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 ☐ GAS WELL ☐ DRY ☐ Other

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

2. NAME OF OPERATOR
SOUTHERN UNION PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
P. O. BOX 808, FARMINGTON, NEW MEXICO 87401

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 960 FT. FROM THE NORTH LINE & 790 FT. FROM THE WEST LINE
At top prod. interval reported below SAME AS ABOVE.
At total depth SAME AS ABOVE.

5. LEASE DESIGNATION AND SERIAL NO.
CONTRACT #165

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
JICARILLA APACHE

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
JICARILLA "K"

9. WELL NO.
16

10. FIELD AND POOL, OR WILDCAT
BASIN DAKOTA
OTERO CHACRA EXTENSION

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
SEC. 12, T-25N, R-5W, N.M.P.M.

12. COUNTY OR PARISH
RIO ARRIBA

13. STATE
NEW MEXICO

14. PERMIT NO. | DATE ISSUED

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10/4/71	10/22/71	11/19/71	6999 FT. R.K.B.	6988 FT.

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
7805 FT. R.K.B.	7786 FT. RKB	2	→	0-7805	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4202 - 4230 FT. MD & TVD - OTERO CHACRA EXTENSION
7512 - 7710 FT. MD & TVD - BASIN DAKOTA

25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN
E.S. INDUCTION, GAMMA-RAY DENSITY, CEMENT BOND LOG

27. WAS WELL CORED

RECEIVED
DEC 16 1971
U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

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	24.0#	340 FT.	12-1/4	250 SACKS	NONE
4-1/2	10.50#	7804 FT.	7-7/8	1ST STAGE CEMENTED W/1300 CU. FT.	
		STAGE COLLAR	SET AT 4398 FT.	2ND STAGE CEMENTED W/1400 CU. FT.	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1-1/2 E.U.E.	7450 FT.	7445 FT. DAKOTA

31. PERFORATION RECORD (*Interval, size and number*)
CHACRA: 1 SHOT/FT. 4202-4230 FT.
TOTAL 29 HOLES. 0.45" HOLE SIZE.
DAKOTA: 2 SHOTS/FT. 7512-7524 FT.
1 SHOT/FT. 7650-7666, 7694-7710 FT.
TOTAL 59 HOLES. 0.45" HOLE SIZE.

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4202 - 4230	30,000# SAND & 30,030 GALS. WATER (OTERO CHACRA)
7512 - 7710	80,000# SAND & 88,620 GALS. WATER (BASIN DAKOTA)

33.* PRODUCTION

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

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12-1-71	3 HOURS	3/4"	→		195	CHACRA	
12-8-71	3 HOURS	3/4"			221	DAKOTA	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
NO TUBING 139	57 PACKER	→		862 (CHACRA) 1765 (DAKOTA)		

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

TEST WITNESSED BY
KENNETH E. ROBBY

35. LIST OF ATTACHMENTS

RECEIVED
DEC 17 1971
OIL CON. COM.

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

SIGNED Original signed by DAN R. COLLIER TITLE OFFICE MANAGER DATE DECEMBER 15, 1971

*(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.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
BASE OJO ALAMO	2960	
FRUITLAND	3238	
PICTURED CLIFFS	3305	
CHACRA	4203	
CLIFF HOUSE	4978	
POINT LOOKOUT	5646	
GALLUP	6556	
BASE GREENHORN	7490	
DAKOTA	7515	

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