CONFIDENTIAL INFORMATION

DRILL STEM TEST DATA

BOTTOM HOLE CHOKE	5/8"	SURFACE	1" adj.
CUSHION	None	ELEVATION	3639' G.L.
TIME TOOL OPENED	7:01 A.M.		
TOOL OPEN BEFORE I.S.I.P.	30 MIN.		
INITIAL SHUT-IN	1 HRS. 0 MIN.		
TOOL OPEN	1 HRS. 0 MIN.		
FINAL SHUT-IN	3 HRS. 0 MIN.		

RECORDER DATA

TYPE	AK-1	CAPACITY	8375#
TOP	13390	DEPTH	11133
BOTTOM	13391	DEPTH	11172
CLOCK: TOP	24 Hr.	BOTTOM	24 Hr.

SURFACE ACTION

Preflow: Open with a weak to fair blow in 2 min. Open ¼" choke @ 4 min. Built to 9 3/4 lb. @ 15 min. GTS @ 25 min. w/11¼ lb. (32.8 mcf/d). Increased to 11 3/4 lb. on ¼" @ 30 min. (33.6 mcf/d).

Final Flow: Open with a weak to fair blow in 1 min. Open ¼" @ 5 min. with 5½ lb. (21.8 mcf/d). Built to 6 3/4 lb. @ 15 min. (23.65 mcf/d). Decreased to 6½ lb. @ 30 min. (23.9 mcf/d) & 5¼ lb. @ 45 min. (20.97 mcf/d). & 4 lb. @ 60 min. (18.5 mcf/d).

RECOVERY

591' Total fluid (3.96 bbl.)
533' Free Oil (3.57 bbl.)
58' Heavy oil & Gas cut mud (.39 bbl)

Top API Sp. Gr. 35 @ 60°
Mid API Sp. Gr. 35 @ 60°
Bot Mud, Chl. 146,000 PPM Rw. .050 @ 60°

SUCCESSFUL TEST Yes

		RECORDER NO. 13390	
(INITIAL HYDROSTATIC PRESSURE)		5744	P.S.I.
(INITIAL PRE-FLOW PRESSURE)		195	P.S.I.
(FINAL PRE-FLOW PRESSURE)	30 MIN.	168	P.S.I.
(INITIAL SHUT-IN PRESSURE)	60 MIN.	4430	P.S.I.
(INITIAL FLOW PRESSURE)		307	P.S.I.
(FINAL FLOW PRESSURE)	60 MIN.	254	P.S.I.
(FINAL SHUT-IN PRESSURE)	180 MIN.	5742	P.S.I.
(FINAL HYDROSTATIC PRESSURE)		5748	P.S.I.

HOLE AND MUD DATA

TOTAL DEPTH	11,175	MAIN HOLE	7 7/8
DEPTH OF CSG.	5230	CASING SIZE	8 5/8
MUD WT.	9.9+	VISCOSITY	34
WATER LOSS	12.4	CAKE	1
TYPE MUD	Aquagel		
CHLORIDE	137,000 PPM		
RESISTIVITY	.050 @ 60 °F		

SAMPLER REPORT

PRESSURE IN SAMPLER			100	PSI
BHT	142	°F @	11,132	F.T.
OIL:			560	CC.
WATER:			0	CC.
MUD:	gas cut		440	CC.
GAS:			.80	CU.FT.
RESISTIVITY	.052	@	60	°F
CHLORIDE			132,000	PPM.
GRAVITY	35	°API @	60	°F
CAPACITY			1500 cc	

TOOL DATA

NO. PACKERS	2
SIZE PACKERS	6 3/4
CONVENTIONAL TEST	Yes

TYPE TOOL	DEPTH	LENGTH	I.D.	O.D.
4½ XH DP		10191	3.8	4.5
4½ XH DC		831	2.3	6.25
Cir Sub	11023	1		
3 DC		87		
Shut-in		6		
Sampler		3		
Hyd Tool		5		
Jars		6		
Recorder		5		
Safety Jt.		2		
Packer		6		
Packer		6		
Perf				
Recorder		25'		

DRLG. CONT. TMBR-Sharp RIG # 65

REMARKS:

Glen Hogue, Jr.

TESTER

APPROVED BY: Gary Butler

COMPANY Mitchell Energy Corporation
LEASE NAME & NO. Sapphire Federal #1
INTERVAL TESTED 11,150 - 11,175 25'

COUNTY Lea
STATE New Mexico
FORMATION Wolfcamp

DATE January 27, 1989
TICKET # 6789
TEST # 2