

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		5. Lease Designation and Serial No. SF - 078039
2. Name of Operator AMOCO PRODUCTION COMPANY		6. If Indian, Allottee or Tribe Name
Attention: NANCY I. WHITAKER		7. If Unit or CA, Agreement Designation
3. Address and Telephone No. P.O. Box 800, Denver, Colorado 80201 (303) 830-5129		8. Well Name and No. BARNES B 21
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1250 FWL 800 FWL Sec. 13 T 32N R 11W UNIT M		9. API Well No. 3004527743
		10. Field and Pool, or Exploratory Area FRUITLAND COAL
		11. County or Parish, State SAN JUAN NEWMEXICO

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION
☐ Notice of Intent ☒ Subsequent Report ☐ Final Abandonment Notice	☐ Abandonment ☐ Recompletion ☐ Plugging Back ☐ Casing Repair ☒ Altering Casing ☒ Other REPAIR/CLEAN OUT ☐ Change of Plans ☐ New Construction ☐ Non-Routine Fracturing ☐ Water Shut-Off ☐ Conversion to Injection ☐ Dispose Water
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

SEE ATTACHED SUBSEQUENT INFORMATION FOR REPAIR APPROVED BY BLM ON 7/23/96.

RECEIVED
JAN 21 1997
OIL CON. DIV.
DIST. 3

RECEIVED
BLM
97 JAN 14 AM 10:47
070 FARMINGTON, NM

14. I hereby certify that the foregoing is true and correct	
Signed <i>Nancy I. Whitaker</i>	Title STAFF ASSISTANT Date 01-10-1996
(This space for Federal or State office use)	
Approved by _____	Title _____ Date 5 1997
Conditions of approval, if any:	
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 or fraudulent representations as to any matter within its jurisdiction.	

ACCEPTED FOR RECORD
JAN 15 1997
FARMINGTON DISTRICT OFFICE

BARNES B # 21

REPAIR WORK 3004527743

Subsequent report for NOI approved on 7/23/96

MIRUSU 8/2/96

NDWH NUBOP. FLOWED CSG PRESS TO PIT. PU TBG JT AND SCREW IN DONUT. TRIED TO PRESS TEST BOTTOM RAMS, COULD NOT GET A TST. CHANGED OUT RAMS ON BOP. PRESS TST TO 2000 PSI. HELD OKAY. RU HCR VALVES & BLOOIE LINES. PUMP 50 BBLs WTR DOWN BACKSIDE & UNSEAT DONUT. W.O. WELL TO UNLOAD WTR FOR TIME TST. LAID DN 35 JTS 3.5" TBG.

FLOWED WELL TO PIT & UNLOAD WTR. SI 1 HR. 15 MIN -- 300 PSI, 30 MIN -- 320 PSI, 45 MIN -- 320 PSI, 60 MIN -- 320 PSI. FLOW TESTED WELL FOR 1 HR. RECVRD 2863 MCF/D. LAID DN 83 JTS OF 3.5" TBG, F NIPPLE, MULESHOE.

TIH W/3.5" D.C.'s TAGGED @ 2872'. DRILLED 8' HARD DRLG. & FELL THRU BRIDGE. TIH & C/O TO BOTTOM. CIR HOLE W/AIR @ 150 CFM. LAID DN 2 JTS. CIRC W/AIR & STARTED 1 GAL SOAP / 5 BBL WTR/HR. LIGHT MIST RETURNS. TOH W/ 11 JTS & START MIST. TIH W/PIP & SOAP/ 10 BBLs WTR/HR. CIR W/1500 CFM AIR & SOAP THRU TIGHT SPOT @ 2885-2911. STARTED BRINGING HEAVY SHALE & COAL RETURNS TO SURFACE. C/O FILL & TIGH HOLE F/ 2885 TO 2911' W/ 1500 CFM AIR & FOAM MIST. 2 GAL SOAP/10 BBL WTR/HR. HEAVY SHALE & COAL RETURNS. C/O 2911 TO 2943 1700 CFM AIR @ 10 BPH FOAM MIST. VERY HEAVY SHALE COAL RETURNS TO SURFACE. C/O 2943 TO 2950'. WELL STABLIZED.

PITOT TEST 60 MIN. 14-19 PSI 2.774 MMCFD RECOVERED. TEST THRU .75" CHOKE 1 HR. 150 - 200 PSI, 2.900 MMCF/D RECOVERED. SHUT IN TEST. ISI 230 PSI. 15 MIN 290 PSI. 30 MIN. 300 PSI, 45 MIN 305 PSI, 50 MIN 305 PSI.

TIH W/ 13 STDS. AND TAGGED 5 FT OF FILL. CIRC W/1500 CFM AIR ON BOTTOM. PITO TEST: 15-120 MIN. 32 PSI. RECOVERED 3.3 MMCF/D. FLOW TEST THRU .75" CHOKE, 15 MIN - 60 MIN 170 TO 180 PSI. TIH & TAGGED @ 2885. C/O TO BOTTOM 2885 TO 2950' W/ AIR. PITOT TEST 45 MIN, 21 PSI, RECOVERED 2953 MCF. C/O TO BOTTOM. TIH W/ 2 STDS SET PKR. ND BOP AND NU WELL HEAD, AND MASTER VALVE. NU BOP AND HCR AND CHOKE MANIFOLD AND BLOOIE LN. TI LATCH ON TO PKR, KILL WELL, L/D PKR.

TIH 13 JTS. TAGGED 7' FILL. CIR OUT 7' FILL W/1500 CFM AIR ON BOTTOM. TOH L/D DP & DC. ND BOP SET MSTR VLVE.

RDSUMO 8/11/96

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MIRUSU 8/23/96

NU BOP TEST BOP STAC & CHOKE MANIFOLD TO 200 PSI LOW AND 2000 PSI HIGH WITH RIG PUMP, TEST OK. PU BIT DRILL COLLARS/PIPE. FLOW TEST W/PITOT TUBE; 15-60 MIN. 27-29 PSI, 3.40 TO 3.660 MMCFD. FLOW TEST WITH .75" CHOKE: 15-60 MIN, 160 - 190 PSI, 2.320 TO 2.755 MMCFD. SI BU TEST. INSIP 210 PSI, 15 MIN 270 PSI, 30 MIN. 290 PSI, 45 MIN 300 PSI, 60 MIN 310 PSI. TIH W/ SHOE, BRIDGE AT 2859, CIRC W/1500 CFM AIR & 7 BBL/HR H2O. UNABLE TO UNLOAD HOLE. C/O FROM 2859' TO 2900 W/ 1500 CFM, 10 BBL/HR FOAM MIST. LARGE COAL/SHALE FINES. C/O 2810 TO 2874. LD 4 JTS. TO 2780. C/O 2780' TO 2905 W/1500 CFM AIR, 10 BBL/HR FOAM/MIST. C/O 2810 TO 2842. HEAVY COAL SHALE RETURNS. C/O 2842 TO 2905. C/O 2905 TO 2950' W/ 1500 CFM & 10 BBL/HR FOAM/MIST. CIRC W/1500 CFM AIR, 10 BBL/HR FOAM/MIST SPOTTY RETURNS, WORK PIPE UNTIL FULL RETURNS. PULL UP TO WINDO AT 2800'. CIRC W/1500 CFM AIR, CUT FOAM/MIST TO DRY HOLE. TOH FOR WIRE LINE RUN CAMERA.

RU HALLIBURTON WIRE LINE. RUN CAMERA ON WIRE LINE TO 2850'. UNABLE TO SEE BECAUSE OF FOAM. RD HALLIBURTON. FLOW TEST WELL THRU PITOT TUBE. 15 - 60 MIN, 56 - 49 PSI. 6.085 TO 5.190 MMCFD. FLOW TEST THRU .75" CHOKE 15 - 60 MIN. 205-212 PSI., 2.972 TO 3.074 MMCFD. SURGE WELL 4 TIMES: SI 1 HR BUILD UP TO 290 PSI. FLOW .5 HR, RECOVERED MED AMOUNTS OF FINES. TIH TAG BRIDGE AT 2840' C/O 2840 TO 2900. CIR W/1500 CFM AIR, 10 BBL/HR FOAM/MIST. C/O 2874' TO 2950. CIRC W/1500 CFM AIR 10 BBL/HR FOAM/MIST. CIRC. UP LARGE AMOUNTS OF FINES. CUT FOAM/MIST OFF LAST .5 HR TO DRY HOLE.

TOH TO TEST AND CAVITATE. FLOW BACK NATURAL. SI FOR BUILD UP TO 290 PSI MAX. FLOW BACK WITH PITOT TUBE: 15 - 60 MIN. 52 - 40 PSI, 5.727 TO 4.653 MMCF/D. C/O TO TD. TAG UP AT 2870', CIRC W/1500 CFM AIR AND 8 BBL WTR. C/O TO 2950'. C/O HOLE WITH 1500CFM AIR & 8 BBL WTR TO CLEAN UP FILL. BLOW HOLD DRY. LD 13 JTS. SI TEST FOR 1 HR. 292 PSI MAX PRESS. PITOT TEST 1 HR. 42 - 30 PSI 4/832 TO 4.474 MMCFD. TESTED 3/4" CHOKE, 15 MIN TO 60 MIN. 190 TO 200 PSI. SI TEST 30 MIN. 15 MIN 220 PSI, 30 MIN. 260 PSI. PITOT TEST 1 HR. 15 MIN. 55 PSI, 30 MIN, 50 PSI, 60 MIN. 48 PSI. CST WITH AIR AND WATER ALTERNATIVELY. MADE 6 CST. TIH TAG FILL AT 2870'. C/O HOLE, USING 1500 CFM AIR AND 5-9BBL WATER PER HR. TOH TO TEST AND CST.

SI TEST 1 HR. 15 MIN., 230# 30 MIN., 270#, 45 MIN., 290#, 60 MIN, 300#. 1 HR PITOT TEST: 15 MIN., 36# 4/3 MMCFD, 30 MIN. 38# 4.5 MMCFD, 45 MIN., 38# 4.5 MMCFD, 60 MIN., 36# 4.3 MMCFD. 1 HR MANIFOLD TEST. 15 MIN 180#, 30 MIN. 200#, 45 MIN. 210#, 60 MIN. 210#. NATURAL CST SET OF 3. 1 HR NATURAL BUILD UPS & 30 MIN BLOW DOWN. FINISH SET OF 3 NATURAL CAVITATIONS. CAVITATE WITH 3 SETS OF 2250 AIR FOR 1 HR W/ 30 MIN BLOW DOWNS. TIH TAG UP AT 2860'. C/O W/ 5-9 BBLS WTR AND 1500 CFM AIR. HAD BRIDGES AT 2860, 2905, 2915, 2930-2950. CIRC AND CLEAN OUT HOLE TO TD. BLOW HOLE DRY FOR 1 HR. TOH FOR TEST. SI FOR 1 HR PRESS BUILD UP TO 290# MAX.

1 HR PITOT TEST. 15 MIN, 56# 6.1 MMCFD, 30 MIN 48# 5.4 MMCFD, 45 MIN 46# 5.2 MMCFD, 60 MIN 46# 5.2 MMCFD. 1 HR MANIFOLD TEST. 15 - 60 MIN, 200 - 214 PSI. 3 SETS OF NATURAL CSTS. 1 HR BUILD UP AND 30 MIN BLOW DOWN. 6 SETS OF AIR - 10 BBLS WTR-AIR WITH 30 MIN BLOW DOWNS. FINISH CSTS WITH AIR-WATER-AIR TOTAL OF 9 SETS. TIH TO C/O TAG AT 2870'. C/O FILL WITH 1500 CFM AND 5-10 BBLS MIST. C/O WELL WITH AIR 1500 CFM AND 8 BBL HR MIST/WTR W/4 GAL SOAP IN 20 BBL WTR WORKING FROM SURFACE CASING TO 2937' SLOUGHING COAL/SHALE. C/O 2900 TO 2937 W/ 1500 CFM AIR MISTING 8 BBLS HR 2-GAL/SOAP/10 BBLS WTR. TOH FOR BIT/BIT SHANKS. SI TEST. ISIP 110 PSI, 15 MIN., 230 PSI, 30 MIN. 270 PSI, 45 MIN., 280 PSI, 60 MIN., 300 PSI.

PITO TEST

15 MIN 50 PSI 5548 MCF WET
 30 MIN 46 PSI 5190 MCF DRY
 45 MIN 46 PSI 5190 MCF DRY
 60 MIN 46 PSI 5190 MCF DRY

TEST THRU 3/4" CHOKE

15 MIN 200 PSI
 30 MIN 210 PSI
 45 MIN 220 PSI
 60 MIN 220 PSI

TIH TAG @ 2555' W/ BIT #2. CIR W/1500 CFM AIR 8 BBL MIST W/2 GAL SOAP IN 10 BBLS WATER. HEAVY COALS AND SHALLS ON RETURNS WORKED DOWN TO 2937'. HOLE SLOUGHED IN WORK BACK UP ABOVE 2900' BRIDGES @ 2900', 2903', 2906', 2937'. C/O FROM 2855' TO 2950' SLOUGHING COALS HEAVY / TO MEDIUM FLOW AIR 1500 CFM 1 GAL SOAP/10 BBLS WTR 7-8 BBL/HR. HOLE SLOUGH IN W/BIT @ 2900'. INCREASED SOPAT TO 2 GA/10BBL WTR WORKED BACK TO 2950'. WELL CLEANING UP. CIRC OUT TO TD @ 2950'. bRIDGES @ 2890', 2915', 2937' CIR W/ AIR 1500 CFM 1-2 GAL SOAP IN 10 BBL WTR. SHORT TRIP TO SHOE 12 JTS. FLOW NATURAL 1.5 HRS. TIH TAGGED BRIDGE @ 2890', 2915' 2937'. CLEAN OUT TO BOTTOM, MED. TO HEAVY COAL. CIRCULATE ON BOTTOM FOR CLEAN UP. LD 12 JTS. FLOW NATURAL FOR FILL TEST. TIH TAGGED FILL @ 2947'. CIRC W/1500 CFM AIR W/7-8 BBL WTR MIST W/1-2 GAL SOAP/10 BBLS WTR. TOH FOR TEST.

ISIP 150 PSI

15 MIN 230 PSI
 30 MIN 270 PSI
 45 MIN 280 PSI
 60 MIN 290 PSI
 75 MIN 300 PSI
 90 MIN 300 PSI

PITO TEST

15 MIN 56 PSI 6085 MCF 150 DRY
 30 MIN 55 PSI 6000 MCF 140 DR
 45 MIN 40 PSI 4653 MCF 130 WET HEAVY MIST
 60 MIN 36 PSI 4295 MCF 120 WET HEAVY MIST
 75 MIN 38 PSI 4475 MCF 130 WET HEAVY MIST
 90 MIN 38 PSI 4474 MCF 130 WET HEAVY MIST
 105 MIN 38 PSI 4475 MCF 130 WET HEAVY MIST

3/4" CHOKE TEST

15 MIN 200 PSI
 30 MIN 210 PSI
 45 MIN 210 PSI
 60 MIN 210 PSI

TIH LD 2 BD DC'S TAGED @ 2890'. CIRC & TRY TO WORK TO BOTTOM. 1500 CFM AIR 8 BBL/MIST 2 GAL SOAP/10 BBL WTR. SHORT TRIP TP SHOE 12 JTS. FLOW NATURAL. CIRC 1500 CFM AIR 2/8BBL/HR/2-GAL SOAP/10 BBL WTR. HEAVY TO MED COAL RETURNS. CIRC OUT COAL ON BOTTOM 1500 CFM AIR. TOH W/12 JTS AND NATURALLY FLOWED WELL. TRIP IN TAG 2913'. CLEAN OUT TO BOTTOM @ 2950' W/1500 CFM AIR MIST 8 BBLS HR W/1.5 GAL SOAP IN 10 BBL WTR. LD 12 JTS & FLOW NATURALLY. TAGGED @ 2915'. CLEAN OUT TO BOTTOM HEAVY TO MED COAL. LD 12 JTS TOH W/BIT. SI TEST.

ISIP 265 PSI
15 MIN 265 PSI
30 MIN 285 PSI
45 MIN 290 PSI
60 MIN 300 PSI

PITO TEST
15 MIN 56 PSI 6085 MCF
30 MIN 50 PSI 5548 MCF
45 MIN 49 PSI 5458 MCF
60 MIN 47 PSI 5279 MCF

3/4 CHOKE FLOW TEST
15 MIN 195 PSI
30 MIN 210 PSI
45 MIN 214 PSI
60 MIN 215 PSI

TIH TAGGED FILL AT 2945'. 5 FT FILL. C/O WITH 1500 CFM AIR W/1.5 GAL SOAP IN 10
BBL WTR @ 8 BBL PH. TOH 12 JTS. FLOW NATURALLY. TIH TAGGED 3' FILL AT 2947'.
CIRC OUT FILL TOH LDDP & DC'S.

NDBOP CLOSE IN FRAC FALVE
LOCK OT TAG.

RDSUMO 9/12/96