383'-7450'),
and perforated the following: 7384', 7410', 7414', 7423',
7426', 7429', 7432', 7437', and 7443', 4 shots per foot.
COOHWPQ and hooked up NASCO to break down formation. Pumped
in 20 bbls of Hcl. Water broke formation at 2100#. Pumped
in to establish a rate of 32 B/P/M at 2900 psig. Dropped 60
balls, and balled completely off. Released pressure-WIHW ball
catcher, and retrieved balls.
- 6/22/82 Frac'd zone with slick water, (2½# FR-2 per 1000 gals.), clay
stabilizers and adamite. Ran 16,000 gal pad, followed by
51,000# 20-40 sand, and 2,019 bbls slick water. Total fluid
2,406 bbls. Max pressure 3600# - Min 2640#. Average fluid
rate 30 bbls. per min. ISIP 1800 psig. After 15 min. 1500#.
Set bridge plug at 7350'. Tested csg to 4000 psig. WIHWT,
and spotted 250 gals. 7½% Hcl acid. COHW tbq. WIHW perforating
gun. Perforated Dakota "A" zone, (Interval 7245'-7285') at
7259', 7261', 7263', 7265', 7268', and 7271' with 4 shots per
foot. COHWPG and started frac. Broke down formation with 20
bbls Hcl water, and established a 35 B/P/M rate. Dropped
60 balls, and balled off perfs. Released pressure and ran
junk basket to pick up balls. Flanged up head and frac'd
with 16,000 gal pad, 56,000# 20-40 sand, and 2,300 bbls of
slick water, (2½# FR-2 per 1,000 gal.) clay stabilizers and
adamite. Total fluid 2,686 bbls. Max. press. 3,670# - Min.
2,600#. Average fluid rate 34 B/P/M. ISIP 1,800# After 15
min. 1,500#. Set bridge plug at 7,050'. Tested csg. to 4,000#.
- 6/23/82 WIHWPG to perforate the lower Tocito. (lower Mancus) Zone for
an additional test. Perforated 6956', 6961', 6963', 6965',
6971', and 6972', each foot shot with 4 holes. COHWPG and
WIHWT and packer. Set packer at 6888'. Displaced tbq. with
nitrogen. Hooked up nitrogen and Hcl slick water. Broke down
formation at 2800#. Pumped in 20 bbls. fluid and nitrogen.
(44,000 SCF). Established a rate of 20 B/P/M. Dropped 50
balls. Could not ball off. Flowed nitrogen, etc. to surface.
Slight show of gas. After 30 minutes flowed well. 2 hours
it died. Went in with swab, and swabbed 4 times. Well kicked
off by heads, flowing water, gas and oil. Flowed 20 minutes
and died. COOHWT and packer, and hooked up to frac. equip.
Pumped 386 bbls of slick water at 11.3 BPM. Started 20-40
sand, and put away 8,000# before sanding off. Total fluid
pumped in 764 bbls. Opened well to pit. Flowed 2 hours,
making mostly frac water, trace gas, and oil. Died. Started

swabbing. Well started kicking after 3 swabs. Would flow water, gas and oil for 10 min., then die. Decided to leave alone. Went in with tubing and mill. Drilled out plugs at 7050' and 7350'. COOHWT and bit, and WBIHWT and seating nipple. Landed tubing at 7267' KB.

6-24-82 Pressure on csg. 480#, and 270# on tbg. Well shut in while tanks are hooked up.



RECEIVED

JUL 12 1982

U.S. GEOLOGICAL SURVEY
WASHINGTON, D.C.

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24
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LTD V

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23
N

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

Chace Oil Co.

70-5

70-6
TD 7543
KB 7071

29

28

27

70-8

70-7
TD 7500
KB 7068

Chace Oil Co.

70-3
TD 7242
KB 6942

70-4
TD 3250
KB 7032

Chace Oil Co.

70-10

70-9

32

33

34

70-1 (cwwo)
TD 6400
KB 7005

70-14

70-11

70-12

70-15

ce

Getty

Amerada-Hess

Arapahoe

Chace Oil Co.

D-2
TD 6208
TD 2740

1
TD 2960

71-3
TD 7407
KB 7192

71-6

580

5

4

3

Florence

Amerada-Hess

4
TD 2751

J-1
TD 2870

J-2
TD 2965
KB 7180

71-2
TD 3109
KB 7271

71-7

71-1

2697

Chace Oil Co.

Chace Oil Co.

1
TD 2845
2
TD 2810

4
TD 2860

Cinco Diablo (PC)

8
TD 3000

1
TD 3140

8

10

Chace Oil Co.

71-4

RAIN 71-5

5