Company Range Oil Company, Inc. Lease & Well No. #1 Watrous

Elevation 1098 Kley Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 16660

Date 12/16/82 Sec. 6 Twp. 34S Range 3E County Cowley State Kansas

Test Approved by H. G. McMahon III Western Representative Norman Allen

Formation Test No. 1 Interval Tested from 3360 ft. to 3365 ft. Total Depth 3365 ft.

Packer Depth 3360 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3355 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3348 AP ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 3362 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth -- ft. Recorder Number - Cap. -

Drilling Contractor Range Drlg.Rig #2 Drill Collar Length 120 I. D. 2¼ in.

Mud Type chemicl Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.9 Water Loss 10.4 cc. Drill Pipe Length 3215 I. D. 3.8 in.

Chlorides 2,100 P.P.M. Test Tool Length 25 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 5 ft. Size 5½OD in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Weak throughout test.

Recovered 25 ft. of watery mud Chlorides 9,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Read Chart #13268

Time Set Packer(s) 11:45 ~~A.M.~~ P.M. Time Started Off Bottom 2:30 A.M. ~~P.M.~~ Maximum Temperature 110°

Initial Hydrostatic Pressure			(A)	1652	P.S.I.	
Initial Flow Period	Minutes	30	(B)	35	P.S.I. to (C)	35 P.S.I.
Initial Closed In Period	Minutes	27	(D)	130	P.S.I.	
Final Flow Period	Minutes	45	(E)	32	P.S.I. to (F)	32 P.S.I.
Final Closed In Period	Minutes	60	(G)	365	P.S.I.	
Final Hydrostatic Pressure			(H)	1641	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 12/16/82 Test Ticket No. 16660

Recorder No. 13268 Capacity 4225 Location 3362 Ft.

Clock No. --- Elevation 1098 Kelly Bushing Well Temperature 110 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1652	P.S.I.
B	First Initial Flow Pressure	35	P.S.I.
C	First Final Flow Pressure	35	P.S.I.
D	Initial Closed-in Pressure	130	P.S.I.
E	Second Initial Flow Pressure	32	P.S.I.
F	Second Final Flow Pressure	32	P.S.I.
G	Final Closed-in Pressure	365	P.S.I.
H	Final Hydrostatic Mud	1641	P.S.I.

	Time Given	Time Computed
Open Tool	11:45P M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	27 Mins.
Second Flow Pressure	45 Mins.	45 Mins.
Final Closed-in Pressure	60 Mins.	60 Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	35
P 2	5	35
P 3	10	35
P 4	15	35
P 5	20	35
P 6	25	35
P 7	30	35
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	35
	3	41
	6	53
	9	66
	12	77
	15	89
	18	103
	21	114
	24	124
	27	130

Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	32
	5	32
	10	32
	15	32
	20	32
	25	32
	30	32
	35	32
	40	32
	45	32

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	32
	3	38
	6	47
	9	63
	12	79
	15	97
	18	115
	21	132
	24	153
	27	170
	30	186
	33	202
	36	222
	39	237
	42	261
	45	276
	48	297
	51	316
	54	333
	57	349
	60	365

IKT # 16660

