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*

5. LEASE DESIGNATION AND SERIAL NO.: NOO-C-14-20-2727

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo Tribal

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

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Navajo

2. NAME OF OPERATOR: Curtis Little

9. WELL NO.: 1-35

3. ADDRESS OF OPERATOR: P.O. Box 8976, Albuquerque, New Mexico 87108

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements.*)
At surface: 990' FWL & 1650' FSL
At top prod. interval reported below
At total depth: Same

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 35, T 26N, R 18W

RECEIVED NOV 29 1971 OIL CON. COM. DIST. 3

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: San Juan | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
8-14-71	10-2-71	D&A 10-2-71	5606 GR	5606

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
1900			→	0-1900	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: None

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: None

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
5 1/2"	11.5	28	6 3/4"	6 sx	None

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
D&A		

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-2-71						43bbls/hr	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

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

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: Sample description, water analysis

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

SIGNED Curtis Little TITLE Operator DATE 11-25-71

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

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.
See attached			

38. GEOLOGIC MARKERS

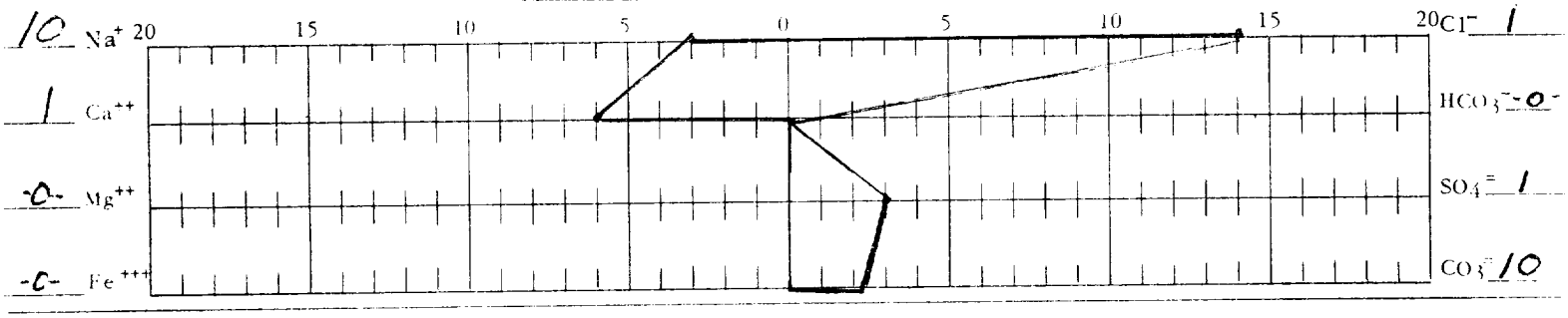
NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Gallup	Surface	
Carlile Sh	195	
Dakota	863	

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

TYPE OF WATER: ☐ PRODUCED WATER ☐ INJECTION WATER OTHER _____

WATER ANALYSIS PATTERN

(NUMBER BESIDE ION SYMBOL INDICATES me/l * SCALE UNIT)



DISSOLVED SOLIDS

	me/l *	mg/l *
CATIONS		
Total Hardness	6	300 As $CaCO_3$
Sodium, Na^+ (calc.)	30	690
Calcium, Ca^{++}	6	120
Magnesium, Mg^{++}	-0-	-0-
Iron (Total), Fe^{+++}	-0-	ND
ANIONS		
Chloride, Cl^-	14	500
Sulfate, $SO_4^=$	3	150
Carbonate, $CO_3^=$	24	720
Bicarbonate, HCO_3^-	-0-	-0-
Hydroxyl, OH^-	12	204
Sulfide, $S^=$	ND	ND
Phosphate-Meta, PO_3^-		
Phosphate-Ortho, $PO_4^=$		

DISSOLVED GASES

Hydrogen Sulfide, H_2S	-0-	mg/l *
Carbon Dioxide, CO_2	-0-	mg/l *
Oxygen, O_2	-0-	mg/l *

PHYSICAL PROPERTIES

pH	9.4	
Eh (Redox Potential)		MV
Specific Gravity		
Turbidity, JTU Units	18	
Total Dissolved Solids (Calc.)	2384	mg/l *
Stability Index @ ____ F		
@ ____ F		
$CaSO_4$ Solubility @ ____ F		mg/l *
@ ____ F		mg/l *
Max. $CaSO_4$ Possible (Calc.)		mg/l *
Max. $BaSO_4$ Possible (Calc.)		mg/l *
Residual Hydrocarbons		ppm (Vol Vol)

SUSPENDED SOLIDS (QUALITATIVE)

Iron Sulfide ☐ Iron Oxide ☐ Calcium Carbonate ☐ Acid Insoluble ☐

REMARKS AND RECOMMENDATIONS:

* NOTE: me/l and mg/l are commonly used interchangeably for epm and ppm respectively. Where epm and ppm are used, corrections should be made for specific gravity.

PIC ENGINEER	DIST. NO.	ADDRESS	OFFICE PHONE	HOME PHONE
TESTED BY	DATE	DISTRIBUTION ☐ CUSTOMER ☐ AREA OR ☐ DISTRICT OFFICE ☐ PIC ENGINEER OR ☐ PIC LAB ☐ PIC SALES SUPERVISOR		

FORM RR-2149A

SAMPLE DESCRIPTION

Navajo No. 1-35
NW/4 SW/4, Section 35
Township 26 North, Range 18 West
San Juan County, New Mexico

Samples delivered to Four Corners Sample Cut Association for permanent file.
(No samples from 195 to 660.)

Drilling Time (minutes)	Interval	Lithology
	0- 95	Sandstone: porous, air drilled.
	95- 195	Sandstone: water wet. Converted to mud drilling.
15	660- 670	Shale: dark gray, trace pyrite, trace calcite, trace bentonite.
17	670- 680	Shale and bentonite.
19	680- 690	Shale and bentonite. Trace Shale: gray, fossiliferous, calcareous.
21	690- 700	Shale: gray. Bentonite: white. Limestone: brown, argillaceous, silty, fossiliferous.
23	700- 710	As above.
30	710- 720	As above. Increasing in Limestone.
29	720- 730	As above.
30	730- 740	As above.
31	740- 750	As above.
42	750- 760	As above.
45	760- 770	As above.
29	770- 780	As above.
29	780- 790	As above.
46	790- 800	Shale: light gray, soft.
35	800- 808	As above. Reverse drilling break at 808.
18	810- 815	Shale: light gray, soft. Trace bentonite. Trace Limestone: brown, fossiliferous, silty, hard.
22	815- 820	Shale: light gray, soft. Trace bentonite. Trace Limestone: as above.
15	820- 825	As above.
11	825- 830	As above.
15	830- 835	As above. Trace gray, calcareous Siltstone and Silty Limestone.

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Drilling Time (minutes)	Interval	Lithology
14	835- 840	As above. Shale becoming increasingly silty.
12	840- 845	As above.
11	845- 850	As above.
11	850- 855	As above.
10	855- 860	As above.
41	860- 865	As above.
8	365- 868	Sample top Dakota at 863.
?	868- 870	Sandstone: gray, fine to medium grain, sub-rounded, glauconitic, very argillaceous. No shows.
7	870- 875	Sandstone: as above. Bentonite: white, brown. Shale: gray.
10	875- 880	As above.
10	880- 885	Sandstone: white, clean, very fine grain, friable, slightly glauconitic.
11	885- 890	Sandstone: as above. Hole started making water - estimated at 15 bbls per hour.
12	890- 895	Sandstone: as above, increasing in white bentonite. ?Sluff?
12	895- 900	As above.
30 (approx)	900- 910	As above.
?	910- 920	Sandstone: as above. Trace coal. Trace Shale: black.
11.5	920- 925	Coal. Bentonite: white.
13	925- 930	Coal. Bentonite: white. Sandstone: gray, fine grain, pyritic.
11.5	930- 935	Sandstone: white, very fine grain, glauconitic. Siltstone: gray. Shale: gray. Coal.
14	935- 940	Coal. Shale: gray. Sandstone: white, very fine grain, pyritic. Trace Sandstone: white w/good brown oil staining. No fluorescence. Dead oil. Hole making 15-20 bbls fresh water per hour.
14	940- 945	Shale: gray, silty. Shale: black, carbonaceous. Trace Siltstone: gray.
16	945- 950	Shale: light gray, soft. Siltstone: light brown, hard. Trace coal.

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Navajo 1-35
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Drilling Time (minutes)	Interval	Lithology
13	950- 955	As above.
11	955- 960	Siltstone: cream, hard, tite, slightly calcareous. Sandstone: white, fine to medium grain, glauconitic. Shale: dark gray, sandy. Shale: light gray, soft.
15	960- 965	Shale: as above.
12.5	965- 970	Shale: as above, some very silty. Siltstone: gray, argillaceous, tite.
?	970- 975	As above.
15	975- 980	Sandstone: white, very fine grain, bentonitic, tite.
8	980- 985	As above.
7	985- 990	Sandstone: loose clear grains, medium grain, sub angular, porous. Water flow increasing.
7.5	990- 995	Sandstone: as above.
3	995-1000	Sandstone: as above. Good trace coal. Trace Shale: brown, soft. Gauged water flow at 43 bbls per hour.