WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903

GREAT BEND, KANSAS

WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET 25569

Formation K.C. Kansas City Elevation 1509 KB Eff. Pay ✓ Ft. Elly Bushing

District Wakeeney Date 8-24-77 Customer Order No. ✓

COMPANY NAME Mack Oil Co.

ADDRESS 908 Union Center Bldg., Wichita, Ks. 67202

LEASE AND WELL NO. Kohman #5 COUNTY Kingman STATE Ks. Sec. 7 Twp. 30 S Rge. 7 W

Mail Inv. To Same (Co. Name) (Address) No. Copies Requested 5

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 1 O.K. X Misrun — Interval Tested From 3790' to 3811' Total Depth 3811'

Size Main Hole 7 7/8 Rat Hole 12 1/4 Conv. — B.T. X Damaged — Yes X No Conv. — B.T. X Damaged — Yes X No

Top Packer Depth 3785 Ft. Size 6 3/4 Bottom Packer Depth 3790 Ft. Size 6 3/4

Straddle — Conv. — B.T. — Damaged — Yes — No Packer Depth — Ft. Size —

Tool Size 5 1/2 OD Tool Joint Size 4 1/2 FH Anchor Length 21 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3802 Ft. Clock No. 6893 Depth 3805 Ft. Clock No. 6899

Top Make Kuster Cap. 4200 No. 3354 Inside ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 2605 ~~Inside~~ Outside

Below Straddle: Depth ✓ Rec. No. ✓ Clock No. ✓ Inside Outside Depth ✓ Ft. Rec. No. ✓ Clock No. ✓ Inside Outside

Time Set Packer 10:42 A M

Tool Open I.F.P. From 10:45 A M. to 11:15 A M. — Hr. 30 Min. From (B) 32 30 P.S.I. To (C) 42 42 P.S.I.

Tool Closed I.C.I.P. From 11:15 A M. to 11:45 A M. — Hr. 30 Min. (D) 1287 1281 P.S.I.

Tool Open F.F.P. From 11:45 A M. to 12:45 P M. 1 Hr. — Min. From (E) 63 68 P.S.I. To (F) 84 74 P.S.I.

Tool Closed F.C.I.P. From 12:45 P M. to 1:45 P M. 1 Hr. — Min. (G) 1403 1404 P.S.I.

Initial Hydrostatic Pressure (A) 2028 P.S.I. 2025 Final Hydrostatic Pressure (H) 2006 2004 P.S.I. Maximum Temp. 120°

INFORMATION

BLOW Weak Blow ~~Thru out~~ Throughout Test

Did Well Flow — Yes X No Recovery Total Ft. 60' G.I.P. Gas in pipe + 100' Oil Cut Mdy water

Reversed Out — Yes X No Mud Type Starch Viscosity 48 Weight 9.7 Water Loss 11.6 cc. Chlorides 59,000 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint None Jars: Size — In. Make — Ser. No. —

Dual Packers Yes Did Packers Hold? Yes Did Tool Plug? No Where? ✓

DRILLING CONTRACTOR Ross + Williamson (#7) Length Drill Pipe 2807 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 FH In.

Length Weight Pipe 723 ft. I.D. Weight Pipe 2.76 In. Tool Joint Size 5" IF In. Length Drill Collars 27 ft. I.D. Drill Collars 2.25 In.

Tool Joint Size 4 1/2 FH In. Length D.S.T. Tool 39 ft.

Remarks ~~Thank You!~~

INVOICE SECTION

Open Hole Test	$ 380.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$ 380.00

COMPANY TERMS

Western Testing Co., Inc., shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 10% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Disc 7.60

Test Approved By L. Earl Moore Western Representative Ken Metzler

Signature of Customer or his Authorized Representative L. Earl Moore Operator's Time ✓ Hrs.

WESTERN TESTING CO., INC.
Pressure Data

Date 8-24-77 Test Ticket No. 25509

Recorder No. 3354 Capacity 4200 Location 3802 Ft.

Clock No. 6893 Elevation 1509 Kelly Bushing Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2025	P.S.I.	Open Tool 10:42A M	
B First Initial Flow Pressure	30	P.S.I.	First Flow Pressure 30 Mins.	30 Mins.
C First Final Flow Pressure	42	P.S.I.	Initial Closed-in Pressure 30 Mins.	30 Mins.
D Initial Closed-in Pressure	1281	P.S.I.	Second Flow Pressure 60 Mins.	60 Mins.
E Second Initial Flow Pressure	68	P.S.I.	Final Closed-in Pressure 60 Mins.	60 Mins.
F Second Final Flow Pressure	74	P.S.I.		
G Final Closed-in Pressure	1404	P.S.I.		
H Final Hydrostatic Mud	2004	P.S.I.		

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	30
P 2	5	32
P 3	10	35
P 4	15	36
P 5	20	38
P 6	25	40
P 7	30	42
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
0		42
3		53
6		88
9		184
12		388
15		665
18		878
21		1019
24		1124
27		1190
30		1281
33		
36		
39		
42		
45		
48		
51		
54		
57		
60		

Second Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

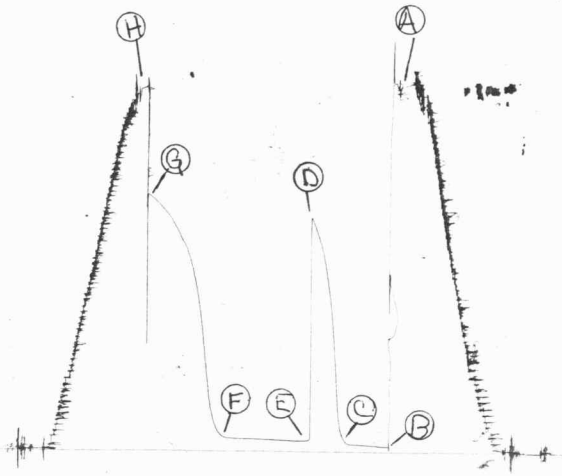
Point	Minutes	Press.
0		68
5		61
10		61
15		62
20		63
25		63
30		65
35		68
40		69
45		71
50		72
55		73
60		74
65		
70		
75		
80		
85		
90		

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

Point	Minutes	Press.
0		74
3		79
6		99
9		133
12		205
15		327
18		515
21		738
24		880
27		987
30		1061
33		1127
36		1162
39		1211
42		1251
45		1289
48		1314
51		1340
54		1365
57		1388
60		1404

Tkt# 25569

I.



WESTERN TESTING CO., INC.

Pressure Data

Date 8-24-77 Test Ticket No. 25569

Recorder No. 3354 Capacity 4200 Location 3802 Ft.

Clock No. 6893 Elevation 1509 Kelly Bushing Well Temperature 120 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2025	P.S.I.	Open Tool	10:42A M	
B	First Initial Flow Pressure	30	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	42	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1281	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	68	P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	74	P.S.I.			
G	Final Closed-in Pressure	1404	P.S.I.			
H	Final Hydrostatic Mud	2004	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc.		Breakdown: 10 Inc.		Breakdown: 12 Inc.		Breakdown: 20 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	30	0	42	0	68	0	74
P 2 5	32	3	53	5	61	3	79
P 3 10	35	6	88	10	61	6	99
P 4 15	36	9	184	15	62	9	133
P 5 20	38	12	388	20	63	12	205
P 6 25	40	15	665	25	63	15	327
P 7 30	42	18	878	30	65	18	515
P 8		21	1019	35	68	21	738
P 9		24	1124	40	69	24	880
P10		27	1190	45	71	27	987
P11		30	1281	50	72	30	1061
P12				55	73	33	1127
P13				60	74	36	1162
P14						39	1211
P15						42	1251
P16						45	1289
P17						48	1314
P18						51	1340
P19						54	1365
P20						57	1388
						60	1404

WESTERN TESTERS

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Mack Oil Co. Lease & Well No. Kohman #5

Elevation 1509 Kelly Bush. Formation Kansas City Effective Pay - Ft. Ticket No. 25569

Date 8-24-77 Sec. 7 Twp. 30S Range 7W County Kingman State Kansas

Test Approved by L. Earl Moore Western Representative Ken Metzler

Formation Test No. 1 O.K. X Misrun - Interval Tested From 3790' to 3811' Total Depth 3811'

Size Main Hole 7 7/8 Rat Hole 12¼ Conv. - B.T. X Damaged - Yes X No Conv. - B.T. X Damaged - Yes X No

Top Packer Depth 3785 Ft. Size 6 3/4 Bottom Packer Depth 3790 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 21 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 3802 Ft. Clock No. 6893 Depth 3805 Ft. Clock No. 6899

Top Make Kuster Cap. 4200 No. 3354 Inside ~~Outside~~ Bottom Make Kuster Cap. 4150 No. 2605 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 10:42A M

Tool Open I.F.P. From 10:45A M. to 11:15A M. - Hr. 30 Min. From (B) 30 P.S.I. To (C) 42 P.S.I.

Tool Closed I.C.I.P. From 11:15 M. to 11:45A M. - Hr. 30 Min (D) 1281 P.S.I.

Tool Open F.F.P. From 11:45A M. to 12:45P M. - Hr. 60 Min. From (E) 68 P.S.I. To (F) 74 P.S.I.

Tool Closed F.C.I.P. From 12:45 M. to 1:45P M. - Hr. 60 Min. (G) 1404 P.S.I.

Initial Hydrostatic Pressure (A) 2025 P.S.I. Final Hydrostatic Pressure (H) 2004 P.S.I. Maximum Temp. 120

INFORMATION

BLOW Weak blow throughout test

Did Well Flow - Yes X No Recovery Total Ft. 60' gas in pipe, 100' oil cut muddy water.

Reversed Out - Yes X No Mud Type Starch Viscosity 48 Weight 9.7 Water Loss 11.6 cc. Chlorides 59,000 p.p.m.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR Rains & Williamson #7 Length Drill Pipe? 2807 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe 723 Ft. I.D. Weight Pipe 2.76 In. Tool Joint Size 5"IF In. Length Drill Collars 27 Ft. I.D. Drill Collars 2.25 In.

Tool Joint Size 4½FH In. Length D.S.T. Tool 39 Ft.

Remarks: