



10-9-80 525[±] MADE 525[±] IN NACIMIENTO FORMATION. MW WTR. PUMP PRESS 1,000, GPM 280. BIT NO 1 RR, 12-1/4", HTC, OSC3AT, JETS 12/12/12, DEPTH IN 0[±], DEPTH OUT 104[±], 104 FT, 5-1/4 HRS, 9.8 FT/HR. OPER DRILL. BIT NO 2, 12-1/4", HTC, X3A, JETS 15/15/15, DEPTH IN 104[±], 421 FT, 5 HRS, 84.2 FT/HR. OPER DRLG.

COMPONENT	LENGTH	O.D.	I.D.
BIT	1.00 [±]	12-1/4"	
BIT SUB	3.60 [±]	7-5/8"	2-3/8"
12 DC [±] S	365.89 [±]	6-1/8"	2-3/8"
X OVER	1.10 [±]	5-7/8"	2-3/8"

TOTAL BHA 371.59[±]. FINISHED MOVING IN & P/U ROTARY TOOLS. DRILL RAT & MOUSE HOLE. MIX SPUD MUD. SPURRED WELL @ 4:15 PM 10/8/80. DRILL 0[±]-104[±]. TRIP FOR NEW BIT. DRILL TO 525[±]. PRESENT OPER @ 6:00 AM IS DRILL 525[±]-530[±].

10-10-80 571[±] MADE 41[±] IN NACIMIENTO FORMATION. MW 8.7, VIS 32, WL NC, PH 8.0, PV 4, YP 3, 3 SOLIDS, 220 CHLORIDE, 60 CALCIUM. PUMP PRESS 650, GPM 281, ANNULAR VELOCITY 123/176. BIT NO 2, 12-1/4", HTC, X3A, JETS 15/15/15, DEPTH IN 104[±], DEPTH OUT 530[±], 426 FT, 6 HRS, 71 FT/HR. OPER PULLED. BIT NO 3, 8-3/4", REED, FT52, JETS 12/12/12, DEPTH IN 530[±], 41 FT, 1 HR, 41 FT/HR. OPER DRLG. RPM 55, WT ON BIT 30,000#.

COMPONENT	LENGTH	O.D.	I.D.
BIT	1.00 [±]	8-3/4"	
BIT SUB	3.40 [±]	7-5/8"	2-3/8"
17 DC [±] S	517.93 [±]	6-1/8"	2-3/8"
X	1.95 [±]	5-7/8"	2-3/8"

TOTAL BHA 524.28[±]. DRLD 12-1/4" HOLE FROM 525[±]-530[±]. CIRC 1/2 HR, SHORT TRIP 5 STANDS. HOLE OK. POH TO RUN CSG. RAN 14 JTS 9-5/8", 36#, K55 CSG & LANDED SHOE @ 529[±] KB. BJ CMT[±]D W/300 SKS CLASS "B" & 2%ACL2. CIP @ 1:30 PM 10/9/80. WOC 4-1/2 HRS. LAND CSG & WELD ON OCT 9-5/8" SOW HEAD. N/U. TEST BLIND RAMS CHOKE MANIFOLD, 9-5/8" CSG TO 750 PSI - OD. RIH. TEST PIPE RAMS TO 750 PSI - OK. RIH & TAG CMT @ 477[±]. DRILL 52[±] HARD CMT, BAFFLE & GUIDE SHOE & 5[±] OF FORMATION. PRESSURE SHOE TO 200 PSI. BLEED BACK TO 50 PSI IN 3 MIN (EMW=10.5). DRLG AHEAD W/NO PROBLEMS. WELL MUD UP TO 9.6 PPG.

10-11-80 1,310[±] MADE 739[±] IN FRUITLAND FORMATION. MW 10.5, VIS 53, WL 12, PH 9, PV 18, YP 11, 2/8 GELS, 14.2 SOLIDS, 75 CHLORIDE, 52 CALCIUM. PUMP PRESS 800, GPM 281, ANNULAR VELOCITY 123/176. BIT NO 3, 8-3/4", REED, FP52, JETS 12/12/12, DEPTH IN 530[±], 780 FT, 19-3/4 HRS, 39.5 FT/HR. OPER DRLG. RPM 75, WT ON BIT 25,000#. DEV DEPTH 1,260[±] INC 4°. TOTAL BHA 524.28[±]. RAISED MUD WT TO 9.3 PPG UNDER SHOE, WELL BEGAN TAKING GAS @ 954[±], (FARMINGTON @ 869[±]), RAISED MUD WEIGHT SLOWLY & DRLD @ 1,168 W/9.8 PPG MUD WEIGHT, WELL STILL TAKING GAS AT SAME RATE, RAISED MUD WEIGHT TO 10 PPG, DRLD TO 1,200[±], STILL TAKING GAS AT SAME RATE, RAISED MUD WEIGHT SLOWLY TO 10.4 PPG, DRLD TO 1,303[±], STILL TAKING GAS, CIRC 2 HRS, RAISED MUD WIGHT TO 10.5 PPG, LOST 75 BBLs MUD, MIXED LCM, CIRC 2-1/2 HRS (W/RULL RETURNS), WELL STOPPED TAKING GAS, RAN SURVEY, HAVE RECOVERED BIT WIEGHT TO CONTROL DEVIATION. WILL MAINTAIN 10.4-10.5 PPG MUD WT, ROP RECOVERED FROM 50 FPH TO 10 FPH. DRLG AHEAD.

10-12-80 1,595⁺ MADE 285⁺ IN PICTURED CLIFFS FORMATION. MW 10.6, VIS 60, WL 11.2, PH 9, PV 26, YP 21, 4/12 GELS, 16.4 SOLIDS, 240 CHLORIDE, 48 CALCIUM. PUMP PRESS 800, GPM 281, ANNULAR VELOCITY 123/176. BIT NO 3, 8-3/4", REED, FP52, JETS 12/12/12, DEPTH IN 530⁺, 1,065 FT, 41-1/2 HRS, 25.7 FT/HR. OPER DRLG. RPM 75, WT ON BIT 20,000#. DEV DEPTH 1,460⁺ INC 4°. TOTAL BHA 524.28⁺. DRLD TO 1,445⁺, WELL STARTED TAKING GAS, INCREASED MUD WT TO 10.7 PPG, NO GAS, LOSING SMALL AMOUNT OF MUD, REDUCED MUD WT TO 10.5 PPG, RAN SURVEY, DRLG AHEAD W/NO PROBLEMS, ADDING LCM TO PREVENT MUD LOSS. RIG REPAIR: PUMPS.

10-13-80 1,850⁺ MADE 225⁺ IN LEWIS SHALE FORMATION. MW 10.6, VIS 61. PUMP PRESS 1,000, GPM 281, ANNULAR VELOCITY 123/176. BIT NO 3, 8-3/4", REED, FP52, JETS 12/12/12, DEPTH IN 530⁺, DEPTH OUT 1,625⁺, 1,095 FT, 44 HRS, 24.9 FT/HR. OPER PULLED. BIT NO 4, 8-3/4", SMITH, DTJ, JETS 11/11/11, DEPTH IN 1,625⁺, DEPTH OUT 1,850⁺, 225 FT, 12 HRS, 18.8 FT/HR. OPER PULLED. RPM 90-110, WT ON BIT 18-20,000#. DEV DEPTH 1,625⁺ 3-1/4°. TOTAL BHA 524.28⁺. DRLD TO 1,625⁺. TRIP FOR BIT #4. HOLE OK. RIH. DRLD TO 1,850⁺. CIRC. SHORT TRIP TO 10 STDS. 21⁺ FILL ON BTM, CIRC & SURVEY. POH TO RUN CSG. NO GAS W/10.6 MUD.

10-14-80 1,838⁺ MADE 0⁺. MW WTR. PUMP PRESS 1,250, GPM 225, ANNULAR VELOCITY 206/334. BIT NO 5, 6-1/4", SMITH, F2, JETS 11/11, DEPTH IN 1,850⁺, DRLD CMT. RPM 55, WT ON BIT 12,000#. DEV DEPTH 1,850⁺ INC 2°.

COMPONENT	LENGTH	O.D.	I.D.
BIT	.75 ⁺	6-1/4"	
28 DC ⁺ S	829.65 ⁺	4-3/4"	2-1/2"

TOTAL BHA 830.40⁺. SET SLIPS W/70,000#, CUT OFF CSG. N/U BOP. TEST BLIND RAMS, CHOKE MANIFOLD & 7" CSG TO 2,000# -OK. RIH & TEST PIPE RAMS TO 1,500 PSI - OK. TAG HARD CMT @ 1,801⁺. DRILLED 37⁺ @ 6:00 AM. CSG RAN AS FOLLOWS:

NO. JTS	SIZE	OVERALL LENGTH	EFFECTIVE LENGTH	SETTING FROM	DEPTH TO
1	7 8RD STC	0.95	0.95	1,849.00	1,848.05
1	RECTOR GUIDE SHOE				
1	7 20# 8RD K-55	41.65	41.35	1,848.05	1,806.70
	STC R-3 C-1				
1	7 8RD INSERT	0.00	0.00	1,806.70	1,806.70
	FLOAT				
44	7 20# IRD K-55	1,825.86	1,812.66	1,806.70	+5.96
	STC R-3 C-1				
45		1,867.51	1,854.01		

NO CENTRALIZERS: 3; DEPTHS OR JTS: MIDDLE OF #1, #3, #5 COLLAR. LANDED SHOE AT 1,849⁺ KB. 1ST STAGE: CMTD CSG W/150 SKS OF LIGHT W/2% CACL5 & 1/4#/SK FLOCELE, FOLLOWED BY 125 SKD OF CLASS "G" W/2% CACL2 & 1/4#/SK FLOCELE. USED 60% EXCESS VOLUME, PMPD 10 BBLS WTR AHEAD, 0 BEHIND. MIXING TIME 20 MIN, PMPG TIME 27 MIN, TOTAL TIME 47 MIN. CIRC PRESS 200, DISPLACEMENT PRESS 200-600. DISPLACED CMT W/73 BBLS OF WTR W/NATIONAL PUMP. BUMPED PLUG W/900 PSI. PLUG DOWN @ 2:00 PM, 10/13/80. GOOD RETURNS WHILE CMTG. CIRC 40 BBLS CMT TO SURFACE. PLOAT EQUIPMENT CHECKED OK. WOC 16 HRS. EST'D CMT TIP IN ANNULUS SURFACE. CIP @ 2:00 PM. SET SLIPS @ 3:30 PM. NO ACTUAL WOC TIME.

10-15-80 2,623⁺ MADE 773⁺ IN LEWIS SHALE FORMATION. MW WTR & BENEX. PUMP PRESS 1,500, GPM 237, ANNULAR VELOCITY 219/354. BIT NO 5, 6-1/4", SMITH, F2, JETS 11/11, DEPTH IN 1,850⁺, DEPTH OUT 2,623, 773 FT, 18-1/2 HRS, 41.8 FT/HR. OPER PULLED. RPM 60, WT ON BIT 20,000#. DEV DEPTH 2,150⁺ INC 3/4°, DEV DEPTH 2,450⁺ INC 1/2°. TOTAL BHA 830.40. DRLD TO 2,623⁺. POH. CHGD BITS.

10-16-80 3,340⁺ MADE 717⁺ IN MENEFFEE FORMATION. MW WTR & BENEX. PUMP PRESS 1,300, GPM 245, ANNULAR VELOCITY 224/366. BIT NO 6, 6-1/4", SMT, F2, JETS 11/11/11, DEPTH IN 2,623⁺, 717 FT, 19 HRS, 37.7 FT/HR. OPER DRLG. RPM 60, WT ON BIT 25,000#. DEV DEPTH 2,954⁺ INC 1/2°.

COMPONENT	LENGTH	O.D.	I.D.
BIT	0.75 ⁺	6-1/4"	
26 DC ⁺ S	771.56 ⁺	4-3/4"	2-1/2"

TOTAL BHA 772.31⁺. L/D DC⁺S (BOX & PIN WASHED ON SHOULDER) ON TRIP FOR BIT #6, TIH, REAM 56⁺ 2,367⁺-2,623⁺, DRLG AHEAD W/NO PROBLEMS, HOLE IN GOOD SHAPE, WILL MUD UP @ 5,800⁺ (255⁺ ABOVE DAKOTA).

- 10-17-80 4,180⁺ MADE 840⁺ IN POINT LOOKOUT FORMATION. MW WTR & BENEX. PUMP PRESS 1,400, GPM 250, ANNULAR VELOCITY 229/373. BIT NO 6, 6-1/4", STD, F2, JETS 11/11/11, DEPTH IN 2,623⁺, 1,557 FT, 41.25 HRS, 37.7 FT/HR. OPER DRLG. RPM 60, WT ON BIT 25,000#. DEV DEPTH 3,454⁺ INC 1°, DEV DEPTH 3,951⁺ INC 1°. TOTAL BHA 772.31⁺. DRLG AHEAD @ 4,180⁺ W/NO PROBLEMS.
- 10-18-80 4,807⁺ MADE 627⁺ IN MANCOS FORMATION. MW WTR & BENEX. PUMP PRESS 1,500, GPM 254, ANNULAR VELOCITY 233/380. BIT NO 6, 6-1/4", SMT, F-2, JETS 11/11/11, DEPTH IN 2,623⁺, 2,184⁺ FT, 62-3/4 HRS, 34.8 FT/HR. OPER DRLG. RPM 60, WT ON BIT 25,000#. DEV DEPTH 4,452⁺ INC 1°. TOTAL BHA 772.31⁺. PRESENTLY DRLG AHEAD W/NO PROBLEMS. RIG REPAIR-HYDROMATIC.
- 10-19-80 5,026⁺ MADE 219⁺ IN MANCOS FORMATION. MW WTR & BENEX. PUMP PRESS 1,300, GPM 312, ANNULAR VELOCITY 283/461. BIT NO 6, 6-1/4", SMT, F-2, JETS 11/11/11, DEPTH IN 2,623⁺, DEPTH OUT 4,914⁺, 2,292 FT, 67 HRS, 34.2 FT/HR. OPER PULLED. BIT NO 7, 6-1/4", HTC, J33, JETS 14/14/14, DEPTH IN 4,914⁺, 112 FT, 3-3/4 HTS, 29.9 FT/HR. OPER DRLG. RPM 55-60, WT ON BIT 20-25,000#. DEV DEPTH 4,892⁺ INC 1/2°.

COMPONENT	LENGTH	O.D.	I.D.
BIT	0.70 ⁺	6-3/4"	
JUNK SUB	2.11 ⁺	5"	2-1/2"
26 DC ⁺ S	771.56 ⁺	4-3/4"	2-1/2"

TOTAL BHA 774.37⁺. POH @ 4,914⁺. FOR BIT #7, LEFT 1 CONE ON BTM, WAIT ON MAGNET, TIH W/5-1/4" MAGNET & JUNK SUB, CIRC & WORK ON FISH, POH, RETRIEVED CONE & 1/2 OF BEARINGS, TIH W/BIT #7 & JUNK SUB, DRLG AHEAD, 10,000# DRAG ON CONNECTIONS, RAN MUD SWEEP, STILL GETTING SOME DRAG, PLAN TO MUD UP @ 5,850⁺ TO 9.1 PPG. RIG REPAIR:ROTARY AIR LINES & FITTINGS.

- 10-20-80 5,685⁺ MADE 659⁺ IN SANASTEE FORMATION. MW 8.5, VIS 27 WTR & BENEX. PUMP PRESS 1,400, GPM 264, ANNULAR VELOCITY 241/393. BIT NO 7, 6-1/4", HTC, J33, JETS 14/14/14, DEPTH IN 4,914⁺, 771 FT, 26-1/2 HRS, 29.1 FT/HR. OPER DRLG. RPM 55-60, WT ON BIT 20-25,000#. DEV DEPTH 5,361⁺ INC 1/4°. TOTAL BHA 774.37. DRLG ANEAD. NO PROBLEMS. RAN MUD SWEEP TO CLEAN HOLE. GETTING SMALL AMOUNT OF DRAG ON CONNECTIONS. WILL WEIGHT UP MUD TODAY & INCREASE LCM.
- 10-21-80 5,925⁺ MADE 240⁺ IN GREEN HORN FORMATION. MW 9.1, VIS 43, WL 10, PH 10, PV 10, YP 10, 8/12 GELS, 150 CHLORIDE. PUMP PRESS 1,500, GPM 264, ANNULAR VELOCITY 241/393. BIT NO 7, 6-1/4", HTC, J33, JETS 14/14/14, DEPTH IN 4,914⁺, 1,011 FT, 48-1/2 HRS, 20.9 FT/HR. OPER DRLG. RPM 65, WT ON BIT 15,000#. DEV DEPTH 5,744⁺ INC 3°, DEV DEPTH 5,839⁺ INC 3-3/4°. SURVEY AT 5,744⁺ - 3°. REDUCED BIT WEIGHT TO 19-20,000#. DRLD TO 5,839⁺. SURVEY 3-3/4°. REDUCED BIT WEIGHT TO 15,000#. CURRENTLY DRLG AT 12-15 MIN/FT. WILL TAKE NEXT SURVEY AT 5,940⁺.
- 10-22-80 6,010⁺ MADE 85⁺ IN GRANEROS FORMATION. MW 9.2, VIS 45, WL 8.8, PH 7.2, PV 19, YP 14, 7/13 GELS, 8 SOLIDS, 170 CHLORIDE, TR CALCIUM. PUMP PRESS 1,400, GPM 223, ANNULAR VELOCITY 204/331. BIT NO 7, DEPTH OUT 5,993⁺, 1,079 FT, 61 HRS, 17.7 FT/HR. OPER PULLED. BIT NO 8, 6-1/4", REED, FT62, JETS 13/13/15 DEPTH IN 5,993⁺, 17 FT, 2-1/4 HR, 7.6 FT/HR. OPER DRLG. RPM 60, WT ON BIT 24,000#. DEV DEPTH 5,933⁺ INC 3-3/4°, DEV DEPTH 5,950⁺ INC 2-3/4°. TOTAL BHA 774.37⁺. DRLG AHEAD. SURVEY @ 5,933⁺ - 3-3/4°. UNCHANGED FROM LAST SURVEY. INCREASED BIT WEIGHT TO 19,000#. DRLG AT 8-10 MPF. SURVEY @ 5,950⁺ - 2-3/4°. INSPECTED BAD READING. REPEATED SURVEY. STILL 2-3/4°. (DRIFTED BACK 1° IN 17⁺). TOH FOR BIT #8. TIH. REAM THROUGH BRIDGE @ 5,963⁺. PRESENTLY DRLG AHEAD W/24,000# @ 6-8 MPF.
- 10-23-80 6,135⁺ MADE 125⁺ IN DAKOTA FORMATION. MW 9.2, VIS 50, WL 9, PH 7.2, PV 19, YP 14, 7/13 GELS, 150 CHLORIDE, TR CALCIUM. PUMP PRESS 1,300, GPM 212, ANNULAR VELOCITY 193/315. BIT NO 8, 6-1/4", FT62, JETS 13/13/15, DEPTH IN 5,993⁺, 142 FT, 23 HRS, 6.2 FT/HR. OPER DRLG. RPM 60, WT ON BIT 24,000#. DEV DEPTH 6,050⁺ INC 2°, DEV DEPTH 6,100⁺ INC 2°. TOTAL BHA 774.37⁺. DRLG TO 5,060⁺. MADE SHORT TRIP (3STDS) TO RUN PAST TIGHT SPORT @ 5,963⁺. NO DRAG COMING OUT. NO TIGHT SPOTS GOING IN. HOLE IN GOOD SHAPE. AT THIS AM DRLG AHEAD W/NO PROBLEMS @ 10-15 MPF.
- 10-24-80 6,298⁺ MADE 163⁺ IN MORRISON FORMATION. MW 8.8, VIS 64, WL 10, PH 7.2, PV 21, YP 10, 4/6 GELS, 220 CHLORIDE, TRC CALCIUM. BIT NO 8, 6-1/4", REED, FP62, JTS 13/13/15, DEPTH IN 5,993⁺, 305 FT, 46 HRS, 6.6 FT/HR. OPER DRLG. RPM 60, WT ON BIT 24,000#. DEV DEPTH 6,175⁺ INC 2°. DRLG AHEAD-NO PROBLEMS.

OHIO "A" GOVERNMENT #2E WELL HISTORY

10-25-80 6,305⁺ MADE 7⁺ IN MORRISON FORMATION. BIT NO 8, 6-1/4", REED, FP62, JETS 13/13/15, DEPTH IN 5,993⁺, DEPTH OUT 6,305⁺, 308 FT, 46-1/2 HRS, 6.6 FT/HR. OPER L/D DP. DRLD 7⁺ TO 6,305⁺, CIRC 1 HR, MADE 12 STD SHORT TRIPS, WORKED TIGHT SPOTS UNTIL HOLE IN GOOD CONDITION, TRIP TO BTM, CIRC 2 HRS, POH-SLM ON TRIP (6,305⁺-CORRECTED 2.00⁺ FROM 6,303⁺), R/U DRESSER ATLAS-RUN #1-DIL, SP & GR, (6,305⁺-1,849⁺), RUN #2-CR, CNL/FDC, CAL (6,305⁺-SURFACE), R/D DRESSER ATLAS, TIH & CIRC 2 HRS, PRESENTLY LAYING DOWN DRILL PIPE.

10-26-80 6,305⁺ MADE 0⁺ IN DAKOTA FORMATION. DV TOOL @ 4,726⁺, OPEN DV TOOL & CIRC 15 SK CMT TO SURFACE, RIG RELEASED @ 6:00 AM 10-26-80. CSG RAN AS FOLLOWS:

NO JTS	SIZE	OVERALL LENGTH	EFFECTIVE LENGTH	SETTING FROM	DEPTH TO
1	4-1/2" RUCKER GUIDE SHOE	1.65	1.65	6,300.00	6,298.35
1	4-1/2" 10.5# 8RD K-55 STC R-3 C-1	39.95	39.75	6,298.35	6,258.60
1	4-1/2" RUCKER GUIDE SHOE	1.15	0.95	6,258.60	6,251.65
38	4-1/2" 10.5# 8RD K-55 STC R-3 C-1	1,539.27	1,531.67	6,257.65	4,725.98
1	4-1/2" RECTOR STAGE TOOL	2.15	1.95	4,725.98	4,724.03
82	4-1/2" 10.5# 8RD K-55 STC R-3 C-1	3,316.58	3,300.18	4,724.03	1,423.85
33	4-1/2" 11.6# 8RD K-55 STC R-3 C-1	1,432.73	1,426.13	1,423.85	12.28
154		6,328.53	6,297.73		

NO. CENTRALIZERS: 10; DEPTHS OR JTS: ON JRS #1,3,5,7,9,11,13,15,17,19 & 21,23,25,27, AND 29.CMT BASKET ON JT #38. LANDED SHOE AT 6,300⁺ KB. 1ST STAGE: CMT CSG W/125 SKS OF 50/50 POZ W/6% GEL, 0.8% D-19, 1/2#/SK FLOCELE, FOLLOWED BY 150 SCK OF CLASS "B". USED 20% EXCESS VOLUME, PMPD 10 BBLS WTR AHEAD, 0 BEHIND. MIXING TIME 10 MIN, PMPG TIME 15 MIN, TOTAL TIME 25 MIN. CIRC PRESS 500 PSI, DISPLACEMENT PRESS 800 PSI. MAX PRESS 2,000 PSI. DISPLACED CMT W/99 BBLS WTR W/BJ PUMP. BUMPED PLUG W/2,500 PSI. PLUG DOWN @ 5:50 PM 10-25-80. GOOD RETURNS WHILE CMTG. CIRC 15 SKS CMT TO SURFACE AFTER OPENING STAGE TOOL & CIRC. 2ND STAGE: CMTD CSG W/450 SKS 65/35 POS W/6% GEL, 0.5% D-19, 1/4#/SK FLOCELE. USED 20% EXCESS VOLUME, PMPD 10 BBLS WTR AHEAD, 0 BEHIND. MIXING TIME 19 MIN, PMPG TIME 30 MIN, TOTAL TIME 49 MIN. CIRC PRESS 500 PSI, DISPLACED PRESS 800 PSI, MAX PRESS 2,500 PSI. DISPLACED CMT W/75 BBLS WATER W/BJ PUMP. BUMPED PLUG W/2,500 PSI. PLUG DOWN 9:00 PM 10-25-80. GOOD RETURNS WHILE CMTG. CIRC 0 CMT TO SURFACE. FLOAT EQUIPMENT CHECKED OK. WOC 2 HRS BETWEEN STAGES. LANDED CSG CSG ON SLIPS W/40,000 LBS. EST'D CMT TOP IN ANNULUS 1,500 FT.

10-27-80 NO REPORT.

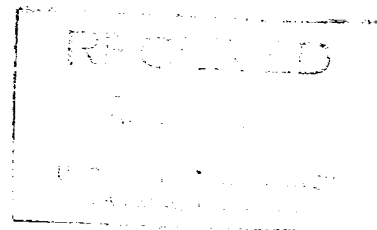
10-28-80 NO REPORT.

10-29-80 NO REPORT.

10-30-80 NO REPORT.

10-31-80 NO REPORT.

- 1-18-81 RD Drake comp unit @ Ohio Gov't #2-E & moved to Ohio "A" Gov't #2-E. RU unit, installed & tested BOP. Tallied tbg. RIH w/92 jts, drill collars, bit sub & 3-3/4 V-2 rotary rock bit. SDN.
- 1-19-81 SD for Sunday.
- 1-20-81 RIH w/bit, drill collars & tbg. Drilled out stage collar @ 4724' KB. POH, ran back in hole w/bit, csg scraper, drill collars & tbg string. Drld out cmt to 6258' KB. Circ hole, drained rig pit. SDN.
- 1-21-81 Circ hole clean w/fresh HCl wtr. POH. RU Dresser-Atlas for logging. Ran CR-CBL-VDL-CCL. After logging press tested csg w/Smith Energy Services to 3500 psi. Csg held. RIH w/tbg to spot acid. SDN.
- 1-22-81 POH w/tbg. RU Dresser-Atlas & perforated the Dakota "A" & "B" zones w/1 .340" shot @ each of the following depths: 6,082', 84', 86', 89', 91', 94' 96', 6,100', 02', 04', 07', 08', 12', 15', 16', 18', 55', 57', 59', 61', 63', 75', 93', & 95' for a total of 24 shots. Prior to POH 7 perforating spotted 200 gal of inhibited 7 1/2% HCl acid across perforation interval. Displaced acid w/57 bbl KCl wtr. ISIP 500. Form brok down @ 2400. Acidized perforations w/2400 gal of 15% HCl acid w/48 ball sealers. Balled off @ 3500#, avg rate 10 BPM. Press averaged 900#. RIH w/ret pkr & tbg. Knocked balls off csg. Set pack @ 6000'. Pmpd into formation @ rate of 7 BPM @ 3400 psi. SD. ISIP = 300. Swabbed back approx 100 bbl wtr & acid. Released pkr, pulled 5 stds tbg. SDN.
- 1-23-81 RU Smith Energy Services & fraced well as per procedure. After frac left well SI for 4 hrs. Opened choke to pit. No returns. Left choke set on 24/64". Well began unloading @ 11:00 a.m. FCP 300. Heavy mist, foam & surging. At 5 a.m. FCP 240, strong blow 1" stream of wtr w/foam. See attached treatment report.



1-24-81 Well flowed to pit for cleanup after frac. Flowed approx 500 bbl wtr & broken down gel.

1-25-81 After flowing well to pit overnight for cleanup, stripped tbg in well w/Baker Model "F" profile nipple 1.81" w/circ blanking plug seated in nipple. Found 52' of sand fillup in csg. RU Nowsco nitrogen service & cleaned out csg to PBTD 6258' KB. Pulled back up hole & landed tbg @ 6053.34' KB. Tbg string made up of 10' stinger on btm, 1 Baker model "F" profile nipple 1.81" & 194 jts 2-3/8" tbg for a total of 6053.34' KB. Removed BOP's. Installed wellhead tree. RU B & R Wireline Service, retrieved blanking plug from profile nipple. Opened tbg to pit, swabbed well back & continued flowing to pit for cleanup.

1-26-81 Flowed well to pit for cleanup. FCP 430, FTP 110. Choke 32/64. Heavy mist w/broken down gel & small amt of cont. Rig SD for Sunday.

1-27-81 Moved completion unit to Ohio Govt #2-E. FCP 380, FTP 105, choke 32/64. Flowing wtr & cond. 200 MCF, will install test separator & tank.

1-28-81 Set test separator, did not get product line to tank connected so all fluid produced went to disposal pit. FCP 535, FTP 105. Total fluids 28 bbl, 117 MCF, 16/64" choke, 15 hrs flow.

1-29-81 FCP= , FTP = . 2 BC, 22 BW, choke 14/64", 95 MCF, 18 hrs. No flow pressures, equip freeze @ 3:00 a.m.

1-30-81 FCP 100, FTP 5, 175 MCF, small stream of wtr w/trace of cond.

1-31-81 FCP 440, FTP 50, 1 BC, 41 BW, 16/64" choke, 107 MCF, 24 hrs.

2-1-81 FCP 415, FTP 70, 3 BC, 40 BW, 16/64" choke, 107 MCF, 24 hrs.

2-2-81 FCP 360, FTP 70, 95 MCF, 2 BC, 21 BW, 16/64" choke, 24 hrs.

2-3-81 Well loaded up downhole. Opened tbg to pit for 8 hrs to unload while blowing to pit. FCP 280, FTP 5, heavy mist, wtr & cond. While flowing thru test separator well prod 13 BW, 1 BO, 100 MCF, 16/64" choke, 16 hrs.

2-4-81 Flowing approx 1" stream of fluid w/6' flare. After making swab run well unloads small amt of cond & emulsion.

2-5-81 Flowed well to pit for 24 hrs. Will put well back thru test separator after obtaining a stabilized CP & flow. FCP 260, FTP 10. Flowing to pit wtr, cond & gas. Heavy mist w/surges of fluid.

2-6-81 Flowed well to pit for 18 hrs for cleanup, then turned well thru test separator. FCP 400, FTP 110, oil 4, wtr 6, choke 16/64, MCF 166, 6 hr test.

2-7-81 FTP 165 psi, CP 420 psi, 110 MCF, 3 BC, 14 BW in the last 24 hrs. 16/64" choke.

2-8-81 FTP 75 psi, CP 500 psi, 74 MCF, 2 BC, 14 BW in the last 24 hrs.

2-9-81 FTP 30 psi, CP 420 psi, well began logging off, stopped flowing well thru separator & began flaring directly to the pit.

2-10-81 CP 400 psi, FTP 20 psi, flaring well to pit, heavy flow of wtr & cond.

2-11-81 In the am of 2-10 the well was flowing intermittently, slugging wtr & cond to the pit. By evening the well was flowing a continuous stream of fluid & gas. Approx 40 BW & 5 BC were flowed to the pit during the day. At 6 p.m., the well tester stopped flowing the well to the pit & started flowing thru the separator. CP 385 psi, FTP 50 psi, 3 BW, 1 BC 56 MCFPD @ 6 a.m. 2-11.

2-12-81 CP 380 psi, FTP 35 psi, 19/64" choke, 6 BW, 3 BC, 59 MCFPD in the past

2-14-81 CP 470 psi, FTP 65 psi, 18/64" choke, 25 BW, 2 BC, 69 MCFPD.

2-15-81 CP 480 psi, FTP 90 psi, 18/64" choke, 22 BW, 1 BC, 70 MCFD.

2-16-81 CP 640 psi, FTP 120 psi, 18/64" choke, 27 BW, 1 1/2 BC, 74 MCFPD.

2-17-81 CP 610 psi, FTP 60 psi, 18/64" choke, 27 BW, 2 BC, 56 MCFPD. Well heads & unloads approx 11 times/day.

2-18-81 CP 575 psi, FTP 120 psi, 18/64" choke, 30 BW, 1 BC, 70 MCFPD.

2-19-81 FCP 515, FTP 75, 18/64" choke, 28 BW, 3 BC, 70 MCF, 24 hrs. Well headed & unloaded 11 times in 24 hrs.

2-20-81 FCP 525, FTP 50. Choke 18/64", 24 BW, 1 BC, 67 MCF, 24 hrs. Well loaded up downhole & made 11 peaks on flow chart in 24 hrs.

2-21-81 FCP 580, FTP 50, 18/64" choke, 29 BW, 1 BC, 60 MCF, 24 hrs. Well loads up downhole & unloads to pit 11 times in 24 hrs.

2-22-81 FCP 580, FTP 100, 18/64" choke, 32 BW, 3 BC, 70 MCF, 24 hrs. Well loaded up downhole & made 11 peaks on flow chart.

2-23-81 FCP 680, FTP 50, 18/64" choke, 31 BW, 2 BC, 72 MCF, 24 hrs. Well loads up downhole 11 times/24 hrs.

2-24-81 FCP 580, FTP 100, choke 18/64", 1 BC, 29 BW, 72 MCF, 24 hrs. Well continues to load up downhole & then unloads 11 times/24 hrs.

2-25-81 FCP 590, FTP 100. Choke 18/64", 25 BW, 1 BC, 72 MCF, 24 hrs.

2-26-81 FCP 590, FTP 50, 18/64" choke, 27 BW, 1 BC, 72 MCF, 24 hrs.

2-27-81 FCP 580 psi, FTP 90 psi, choke 18/64", temp 70⁰, wtr 24 bbl, 2 BC, 24 hrs, 77 MCF.

2-28-81 FCP 455 psi, TP 50 psi, 18/64" choke, 70⁰ temp, 24 BW, 2 BC, 77 MCF, 24 hr test.

3-1-81 CP 600 psi, TP 50 psi, 18/64" choke, 70⁰ temp, 24 BW, 2 BC, 77 MCF, 24 hr test.

3-2-81 CP 320 psi, TP 50 psi, 18/64" choke, 70⁰ temp, 25 BW, 1 BC, 80 MCF, 24 hr test.

3-3-81 CP 380, TP 90, 18/64" choke, 23 BW, 1 BC, 80 MCF, 70⁰ temp, 24 hr test.

3-4-81 CP 395 psi, CP 50 psi, 18/64" choke, 70⁰ temp, 24 BW, 1 BC, 79 MCFG.

3-5-81 CP 405 psi, TP 70 psi, 18/64" choke, 70⁰ temp, 26 BW, 1 BC, 79 MCFG.

3-6-81 Flowed for 13 hrs. Loaded up downhole & died for 11 hrs. SICP 650, SITP 475, flowed 0 BC, 13 BW, 41 MCF, 17/64" choke.

3-7-81 Loaded up downhole, blew well to pit, unloaded approx 5 BC & wtr. Turned well thru separator. FCP 550, FTP 120, 0 oil, 5 BW.

3-8-81 Well died. Will not produce thru separator. Tbg 640, csg 640.

3-9-81 Well SI. Unable to flow thru separator.

3-10-81 Static. Well will not flow thru test separator.

3-11-81 FCP 600, FTP 40, 16/64" choke, 28 BW, 30 BC, 40 MCF, 24 hrs. Well heads & unloads approx every 3 hrs.

3-12-81 FCP 620, FTP 40, 16/64" choke, 24 BW, 0 cond, 40 MCF, 24 hrs. Well made 7 heads in 24 hrs.

3-13-81 FCP 610, FTP 40, 16/64" choke, 25 BW, 0 cond, 40 MCF, 24 hrs.

3-14-81 FCP 590, FTP 40, 16/64" choke, 20 BW, 0 cond, 35 MCF, 24 hrs.

3-15-81 FCP 610, FTP 40, 16/64" choke, 20 BW, 0 cond, 40 MCF, 24 hrs.

3-16-81 FCP 590, FTP 40, 16/64" choke, 20 BW, 0 cond, 40 MCF, 24 hrs.

3-17-81 FCP 610, FTP 40, 16/64" choke, 23 BW, 0 cond, 35 MCF, 24 hrs. Prod log to be run.

3-18-81 RU Gearhart Wireline for prod log stack. SWI to run tools in hole. Gamma ray tool wouldn't work so the logs were correlated on depth by placing the btm of the velocity tool @ btm of tbg (6,053' KB). Tried to run static temp log but temp tool wasn't working. Opened well up to atm thru a 1½" ball valve. Ran velocity & density tools from 6080' to 6210' KB. Had problems running logs because well would not flow steady. FTP = 0 psi, 610 psi FCP while running logs. SWI, POH & changed out temp tool & RIH. Ran static temp log after well had been SI for 2 hrs. SITP 250 psi (building up press while static temp log was being run) & SICP = 620 psi. Opened well up thru ½ open ball valve & ran flowing temp log & stop checks w/velocity tool. POH. SWI, SDN. Preliminary analysis of logs:
6082' - 6120' KB: approx 80% of gas production
6154' - 6166' KB: Major wtr entry, some gas prod
6193' - 6195' KB: No production at all.

3-19-81 Released test unit after running prod logs.

3-20-81 Static. Released test separator after running prod logs.

3-21-81 Static. Evaluate prod logs to determine wtr source.

3-31-81 Static. Waiting on workover unit.

4/25/81 Rigged up unit - treed down - installed BOP. Blew well down. Stripped tbg out of hole. Rigged up McCullough, ran gauge ring to PBTD 6,238' set Baker model "M" cement retainer 6,185'. Began stripping tbg back in well. SDN.

4/26/81 Finished stripping tbg in hole. Removed BOP. Treed up. Began swabbing well made 11 runs swabbed approx. 55 bbls. Well began kicking & unloading water & cond. Csg = 590. Let well blow for 4 hrs. Installed shoke. Left blowing & unloading to pit. SDN.

4/27/81 Csg = 440#. Well slugging & unloading water & cond. Approx. 1" stream with 15' blow.

4/28/81 Csg = 450. Well unloading to pit thru .750" choke. Unloading water & cond. Approx 20' blow. Riggging down unit to move to Ohio Gov't #2E.

5/1/81 FCP 350, FTP 40. Well blowing heavy mist with small stream of cond & wtr.

5/2/81 FCP 350, FTP 40. Blowing heavy mist with small stream of cond & wtr.

5/3/81 FCP 340, FTP 40. 20' flare - well prod less water & cond.

5/4/81 FCP 340, FTP 40. 20' flare - heavy mist, small stream of cond & wtr.

5/5/81 FCP 330, FTP 40, 20' flare with mist. Small stream of cond & wtr.

5/6/81 FCP 330, FTP 40, 20' flare, will try to have test separator set & obtain rates on cond, water, & MCF.

5/7/81 FCP 340, FTP 40, will move test separator from Jic. Apache 13E to Ohio A2E.

5/8/81 FCP 350, FTP 40, Crew brought test separator from Jic. Apache 13E & will set & connect to well today.

5/9/81 Set test separator, turned well thru separator, no flow rates. Well loaded up downhole. Lowered back press on separator.

5/10/81 FCP 525, FTP 45, Choke 24/64", Oil 1/2 bbl, water 2 bbls, MCF 58, 24 hrs.

5/11/81 FCP 580, tbg 30, choke 32/64", oil 0, water 1 bbl, oil 0, MCF 26, opened well to pit to unload tbg.

5/12/81 FCP 550, FTP 30, Choke 34/64", MCF 29, Oil 0, water 0. Blew well for 2 hrs. Will shut well in for 12 hrs for build up.

5/13/81 Shut well in for 12 hrs. SICP 580, SITP 580. Turned well on at 7:00 pm. Well flowed for 1 hr. then died. Well unloaded several times at 11:00 pm. as recorded on chart. Present operation - flowing well to pit.

5/14/81 FCP 645, FTP 35, water 6 bbls, oil 0, MCF 0. Blew well to pit for 12 hrs. Turned well thru sep for 11 hrs. Well loads up with water downhole.

5/15/81 CP 520, TP 0, well not flowing at 6:00 am. Water sample caught & given to Smith Energy Service at 5:00 pm, 5/14/81.

5/16/81 FCP 335, FTP 12, well flowing water, small amount of cond & gas.

5/17/81 FCP 310, FTP 20, flowing water, small amount of cond, light gas blow.

5/18/81 FCP 305, FTP 25, heavy mist water & small amount of cond.

5/19/81 FCP 300, FTP 23. Well flowing heavy mist, water & cond.

5/20/81 FCP 295, FTP 25. Well flowing heavy mist, water & cond.

5/21/81 FCP 300, FTP 32, Heavy mist cond & water.

5/22/81 FCP 310, FTP 36, heavy mist cond & water - water level in pit falling.

5/23/81 CP 300#, FTP 32#, 125 MCF, trace cond, constant mist, making less wtr - flare will not stay lit.

5/24/81 CP 290#, FTP 30#, 125 MCF, heavy mist, trace cond, fluid rate dropping, flare will not remain lit.

5/25/81 CP 300#, FTP 30#, heavy mist (wtr, trace of cond) - flare will not burn. Well making less wtr. 125 MCF.

5/26/81 CP 325#, FTP 25#, heavy mist (wtr w/trace cond).... Flare will not burn (rate 125 MCF est.)

