

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

(See other in-
structions on
reverse side)

FOR APPROVED
O&G NO. 1004-0157
Expires: December 31, 1991

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 ☐ Recompletion

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS AND TELEPHONE NO.
P.O. Box 800, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with BLM Form 3100-1)
At surface 1840' FSL 1100' FEL

At top prod. interval reported below

At total depth

Attention:

Dallas Kalahar

303) 830-5129

OIL CON. DIV.
DIST. 3

14. PERMIT NO. DATE ISSUED

12. COUNTY OR PARISH
San Juan

13. STATE
New Mexico

15. DATE SPUDDED 10/12/82

16. DATE T.D. REACHED 10/20/82

17. DATE COMPL. (Ready to prod.) 05/04/94

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5927' KB

19. ELEV. CASINGHEAD 5915' GR

20. TOTAL DEPTH, MD & TVD 7069' KB

21. PLUG, BACK T.D., MD & TVD 7002' KB

22. IF MULTIPLE COMPL., HOW MANY* 2

23. INTERVALS DRILLED BY
ROTARY TOOLS YES
CABLE TOOLS NO

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

MV Point Lookout Top - 4208'

Bottom 4915'

26. TYPE ELECTRIC AND OTHER LOGS RUN

NONE

25. WAS DIRECTIONAL SURVEY MADE
NO

27. WAS WELL CORED
N

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

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	268' KB	12-1/4"	331 CF C1-B + 2% CaCl2 + 1/4#/sx floccale	
7"	23#	4612' KB	8-3/4"	1st: 236 CF C1-B + 2% CaCl2 + 1/4#/sx 2nd: 166 CF C1-B + 2% D-79 + celloflake 2% CaCl2 + 1/4#/sx celloflake + 118 CF *	
DV@ 1180' KB					

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4-1/2"	4402' KB	7069' KB	(See reverse)		1-1/2"	4390'	5126'

31. PERFORATION RECORD (Interval, size and number)

See Attached

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

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

33.* PRODUCTION

DATE FIRST PRODUCTION 05 03 1994		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Flowing				WELL STATUS (Producing or shut-in) SI w/o 1st Delivery	
DATE OF TEST 05 03 1994	HOURS TESTED 24	CHOKE SIZE 1/2"	PROD'N FOR TEST PERIOD —————	OIL - BBL 1	GAS - MCF. 268	WATER - BBL 5	GAS-OIL RATIO
FLOW TUBING PRESS 150	CASING PRESSURE 350	CALCULATED 24-HOUR RATE —————	OIL - BBL 1	GAS - MCF. 268	WATER - BBL 5	OIL GRAVITY - API (CORR.)	

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

To be sold

TEST WITNESS
ACCEPTED FOR RECORD

35. LIST OF ATTACHMENTS

Perf & Frac information

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

SIGNED Dallas Kalahar

TITLE Business Analyst

DATE MAY 1 1994

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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOOD

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.)

4-1/2" liner cementing detail: 361 CF Cl-B + 2% D-79 + 1/4#/sx celloflake + 177 CF Cl-B neat

ier top cement squeeze: 177 CF Cl-B + 2% CaCl₂ + 6-1/4#/sx Gilsonite

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
Ojo Alamo	997'	1077'	Sandstone	
Kirtland	1077'	2082'	Inter-layered shale, siltstone	
Fruitland	2082'	2367'	Inter-layered shale, sandstone & coal beds	
Pictured Cliffs	2367'	2447'	Sandstone	
Lewis	2447'	4092'	Shale	
Cliffhouse	4092'	4147'	Inter-bedded sandstone and shale	
Menefee	4147'	4695'	Inter-bedded sandstone, siltstone and shale	
Pt. Lookout	4695'	5116'	Sandstone, shale	
Mancos	5116'	5961'	Shale	
Ilup	5961'	6724'	Sandstone, siltstone and shale	
aneros	6756'	6816'	Shale	
Dakota	6816'	TD	Inter-bedded sandstone and shale	Greenhorn
				6724'
				41" x 41"

NOTE: All depths are expressed in terms of KB.

Thurston Com A #1E

MIRUSU 4/14/94, NDWH, NUBOP. TIH AND TAG UP @6880 FT. 122 FT. FILL - TALLIED AND TOH. TIH W/RBP AND SET @5935'. PRESS TEST TO 1500 PSI. HELD OK. SPOTTED 2 SXS OF SAND AND TOH W/RET HEAD - NIPPLED DOWN BKOP & WELL HEAD NIP UP DUAL TBG HEAD AND FRAC VALVE & TEST WELL HEAD SEALS TO 1200 PSI & FRAC VALVE TO 3000 PSI. RIG UP WLE AND RIH & RAN CBL CCL FROM 5924' TO SURF.

RIG UP WLE, RIH W/PERF GUNS. ROH W/GUNS, RIH W/SQUEEZE GUN 3 1/8" HCG W/2 JSPF 120 DEG. 13 GRM .35 HOLE & PERF CSG @ 4810', WELL WENT ON VAC. RD WLE, TIH W/4 1/2" PKR & SET @ 4503' MIXED & PUMPED 200 SXS OF CLASS B CMT W/.3% HALIAD 344 & 5% CAL SEAL. DISP CMT ON VAC NO PRESS, THEN OVERDISPLACED W/10 BBLS. WAITED ON CMT FOR 2 HRS THEN EST INJ RATE OF 1 3/4" BPM @ 170 PSI W/10 BBLS. MIXED & PUMPED 100 SXS OF HALLIBURTON LIGHT W/2% CALCL. & TAILED IN W/100 SXS OF CLASS B W/.3% HALIAD 344 & 5% CAL SEAL, CMT ON VAC. DISPLACEMENT ON VAC TO 16/5 BBLS, STOPPED & STAGED IN 3 BBLS TO SQUEEZE PRESS OF 500 PSI.

PRESS UP ON SQUEEZE TO 500 PSI, HELD OK. RELEASED PKR @ 4503' & TOH. TIH W/3 7/8" BIT & SCRAPER & 6 DC. TAG CMT @ 4584' & DRILL CMT TO 4812'. CIRC HOLE CLEAN & PRESS TEST TO 1000 PSI, HELD OK. TOH W/BIT & SCRAPER AND DC. RIG UP WLE & RIH & RAN CBL FROM 5100' TO 4700', ISOLATION DWN TO 4920'. ROH & RD WLE.

RU WLE & RIH & PERF CSG @ 4932' W/3 1/8" HCG W/2 JSPF .35 HOLE, 120 DEG PHASED. ROH & RD WEL, EST INJ RATE OF 2 BPM @ 300 PSI. TIH W/PKR & SET @ 4502'. RU CMT EQUIP. EST INJ RATE OF 2 BPM @ 0 PSI W/10 BBLS. MIXED & PUMPED 200 SXS CLASS B CMT W/.3% HALIAD 344 W/5% CAL SEAL & DISPLACE W/20 BBLS ON A VACUUM. SWI & WAITED 2 HRS, TBG ON VAC. RELEASED PKR & TOH. TIH W/BIT & SCRAPER & TAG CMT @ 4735' & DRILL OUT TO 4935', CIRC HOLE CLEAN. TOH W/BIT & SCRAPER.

RIGGED UP WIRE LINE EQUIP RIH & RAN CBL CCL GR FROM 5356' - 4754', CMT BOTTOM @ 5260'. PRESS TEST SQUEEZE PERF @ 4932' TO 500 PSI, HELD OK. RIH & SET RBP @ 4928' & PRESS TEST TO 1000 PSI, HELD OK. RIH & DUMPED BAILED 1/2 SXS OF SAND ON RBP. RIH & PERF MV POINT LOOKOUT FROM 4908' - 4915', 4802' - 4807', 4745' - 4765', 4724' - 4734', 4708' - 4718', W/ 3 1/8" HCG 2 JSPF 13 GRM 130 DEG. .35 HOLE. RIGGED DWN WLE, RIGGED UP FRAC EQUIP & FRAC MV W/70 QUALITY FOAM & 12/20 BRADY SAND, PUMPED 157900 LBS SAND W/ 1,192.

NIPPLED DWN FRAC VALVE NUBOP. TIH W/TBG & TAG SAND @ 3500', CIRC OUT TO 4600'. TOH TO 4000'. FINISH TOH W/TBG & SAW TOOTH COLLAR, TIH W/RBP & SET @ 4565', PRESS TEST RBP TO 1000 PSI. SPOTTED 1 SXS OF SAND ON RBP & TOH. RU WLE & RIH W/4" HCG & PERF CSG @ 2391' W/2 JSPF .45 HOLE ROH & RD WLE. TIH W/ RET PKR & SET @ 2094'. PRESS PKR TO 700 PSI, EST INJ RATE OF 2 BPM @ 600 PSI. RU CMT EQUIP, EST INJ RATE OF 3 BPM @ 750 PSI. MIXED & PUMPED 200 SXS CLASS B CMT W/.3% HALIAD 344 & 5% CAL SEAL & DISPLACED W/16 BBLS, OBTAINED SQUEEZE PRESS OF 360 PSI.

RELEASE PKR @ 2094' & TOH, TIH W/BIT & SCRAPER & DC, TAGGED & DRILL CMT FROM 2230' TO 2395', PRESS TEST SQUEEZE PERFS @ 2391' TO 500 PSI, HELD OK. TOH W/BIT & SCRAPER & LAID DWN DC. TIH W/RET. HEAD & CIRC OFF SAND & RELEASED RBP @ 4565', TOH W/RBP. TIH W/RET. HEAD TO 4200'.

TIH FROM 4200' & TAGGED @ 4623', RU N2 EQUIP & CLEANED OUT TO RBP SET @ 4565', RELEASED & TOH CHANGED OUT TBG COLLARS. TIH W/RET. HEAD & TAGGED FILL @ 5885 65 FT OF FILL, PULLED UP TO 4675' RU TO FLOW BACK WELL. PUT WELL ON FULL OPEN FOR 30 MIN. & WELL DIED. RU TO SWAB.

FLOW TEST WELL TO TANK OVER NIGHT ON 1/2" CHOKE FOR 17 HRS, RECOVERED 7 BBLS WATER NO SAND, BLED OFF PRESS. CONT TO TIH W/RET HEAD, TAGGED SAND @ 5749". RU N2 EQUIP & CLEANED OUT TO RBP SET @ 5934' & RELEASED & TOH W/RBP. TIH W/SAW TOOTH COLLAR & TAGGED FILL @ 6875' & CLEANED OUT TO PBTD OF 7002', TOTAL N2 USED = 220,000 SCF. TOH W/SAW TOOTH, TIH W/ 1/2"

MULE 1 JT TBG SN W/ F COLLAR, 53 JTS BAKER LOCK SET PKR, 162 JTS TBG, SET PKR @ 5126' W/10 K OVER TBG LANDED @ 6841' ND BOP LANDED TBG HANGER, NUBOP RU TO RUN 1 1/2" TBG.

TIH W/ 1 1/2" PRODUCTION TBG 6' LONG, 1 JTS, SN 132 JTS OF 1 1/2" TBG, 2 EACH 8' & 2' SUBS & 1 JT OF 1-1/2" TBG. LANDED TBG @ 4390' ND BOP NU WELL HEAD & PRESS TEST TO 1500 PSI. OPEN SHORT STRING MV SICP=500 PSI, PUT WELL ON 1/2" CHOKE FTP=200 PSI. REC 38 BBLs IN 6 HRS, TRIED TO PUMP OUT EXPENDABLE CHECK IN DK LONG STRING. PRESS UP TO 3000 PSI FOUR TIMES, UNABLE TO PMP OUT. RIH W/SINKER BARS & TRIED TO JAR OUT CHECK, RU WLE RIH W/CCL & FOUND 2 - 3 FT OF SAND ON CHECK, RD WLE.

RIGGED UP SLICK LINE EQUIP RIH W/HYDROSTATIC BAILER, MADE 3 RUNS & CLEANED OUT 3 FT OF SAND OFF OF EXPENDABLE CHECK. RIH W/MAGNET & TRIED TO RECOVER, PMP OUT BALL, NO BALL. PRESS UP ON TBG TO 3000 PSI UNABLE TO PMP OUT CHECK. RD SLE RU WLE & TIH W/CHEM. CUTTER & TAGGED UP @ 6824', PULLED UP & CUT TBG @ 6814' W/2100 PSI ON TBG, RETAGGED, BOTTOM DID NOT FALL OFF. RUH W/SINKER BARS & KNOCKED OFF BOTTOM 10 FT TBG.

OPENED DK LONG STRING UP ON 2" OPEN, FLOWED WELL TO TANK FOR 1 HR, RECOVERED 5 BBLs, SHUT WELL IN, MOVED OFF RIG & EQUIP.

RIGGED UP COIL TBG UNIT & RIH W/ 1 1/4" TBG TO 6809' & LANDED, NU WELL HEAD, RU N2 EQUIP & PMP OUT TBG PLUG W/15000 SCF N2 @ 2200 PSI. RIG DWN COIL TBG UNIT SWI & TURN WELL OVER TO PROD. 5/4/94.

NOTE: FISH IN BOTTOM OF HOLE 10 FT OF 2 3/8" TBG W/EXPENDABLE CHECK, BOTTOM OF 2 3/8" DK TBG HAS BEEN CHEM CUT, BOTTOM OF 2 3/8" TBG @ 6831' - 1 1/2" MV TBG LANDED @ 4390' - 1 1/4" DK COIL TBG LANDED INSIDE 2 3/8" @ 6809'.