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: Amoco Production Company

3. ADDRESS OF OPERATOR: 501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 1840' FSL x 790' FWL
At top prod. interval reported below: Same
At total depth: Same

RECEIVED
JAN 19 1984
BUREAU OF LAND MANAGEMENT
FARMINGTON, NEW MEXICO

5. LEASE DESIGNATION AND SERIAL NO.: SF-078771
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME: Rosa Unit
8. FARM OR LEASE NAME:
9. WELL NO.: 98
10. FIELD AND POOL, OR WILDCAT: Undes Gallup
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NW/SW, Sec. 23, T31N, R6W
12. COUNTY OR PARISH: Rio Arriba
13. STATE: New Mexico
14. PERMIT NO.: [illegible] DATE ISSUED: [illegible]

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-13-83	10-19-83	12-21-83	6280' KB	6267' GL

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
7958'	7950'	2	→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 6310'-7592' Gallup

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: DIL-SP-GR, CNL FC-GR-Caliper, Long Spaced Digital Sonic

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
13.375"	48#, H-40	417'	17-1/2"	480 cu.ft. Class B W/2% CaCl2	
8.675"	28#(S-80,J-55)24# (J-55)	3794'	7.875" Reamed out to 11"	(1st)591 cu.ft. Class B 65:35 POZ (2nd) 924 cu.ft. Class B 50:50 POZ (3rd)240 cu.ft	
4.5"	11.6#, N-80	7958'	7.875"	Class B w/2% CaCl2. (Cont. on back)	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.375"	7929'	7691'

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

See Attached Page for perforations

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
See Attached page for stimulation	

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
1-10-84	Flowing	Shut-In

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1-11-84	3 hrs.	.75			471		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
305 psig	1250 psig			3767		

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

TEST WITNESSED BY: J.J. Barnett

35. LIST OF ATTACHMENTS

RECEIVED
APR 10 1984
OIL CON. DIV.
DIST. 3

ACCEPTED FOR RECORD
APR 06 1984
FARMINGTON RESOURCE AREA
BY

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

SIGNED _____ TITLE District Adm. Supervisor DATE January 18, 1984

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

NMOCC

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.)

(Cementing cont. - 4.5" Casing string) (1st) 770 cu.ft. Class B 50:50 POZ tailed in with 118 cu.ft. Class B Neat.
(2nd) 1675 cu.ft. Class B 65:35 POZ tailed in with 118 cu.ft. Class B Neat.

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.
Pictured Cliffs	3100'	3300'	
Mesaverde	5277'	5872'	
Gallup	6310'	7592'	
Greenhorn	7592'	7648'	
Graneros Shale	7648'	7823'	
Main Dakota	7823'	7930'	

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

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

GPO 680-147

Rosa Unit No. 98

Perforations: Gallup

Interval	Spacing	Diameter of Hole	Total Shots
6310'-6324'	1 jsp2f	.39"	7
6326'-6348'	1 jsp2f	.39"	11
6350'-6372'	1 jsp2f	.39"	11
6374'-6396'	1 jsp2f	.39"	11
6398'-6416'	1 jsp2f	.39"	9
6420'-6444'	1 jsp2f	.39"	12
6446'-6468'	1 jsp2f	.39"	11
6470'-6492'	1 jsp2f	.39"	11
6494'-6516'	1 jsp2f	.39"	11
6518'-6540'	1 jsp2f	.39"	11
6838'=6862'	1 jsp2f	.39"	12
6864'-6886'	1 jsp2f	.39"	11
6888'-6910'	1 jsp2f	.39"	11
6912'-6934'	1 jsp2f	.39"	11
6936'-6958'	1 jsp2f	.39"	11
6960'-6982'	1 jsp2f	.39"	11
6983'-7003'	1 jsp2f	.39"	10
7010'-7026'	1 jsp2f	.39"	8
7028'-7050'	1 jsp2f	.39"	11
7052'-7074'	1 jsp2f	.39"	11
7076'-7098'	1 jsp2f	.29"	11
7100'-7122'	1 jsp2f	.29"	11
7124'-7146'	1 jsp2f	.29"	11
7148'-7170'	1 jsp2f	.29"	11
7172'-7194'	1 jsp2f	.29"	11
7258'-7428'	1 jsp2f	.38"	85
7452'-7592'	1 jspf	.38"	140
			492 total shot

Rosa Unit No. 98

Stimulation:

(6310'-6540') 89,572 gal. 50# gelled water with 2% KCL, 1 gal. surfactant/1000 gals. fluid and 64,000# 20-40 mesh sand.

(6838'-7194') 165,000 gal. 50# gelled water with 2% KCL, 1 gal. surfactant/1000 gals. fluid and 150,000# 20-40 mesh sand.

(7258'-7428') 95,000 gal. 50# gelled water with 2% KCL, 5% condensate, and 65,000# 20-40 mesh sand.

(7452'-7592') mini-frac 50,000 gal. 30# gelled water with 2% KCL, 1 gal. surfactant/ 1000 gal. fluid, and 1 millicurie of radioactive iodine/1000 gal. fluid.

(7452'-7592') 36,340 gal. 30# gelled water with 2% KCL, 1 gal. surfactant/1000 gal. fluid, 1 millicurie of radioactive iodine/1000 gal. fluid and 32,680# 20-40 sand.