

DRILL STEM TEST DATA

BOTTOM HOLE CHOKE	5/8"	SURFACE	1" Adj.	CUSHION	None	ELEVATION	3801'	G.L.
TIME TOOL OPENED	1:23 P.M.				RECORDER DATA			
TOOL OPEN BEFORE I.S.I.P.	30	MIN.	TYPE	AK-1	CAPACITY	8375		
INITIAL SHUT-IN	1	HRS.	TOP	13,390	DEPTH	9803		
TOOL OPEN	1	HRS.	BOTTOM	13,391	DEPTH	9851		
FINAL SHUT-IN	2	HRS.	CLOCK: TOP	18 hr.	BOTTOM	24 hr.		
SURFACE ACTION								
Pre-flow: Opened with a weak to fair blow in 2 minutes. Built steadily to 5½ lb. at 5 minutes and 11 lb. in 30 minutes.								
Final Flow: Opened with a weak to fair blow in 2 minutes. Built to 3½ lb. at 15 minutes and 6½ lb. at 30 minutes. 8 lb. at 40 minutes. Opened ½" choke at 40 minutes. Gas to surface at 41 minutes with 7 lb. on ½" choke. (25 MCF/day). Decreased to 3 lb. at 45 minutes (15.7 MCF/day) 5 oz. at 60 minutes (4.76 MCF/day) 2 3/4 oz. at 75 minutes (3.71 MCF/day) 1½ oz. at 93 minutes (2.71 MCF/day)								
Recovery (2.71 MCF/day)								
Reversed out 9720' Free Oil. 137.79 barrels total recovery. No sign of formation water when we reversed out.								
Top - Oil API Sp. Gr. 54 @ 60°.								
Middle - Oil API Sp. Gr. 54 @ 60°.								
Bottom - Oil API Sp. Gr. 54 @ 60°.								
SUCCESSFUL TEST Yes.								

	RECORDER NO.
	13,390
(INITIAL HYDROSTATIC PRESSURE)	5109.4 P.S.I.
(INITIAL PRE-FLOW PRESSURE)	550.2 P.S.I.
(FINAL PRE-FLOW PRESSURE) 30 MIN.	1481.6 P.S.I.
(INITIAL SHUT-IN PRESSURE) 60 MIN.	3947.3 P.S.I.
(INITIAL FLOW PRESSURE)	1562.7 P.S.I.
(FINAL FLOW PRESSURE) 96 MIN.	3219.0 P.S.I.
(FINAL SHUT-IN PRESSURE) 120 MIN.	3949.4 P.S.I.
(FINAL HYDROSTATIC PRESSURE)	5098.9 P.S.I.

HOLE AND MUD DATA

TOTAL DEPTH	9854	MAIN HOLE	7 7/8"
DEPTH OF CSG.	2300	CASING SIZE	8 5/8"
MUD WT.	9.8	VISCOSITY	61
WATER LOSS	9	CAKE	2/32
TYPE MUD	Salt Gel-Brine		
CHLORIDE	61,000 P.P.M.		
RESISTIVITY	.085	@ 60 °F	

TOOL DATA

NO. PACKERS		2			
SIZE PACKERS		6 3/4"			
CONVENTIONAL TEST		Yes			
TYPE TOOL	DEPTH	LENGTH	I.D.	O.D.	
4½ XH DP		8984	3.8	4.5	
4½ XH DC		734	2.3	6.25	
Cir. Sub.	9719	1			
2 DC		59			
X-9 Subs		3			
Shut-in		6			
Sampler		3			
Hyd. Tool		5			
Jars		6			
Recorder		5			
S.J.		2			
Packer	9814	6			
Packer	9820	6			
Shoe					
29' Perf.					
Sub & Rec.		34			
ORLG CONT		McVav	RIG #	7	

SAMPLER REPORT

PRESSURE IN SAMPLER	PSI
HT 158 °F @ 9802 F.T.	
L: 1000 CC.	
WATER: 500 CC.	
UD: CC.	
AS: CU.FT.	
SISTIVITY .20 @ 60 °F	
CHLORIDE 24,000 PPM.	
AVITY 54 *API @ 60 °F	
CAPACITY 1500	

BEFORE EXAMINER SIGNATURE

OIL CONSERVATION DIVISION

APPL 8 10308

CASE NO. 10308

Glen Hogue, Jr.

Al Cho

COMPANY Stevens Operating Corporation
LEASE NAME & NO. McClellan Federal
INTERVAL TESTED 9820 to 9854 (34')

COUNTRY Chaves
STATE New Mexico
FORMATION Devonian

DATE April 9, 1991
TICKET # 7054
TEST # 1

TEST PARAMETERS

DRILLPIPE CAPACITY	.00142 BBL/FT	HOLE SIZE	7.875 IN
DRILLCOLLAR CAPACITY	.000496 BBL/FT	PAY THICKNESS	6 FT
DRILLCOLLAR LENGTH	797 FT	VISCOSITY	1.98 CP
BOTTOM HOLE TEMP	158 DEG F	COMPRESSIBILITY	.0000003 1/PSI
POROSITY FRACTION	10.00 (EST)	1ST FLOW TIME	30 MIN
RECORDER NUMBER	13390	1ST SHUT-IN TIME	60 MIN
RECORDER DEPTH	9803 FT	END FLOW TIME	96 MIN
ELEVATION	3801 GL.	END SHUT-IN TIME	120 MIN
DATUM	-6002 FT		

CALCULATIONS

EXTRAPOLATED INITIAL SHUT IN PRESSURE (PSI)	3959.5
NUMBER OF POINTS USED	11
SLOPE (PSI/LOG CYCLE)	73.5
EXTRAPOLATED FINAL SHUT IN PRESSURE (PSI)	3955.8
NUMBER OF POINTS USED	11
SLOPE (PSI/LOG CYCLE)	24.7
AVERAGE PRODUCTION RATE (BARRELS/DAY)	1493.3
TRANSMISSIBILITY (MD - FT / D)	9821.22
FLOW CAPACITY (MD - FT.)	19423.47
PERMEABILITY (MD.)	3237.24
PRODUCTIVITY INDEX (BARRELS/DAY/PSI)	2.026 F. 1475
DAMAGE RATIO	5.5
SKIN FACTOR (S)	28.7
PRESSURE DROP DUE TO SKIN (PSI)	672.7
APPROXIMATE RADIUS OF INVESTIGATION (FT.)	208.5
DRAWDOWN FACTOR (%)	.1
POTENTIOMETRIC SURFACE (FT.)	3215.3