WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING
TICKET 21702

Formation MISS Elevation 1485 KB Eff. Pay ____ Ft.

District PRATT Date 10-28-76 Customer Order No. ____

COMPANY NAME McCOX PETROLEUM CO.

ADDRESS 816 VICKERS-KSB&T BLDG. WICHITA, KS. 67202

LEASE AND WELL NO. WEBB-TOWNER #1 COUNTY KINGMAN STATE KS Sec. 18 Twp. 30S Rge. 7W

Mail Inv. To SAME (Co. Name) (Address) No. Copies Requested USUAL

Mail Charts To SAME (Address) No. Copies Requested USUAL

Formation Test No. 1 O.K. X Misrun ____ Interval Tested From 4150 to 4177 Total Depth 4177

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

Top Packer Depth 4145 Ft. Size 6 3/4 Bottom Packer Depth 4150 Ft. Size 6 3/4

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

Tool Size 5½ O.D. Tool Joint Size 4½ F.H. Anchor Length 27 Ft. Size 5½ O.D. Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4167 Ft. Clock No. 4963 Depth 4170 Ft. Clock No. 9712

Top Make KUSTER Cap. 4150 No. 2604 Inside ~~Outside~~ Bottom Make KUSTER Cap. 4000 No. 3660 ~~Inside~~ Outside

Below Straddle: Depth ____ Rec. No. ____ Clock No. ____ ~~Inside~~ Outside Depth ____ Ft. Rec. No. ____ Clock No. ____ ~~Inside~~ Outside

Time Set Packer 10:03 P.M.

Tool Open I.F.P. From 10:05 M. to 10:35 M. ____ Hr. 30 Min. From (B) 42 53 P.S.I. To (C) 63 75 P.S.I.

Tool Closed I.C.I.P. From 10:35 M. to 11:20 M. ____ Hr. 45 Min. (D) 95 / 968 P.S.I.

Tool Open F.F.P. From 11:20 M. to 12:20 M. 1 Hr. ____ Min. From (E) 74 79 P.S.I. To (F) 106 113 P.S.I.

Tool Closed F.C.I.P. From 12:20 M. to 1:20 M. 1 Hr. ____ Min. (G) 877 924 P.S.I.

Initial Hydrostatic Pressure (A) 2137 2150 P.S.I. Final Hydrostatic Pressure (H) 2137 2120 P.S.I. Maximum Temp. 128

INFORMATION

BLOW STRONG BLOW THRU-OUT TEST

Did Well Flow ____ Yes X No Recovery Total Ft. 270 ft - 30 ft. O.C.M. - 60 ft. H.O.C.M - 60 ft H.O.C. SL. WTRY. - 60 ft H.O.C. WTRY. MUD - 60 ft. MDY WTR. 1180 ft. G.I.P.

Reversed Out ____ Yes X No Mud Type STARCH Viscosity 51 Weight 9.2 Water Loss 8.0 cc. Chlorides 37,000

EXTRA EQUIPMENT: Type Circ. Sub. PIN Safety Joint ____ Jars: Size ____ In. Make ____ Ser. No. ____

Dual Packers YES Did Packers Hold? YES Did Tool Plug? ____ Where? ____

DRILLING CONTRACTOR SWEETMAN DRLG. CO. Length Drill Pipe 3877 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ F.H. In.

Length Weight Pipe ____ ft. I.D. Weight Pipe ____ In. Tool Joint Size ____ In. Length Drill Collars 252 ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4½ H-90 In. Length D.S.T. Tool 48 ft.

Remarks

INVOICE SECTION

Open Hole Test	$ 390 00
Straddle Test	$ ____
Jars	$ ____
Selective Zone	$ ____
Safety Joint	$ ____
Misrun	$ ____
Evaluation	$ ____
Packer	$ ____
Circ. Sub.	$ ____
	$ ____
Total	$ 390 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.

Test Approved By A. Lane Woods (Signature of Customer or his Authorized Representative) Western Representative Bill Hagen

Operator's Time Max 400 Hrs.

WESTERN TESTING CO., INC.

Pressure Data

Date 10-28-76 Test Ticket No. 21702

Recorder No. 2604 Capacity 4150 Location 4167

Clock No. 4763 Elevation 1485 K B. Well Temperature 128

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2150 P.S.I.		Open Tool	10:03P M	
B	First Initial Flow Pressure	53 P.S.I.		First Flow Pressure	30 Mins.	30 M
C	First Final Flow Pressure	75 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 M
D	Initial Closed-in Pressure	968 P.S.I.		Second Flow Pressure	60 Mins.	60 M
E	Second Initial Flow Pressure	79 P.S.I.		Final Closed-in Pressure	60 Mins.	66 M
F	Second Final Flow Pressure	113 P.S.I.				
G	Final Closed-in Pressure	924 P.S.I.				
H	Final Hydrostatic Mud	2120 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	53
P 2 5	58
P 3 10	55
P 4 15	58
P 5 20	64
P 6 25	70
P 7 30	75
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: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	75
3	145
6	183
9	247
12	318
15	384
18	455
21	531
24	602
27	673
30	730
33	793
36	845
39	895
42	941
45	968
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	79
5	92
10	96
15	100
20	101
25	104
30	108
35	109
40	111
45	111
50	113
55	113
60	113
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 22 Inc.
of 3 mins. and a
final inc. of 0 Min

Point Minutes	Press.
0	113
3	164
6	218
9	269
12	314
15	361
18	408
21	449
24	491
27	531
30	569
33	609
36	644
39	678
42	711
45	742
48	770
51	795
54	824
57	849
60	874
63	897

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

Company McCoy Petroleum Co. Lease & Well No. Wells-Towner #1

Elevation 1485 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. #21702

Date 10-28-76 Sec. 18 Twp. 30S Range 7W County Kingman State Kansas

Test Approved by H. Deane Jirrels Western Representative Bill Hager

Formation Test No. 1 O.K. X Misrun - Interval Tested From 4150' to 4155' Total Depth 4177'

Size Main Hole 77/8 Rat Hole - Conv. X B.T. - Damaged - Yes X No Conv. - B.T. X Damaged X Yes - No

Top Packer Depth 4145 Ft. Size 6 3/4 Bottom Packer Depth 4150 Ft. Size 6 3/4

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

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 27 Ft. Size 5½ OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4167 Ft. Clock No. 4763 Depth 4170 Ft. Clock No. 9712

Top Make Kuster Cap. 4150 No. 2604 ~~Inside~~ Outside Bottom Make Kuster Cap. 4000 No. 3660 ~~Inside~~ Outside

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

Time Set Packer 10:03 P M

Tool Open I.F.P. From 10:05 P M. to 10:35P M. - Hr. 30 Min. From (B) 53 P.S.I. To (C) 75 P.S.I.

Tool Closed I.C.I.P. From 10:35P M. to 11:20P M. - Hr. 45 Min (D) 968 P.S.I.

Tool Open F.F.P. From 11:20P M. to 12:20A M. 1 Hr. - Min. From (E) 79 P.S.I. To (F) 113 P.S.I.

Tool Closed F.C.I.P. From 12:20A M. to 1:20A M. 1 Hr. - Min. (G) 924 P.S.I.

Initial Hydrostatic Pressure (A) 2150 P.S.I. Final Hydrostatic Pressure (H) 2120 P.S.I. Maximum Temp. 128

INFORMATION

BLOW Strong Blow throughout test.

Did Well Flow - Yes X No Recovery Total Ft. 30' oil-cut mud. 60' heavy oil-cut mud. 60' heavy oil-cut slightly watery. 60' heavy oil-cut watery mud. 60' muddy water. 1180' gas in pipe.

Reversed Out - Yes X No Mud Type starch Viscosity 51 Weight 9.2 Water Loss 8.0 cc. Chlorides 37,000 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 Sweetman Drilling Co. Length Drill Pipe? 3877 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 252 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½H90 In. Length D.S.T. Tool 48 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

Date 10-28-76 Test Ticket No. #21702

Recorder No. 2604 Capacity 4150 Location 4167 Ft.

Clock No. 4763 Elevation 1485 Kelly Bushing Well Temperature 128 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2150	P.S.I.	Open Tool	10:03P M	
B	First Initial Flow Pressure	53	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	75	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	968	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	79	P.S.I.	Final Closed-in Pressure	60 Mins.	66 Mins.
F	Second Final Flow Pressure	113	P.S.I.			
G	Final Closed-in Pressure	924	P.S.I.			
H	Final Hydrostatic Mud	2120	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	53
P 2 5	58
P 3 10	55
P 4 15	58
P 5 20	64
P 6 25	70
P 7 30	75
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

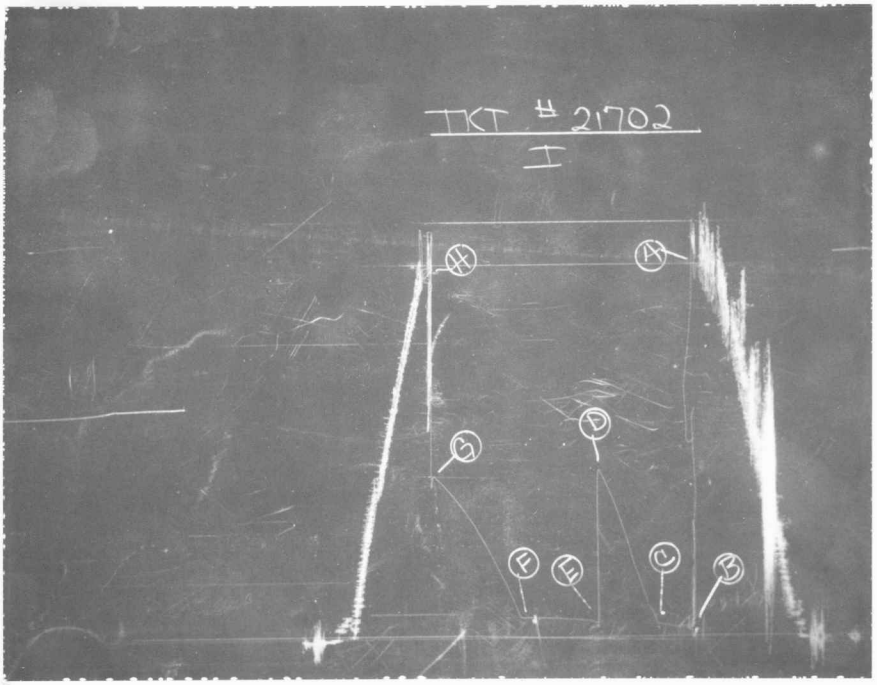
Point Minutes	Press.
0	75
3	145
6	183
9	247
12	318
15	384
18	455
21	531
24	602
27	673
30	730
33	793
36	845
39	895
42	941
45	968

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

Point Minutes	Press.
0	79
5	92
10	96
15	100
20	101
25	104
30	108
35	109
40	111
45	111
50	113
55	113
60	113

Final Shut-In
Breakdown: 22 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	113
3	164
6	218
9	269
12	314
15	361
18	408
21	449
24	491
27	531
30	569
33	609
36	644
39	678
42	711
45	742
48	770
51	795
54	824
57	849
60	874
63	897
66	924


TKT # 21702
I
H
A
G
D
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C
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WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903

GREAT BEND, KANSAS

WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET 21703

Formation MISS Elevation 1485 KB Eff. Pay _____ Ft.

District PRATT Date 10-28-76 Customer Order No. _____

COMPANY NAME MCCOY PETROLEUM CO.

ADDRESS 816 VICKERS KSB&T BLDG. WICHITA, KS. 67202

LEASE AND WELL NO. WELLS-TOWNER #1 COUNTY KINGMAN STATE KS. Sec. 18 Twp. 30 S Rge. 7 W

Mail Inv. To SAME No. Copies Requested USUAL
Co. Name Address

Mail Charts To SAME No. Copies Requested USUAL
Address

Formation Test No. 2 O.K. X Misrun _____ Interval Tested From 4177 to 4209 Total Depth 4209

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

Top Packer Depth 4172 Ft. Size 6 3/4 Bottom Packer Depth 4177 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 30 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4197 Ft. Clock No. 4763 Depth 4200 Ft. Clock No. 9712

Top Make KOSTER Cap. 4150 No. 2604 Inside Outside Bottom Make KOSTER Cap. 4000 No. 3660 Inside Outside

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

Time Set Packer 1:03 P. M

Tool Open I.F.P. From 1:05 M. to 1:35 M. — Hr. 30 Min. From (B) 63 23 P.S.I. To (C) 85 76 P.S.I.

Tool Closed I.C.I.P. From 1:35 M. to 2:20 M. — Hr. 45 Min. (D) 1202 1222 P.S.I.

Tool Open F.F.P. From 2:20 M. to 3:20 M. 1 Hr. — Min. From (E) 85 89 P.S.I. To (F) 106 111 P.S.I.

Tool Closed F.C.I.P. From 3:20 M. to 4:20 M. 1 Hr. — Min. (G) 1160 1178 P.S.I.

Initial Hydrostatic Pressure (A) 2158 2150 Final Hydrostatic Pressure (H) 2158 2150 Maximum Temp. 128

INFORMATION

BLOW GOOD BLOW THRU-OUT TEST

Did Well Flow — Yes X No Recovery Total Ft. 150 Ft. 90 Ft. SL. O. C. M. - 60 Ft. SL. O. C. muddy WATER

Reversed Out — Yes X No Mud Type STARCH Viscosity 45 Weight 9.3 Water Loss 8.8 cc. Chlorides 32,000

EXTRA EQUIPMENT: Type Circ. Sub. PIN Safety Joint _____ Jars: Size — In. Make _____ Ser. No. —

Dual Packers YES Did Packers Hold? YES Did Tool Plug? NO Where? _____

DRILLING CONTRACTOR SWEETMAN DRLG. Length Drill Pipe 3904 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 F.H. In.

Length Weight Pipe — ft. I.D. Weight Pipe — In. Tool Joint Size — In. Length Drill Collars 252 ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 1/2 H-90 In. Length D.S.T. Tool 5 ft.

Remarks SLID TOOL 9 ft. to Bottom

PLUGGING ACTION ON BOTH OPENING.

INVOICE SECTION

Open Hole Test	$ 390 00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$ 390 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.

Test Approved By _____ Western Representative Bill Rogers
Signature of Customer or his Authorized Representative

Operator's Time THANK YOU Hrs.

WESTERN TESTING CO., INC.

Pressure Data

Date 10-28-76 Test Ticket No. 21703

Recorder No. 2604 Capacity 4150 Location 4197

Clock No. 4763 Elevation 1485 K. B. Well Temperature 128

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2150	P.S.I.	Open Tool	1:03P M	
B	First Initial Flow Pressure	23	P.S.I.	First Flow Pressure	30 Mins.	30 Mi
C	First Final Flow Pressure	76	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mi
D	Initial Closed-in Pressure	1222	P.S.I.	Second Flow Pressure	60 Mins.	60 Mi
E	Second Initial Flow Pressure	89	P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mi
F	Second Final Flow Pressure	111	P.S.I.			
G	Final Closed-in Pressure	1178	P.S.I.			
H	Final Hydrostatic Mud	2150	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 4 Inc. of 5 mins. and a final inc. of 0 Min.

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

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

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

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	0	23		0	76		0	89		0	111
P 2	5	Plugging Action		3	104		5	87		3	151
P 3	10	" "		6	145		10	89		6	200
P 4	15	72		9	209		15	92		9	267
P 5	20	72		12	292		20	94		12	333
P 6	25	75		15	299		25	96		15	408
P 7	30	76		18	548		30	98		18	494
P 8	35			21	684		35	100		21	575
P 9	40			24	820		40	102		24	661
P10	45			27	920		45	Plugging Action		27	742
P11	50			30	1004		50	" "		30	822
P12	55			33	1073		55	111		33	887
P13	60			36	1125		60	111		36	937
P14				39	1165		65			39	987
P15				42	1203		70			42	1027
P16				45	1222		75			45	1061
P17				48			80			48	1092
P18				51			85			51	1117
P19				54			90			54	1140
P20				57						57	1159
				60						60	1178

WTC - 4

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

ompany McCoy Petroleum Co. Lease & Well No. Wells-Towner #1

evation 1485 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. #21703

ate 10-28-76 Sec. 18 Twp. 30S Range 7W County Kingman State Kansas

est Approved by H. Deane Jirrels Western Representative Bill Hager

ormation Test No. 2 O.K. X Misrun - Interval Tested From 4177' to 4207' Total Depth 4207'

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

op Packer Depth 4172' Ft. Size 6 3/4 Bottom Packer Depth 4177 Ft. Size 6 3/4

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

ool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 30 Ft. Size 5½ OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

ECORDERS Depth 4197 Ft. Clock No. 4763 Depth 4200 Ft. Clock No. 9712

Top Make Kuster Cap. 4150 No. 2604 Inside ~~Outside~~ Bottom Make Kuster Cap. 4000 No. 3660 ~~Inside~~ Outside

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

me Set Packer 1:03 P M

ool Open I.F.P. From 1:05 P M. to 1:35P M. - Hr. 30 Min. From (B) 23 P.S.I. To (C) 76 P.S.I.

ool Closed I.C.I.P. From 1:35P M. to 2:20P M. - Hr. 45 Min (D) 1222 P.S.I.

ol Open F.F.P. From 2:20P M. to 3:20P M. - Hr. 60 Min. From (E) 89 P.S.I. To (F) 111 P.S.I.

ol Closed F.C.I.P. From 3:20P M. to 4:20P M. - Hr. 60 Min. (G) 1178 P.S.I.

tial Hydrostatic Pressure (A) 2150 P.S.I. Final Hydrostatic Pressure (H) 2150 P.S.I. Maximum Temp. 128

INFORMATION

OW Good blow throughout test.

l Well Flow - Yes X No Recovery Total Ft. 90' slightly oil-cut mud. 60' slightly oil-cut muddy water.

ersed Out - Yes X No Mud Type starch Viscosity 45 Weight 9.3 Water Loss 8.8 cc. Chlorides 32,000 P.P.M.

TRA EQUIPMENT: Type Circ. Sub. pin Safety Joint - Jars: Size - In. Make - Ser. No. -

l Packer yes Did Packers Hold? yes Did Tool Plug? no Where? -

ILLING CONTRACTOR Sweetman Drilling Length Drill Pipe? 3904 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

gth Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 252 Ft. I.D. Drill Collars 2¼ In.

l Joint Size 4½H90 In. Length D.S.T. Tool 51 Ft.

arks:

Slid tool 9' to bottom. Plugging action on both openings.

WESTERN TESTING CO., INC.

Pressure Data

Date 10-28-76 Test Ticket No. #21703

Recorder No. 2604 Capacity 4150 Location 4197 Ft.

Clock No. 4763 Elevation 1485 Kelly Bushing Well Temperature 128 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2150 P.S.I.	Open Tool	1:03 P M	
B	First Initial Flow Pressure	23 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	76 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1222 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	89 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	111 P.S.I.			
G	Final Closed-in Pressure	1178 P.S.I.			
H	Final Hydrostatic Mud	2150 P.S.I.			

PRESSURE BREAKDOWN

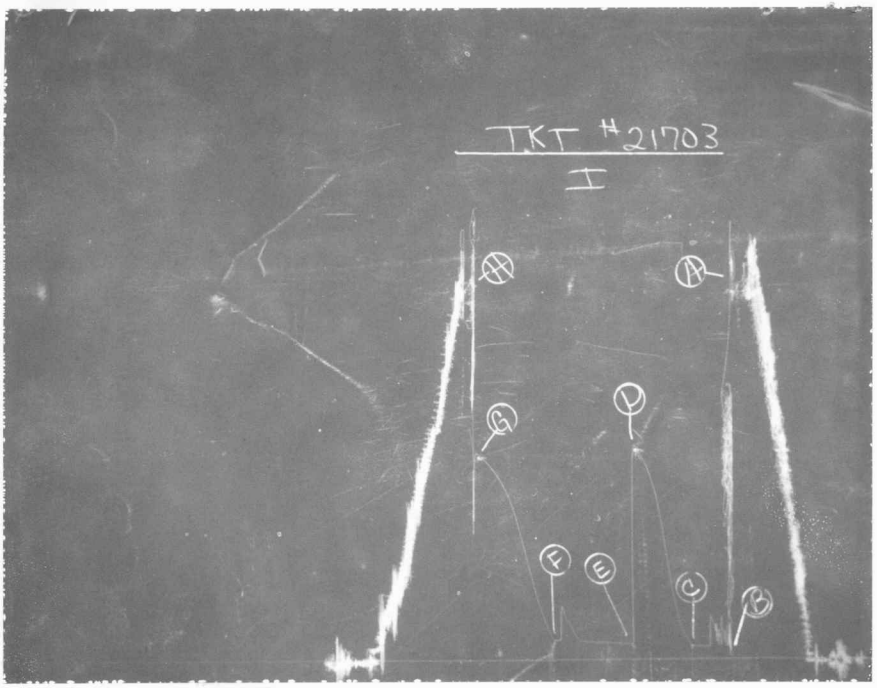
First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

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

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	0	23		0	76		0	89		0	111
P 2	5	Plugging Action		3	104		5	87		3	151
P 3	10	Plugging Action		6	145		10	89		6	200
P 4	15	72		9	209		15	92		9	267
P 5	20	72		12	292		20	94		12	333
P 6	25	75		15	299		25	96		15	408
P 7	30	76		18	548		30	98		18	494
P 8				21	684		35	100		21	575
P 9				24	820		40	102		24	661
P10				27	920		45	Plugging Action		27	742
P11				30	1004		50	Plugging Action		30	822
P12				33	1073		55	111		33	887
P13				36	1125		60	111		36	937
P14				39	1165					39	987
P15				42	1203					42	1027
P16				45	1222					45	1061
P17										48	1092
P18										51	1117
P19										54	1140
P20										57	1159
										60	1178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I
H
A
G
D
F
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C
B

WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING
TICKET 21704

Formation MISS Elevation 1485 KB Eff. Pay ____ Ft.

District GRATT Date 10-29-76 Customer Order No. ____

COMPANY NAME McCOX PETROLEUM Co.

ADDRESS 816 VICKERS KS B&T BLDG. WICHITA, KS. 67202

LEASE AND WELL NO. WELLS-TOWNER #1 COUNTY KINGMAN STATE KS. Sec 18 Twp 30S Rge 7W

Mail Inv. To Co. Name SAME Address No. Copies Requested USUAL

Mail Charts To SAME Address No. Copies Requested USUAL

Formation Test No. 3 O.K. X Misrun ____ Interval Tested From 4210 to 4260 Total Depth 4260

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

Top Packer Depth 4205 Ft. Size 6 3/4 Bottom Packer Depth 4210 Ft. Size 6 3/4

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

Tool Size 5½ O.D. Tool Joint Size 4½ FH Anchor Length 50 Ft. Size 31' D.C. 6¼" O.D. 19' 5½" Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4213 Ft. Clock No. 4763 Depth 4216 Ft. Clock No. 9712

Top Make KUSTER Cap. 4150 No. 2604 Inside Outside Bottom Make KUSTER Cap. 4000 No. 3660 ~~Inside~~ Outside

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

Time Set Packer 10:32 A.M.

Tool Open I.F.P. From 10:35 M. to 11:05 M. ____ Hr. 30 Min. From (B) 31 38 P.S.I. To (C) 127 145 P.S.I.

Tool Closed I.C.I.P. From 11:05 M. to 11:50 M. ____ Hr. 45 Min. (D) 1474 1476 P.S.I.

Tool Open F.F.P. From 11:50 M. to 12:50 M. 1 Hr. ____ Min. From (E) 138 155 P.S.I. To (F) 213 228 P.S.I.

Tool Closed F.C.I.P. From 12:50 M. to 1:50 M. 1 Hr. ____ Min. (G) 1443 1452 P.S.I.

Initial Hydrostatic Pressure (A) 2137 2190 P.S.I. Final Hydrostatic Pressure (H) 2137 2158 Maximum Temp. 128

INFORMATION

BLOW GOOD BLOW THRO-OUT TEST (BOTTOM OF 5 GAL. BUCKET)

Did Well Flow ____ Yes X No Recovery Total Ft. 450 Ft. 30 Ft. H.O.C. WTRY MUD.
120 Ft. O.C. MDY. WTR. - 300 Ft. V.SL. O.C. MDY WTR. (SCUM)

Reversed Out ____ Yes X No Mud Type STARCH Viscosity 41 Weight 9.5 Water Loss 8.8 cc. Chlorides 30,000

EXTRA EQUIPMENT: Type Circ. Sub. PIN Safety Joint ____ Jars: Size ____ In. Make ____ Ser. No. ____

Dual Packers YES Did Packers Hold? YES Did Tool Plug? NO Where? ____

DRILLING CONTRACTOR SWEETMAN DRLG. CO. Length Drill Pipe 3938 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ FH In.

Length Weight Pipe ____ ft. I.D. Weight Pipe ____ In. Tool Joint Size ____ In. Length Drill Collars 252 ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½ H-90 In. Length D.S.T. Tool 70 ft.

Remarks

INVOICE SECTION

Open Hole Test	$390.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$390.00

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.

Test Approved By A. Alan Jarrell Western Representative Bill Hagen
Signature of Customer or his Authorized Representative

Operator's Time THANK YOU Hrs.

WESTERN TESTING CO., INC.
Pressure Data

Date 10-29-76 Test Ticket No. 21704

Recorder No. 2604 Capacity 4150 Location 4213

Clock No. 4763 Elevation 1458 K.B Well Temperature 128

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2190 P.S.I.	Open Tool	10:32A M	
B First Initial Flow Pressure	38 P.S.I.	First Flow Pressure	30 Mins.	30 Mi
C First Final Flow Pressure	145 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mi
D Initial Closed-in Pressure	1476 P.S.I.	Second Flow Pressure	60 Mins.	60 Mi
E Second Initial Flow Pressure	155 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mi
F Second Final Flow Pressure	228 P.S.I.			
G Final Closed-in Pressure	1452 P.S.I.			
H Final Hydrostatic Mud	2158 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	38
P 2 5	62
P 3 10	87
P 4 15	109
P 5 20	128
P 6 25	136
P 7 30	145
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: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	145
3	453
6	1140
9	1314
12	1370
15	1401
18	1422
21	1435
24	1444
27	1452
30	1458
33	1462
36	1470
39	1473
42	1476
45	1476
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	155
5	155
10	164
15	170
20	177
25	183
30	190
35	196
40	203
45	209
50	215
55	222
60	228
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	228
3	502
6	1067
9	1253
12	1311
15	1345
18	1370
21	1385
24	1396
27	1408
30	1414
33	1422
36	1428
39	1431
42	1435
45	1439
48	1442
51	1445
54	1448
57	1450
60	1452

WESTERN TESTING CO., INC.
Pressure Data

Date 10-29-76 Test Ticket No. #21704

Recorder No. 2604 Capacity 4150 Location 4213 Ft.

Clock No. 4763 Elevation 1458 Kelly Bushing Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2190 P.S.I.	Open Tool	10:32 A M	
B First Initial Flow Pressure	38 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	145 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	1476 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	155 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	228 P.S.I.			
G Final Closed-in Pressure	1452 P.S.I.			
H Final Hydrostatic Mud	2158 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	38
P 2 5	62
P 3 10	87
P 4 15	109
P 5 20	128
P 6 25	136
P 7 30	145
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	145
3	453
6	1140
9	1314
12	1370
15	1401
18	1422
21	1435
24	1444
27	1452
30	1458
33	1462
36	1470
39	1473
42	1476
45	1476

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

Point Minutes	Press.
0	155
5	155
10	164
15	170
20	177
25	183
30	190
35	196
40	203
45	209
50	215
55	222
60	228

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

Point Minutes	Press.
0	228
3	502
6	1067
9	1253
12	1311
15	1345
18	1370
21	1385
24	1396
27	1408
30	1414
33	1422
36	1428
39	1431
42	1435
45	1439
48	1442
51	1445
54	1448
57	1450
60	1452

WESTERN TESTERS

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

Company McCoy Petroleum Co. Lease & Well No. Wells-Towner #1

Elevation 1485 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. #21704

Date 10-29-76 Sec. 18 Twp. 30S Range 7W County Kingman State Kansas

Test Approved by H. Deane Jirrels Western Representative Bill Hager

Formation Test No. 3 O.K. X Misrun - Interval Tested From 4210' to 4260' Total Depth 4260'

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

Top Packer Depth 4205 Ft. Size 6 3/4 Bottom Packer Depth 4210 Ft. Size 6 3/4

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

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 50 Ft. Size 19-5½OD 31'D.C.-6¼OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4213 Ft. Clock No. 4763 Depth 4216 Ft. Clock No. 9712

Top Make Kuster Cap. 4150 No. 2604 ~~Inside~~ Outside Bottom Make Kuster Cap. 4000 No. 3660 ~~Inside~~ Outside

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

Time Set Packer 10:32 A M

Tool Open I.F.P. From 10:35A M. to 11:05A M. - Hr. 30 Min. From (B) 38 P.S.I. To (C) 145 P.S.I.

Tool Closed I.C.I.P. From 11:05A M. to 11:50A M. - Hr. 45 Min (D) 1476 P.S.I.

Tool Open F.F.P. From 11:50A M. to 12:50A M. - Hr. 60 Min. From (E) 155 P.S.I. To (F) 228 P.S.I.

Tool Closed F.C.I.P. From 12:50A M. to 1:50P M. - Hr. 60 Min. (G) 1452 P.S.I.

Initial Hydrostatic Pressure (A) 2190 P.S.I. Final Hydrostatic Pressure (H) 2158 P.S.I. Maximum Temp. 128

INFORMATION

BLOW Good blow throughout test (bottom of 5 gallon bucket).

Did Well Flow - Yes X No Recovery Total Ft. 30' Heavy oil-cut watery mud. 120' oil-cut muddy water. 300' very slight oil-cut muddy water (scum).

Reversed Out - Yes X No Mud Type starch Viscosity 41 Weight 9.5 Water Loss 8.8 cc. Chlorides 38,000 P.P.M.

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

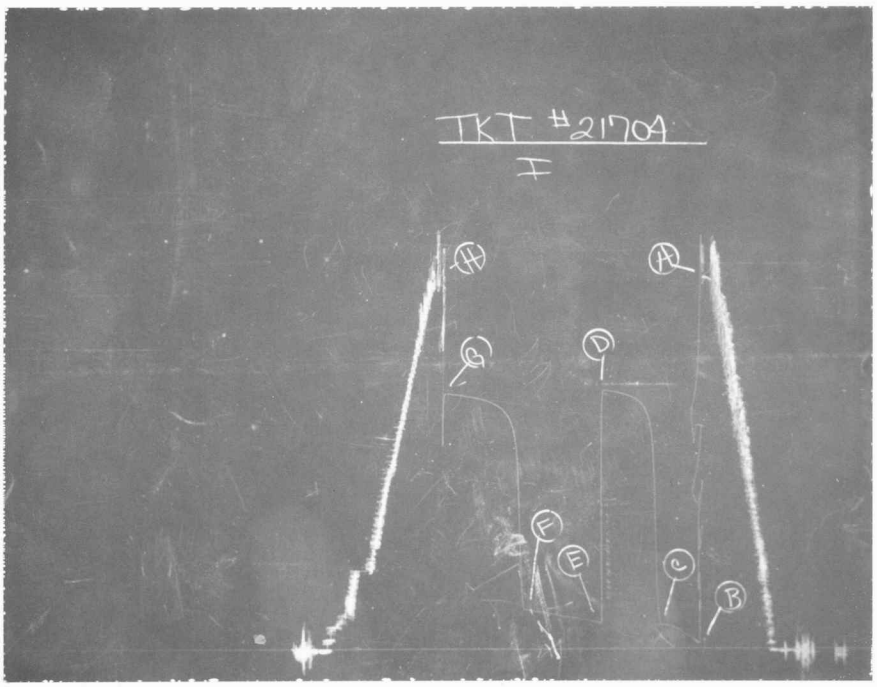
Dual Packer yes Did Packers Hold? yes Did Tool Plug? no Where? -

DRILLING CONTRACTOR Sweetman Drilling Co. Length Drill Pipe? 3938 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 252 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4H90 In. Length D.S.T. Tool 70 Ft.

Remarks:


IKT #21704
I
H
A
G
D
F
E
C
B

WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING
TICKET 21705

Formation _____ Elevation 1485 KB Eff. Pay _____ Ft.

District PRATT Date 10-30-76 Customer Order No. _____

COMPANY NAME MACON PETROLEUM CO.

ADDRESS 816 WICKERS KSB&T BLDG. WICHITA, KS 67202

LEASE AND WELL NO. WELLS-TOWNER #1 COUNTY KINGMAN STATE KS Sec. 18 Twp. 30S Rge. 7W

Mail Inv. To Co. Name SAME Address No. Copies Requested USUAL

Mail Charts To SAME Address No. Copies Requested USUAL

Formation Test No. 4 O.K. X Misrun — Interval Tested From 1332 to 1367 Total Depth 4330

Size Main Hole 7⅞ Rat Hole — Conv. X B.T. — Damaged — Yes — No Conv. — B.T. X Damaged — Yes X No

Top Packer Depth 1332 Ft. Size 6¾ Bottom Packer Depth 1337 Ft. Size 6¾

Straddle X Conv. X B.T. Damaged — Yes X No Packer Depth 1367 Ft. Size 6¾

Tool Size 5½ D.C. Tool Joint Size 4½ F.H. Anchor Length 30 Ft. Size 5½ D.C. Surface Choke Size ¾ In. Bottom Choke Size ¾ In.

RECORDERS Depth 1341 Ft. Clock No. 4763 Depth 1344 Ft. Clock No. 9212

Top Make KUSTER Cap. 4150 No. 2604 Inside/Outside Bottom Make KUSTER Cap. 4000 No. 3660 Inside/Outside

Below Straddle: Depth 1372 Rec. No. 3494 Clock No. 8376 Inside/Outside Depth — Ft. Rec. No. — Clock No. — Inside/Outside

Time Set Packer 5:23 P.M.

Tool Open I.F.P. From 5:25 M. to 6:25 M. 1 Hr. — Min. From (B) 42 40 P.S.I. To (C) 53 60 P.S.I.

Tool Closed I.C.I.P. From 6:25 M. to 7:25 M. 1 Hr. — Min. (D) 502-507 P.S.I.

Tool Open F.F.P. From 7:25 M. to 8:25 M. 1 Hr. — Min. From (E) 53 43 P.S.I. To (F) 63 60 P.S.I.

Tool Closed F.C.I.P. From 8:25 M. to 9:25 M. 1 Hr. — Min. (G) 502-516 P.S.I.

Initial Hydrostatic Pressure (A) 679 761 P.S.I. Final Hydrostatic Pressure (H) 679 761 P.S.I. Maximum Temp. 90

INFORMATION

BLOW STRONG BLOW THRU-OUT TEST
SEE ATTACH SHEET #585

Did Well Flow — Yes X No Recovery Total Ft. 130 Ft. Dslg. Mud

Reversed Out — Yes X No Mud Type STARCH Viscosity 55 Weight 9.6 Water Loss 13.2 cc. Chlorides 30,000

EXTRA EQUIPMENT: Type Circ. Sub. PIN Safety Joint _____ Jars: Size _____ In. Make _____ Ser. No. —

Dual Packers YES Did Packers Hold? YES Did Tool Plug? NO Where? _____

DRILLING CONTRACTOR SUNSTROM DRLG. Length Drill Pipe 1316 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ F.H. In.

Length Weight Pipe — ft. I.D. Weight Pipe — In. Tool Joint Size — In. Length Drill Collars 252 ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4½ F.H. In. Length D.S.T. Tool 91 ft.

Remarks _____

INVOICE SECTION

Open Hole Test	$ 355 00
Straddle Test	$ 160 00
Jars	$ _____
Selective Zone	$ 180 00
Safety Joint	$ _____
Misrun	$ _____
Evaluation	$ _____
Packer	$ _____
Circ. Sub.	$ _____
Total	$ 693 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.

Test Approved By _____ Western Representative Bill Hagen
Signature of Customer or his Authorized Representative

Operator's Time THANK YOU Hrs.

Phone 316 262-5861
316 838-0601

WESTERN TESTERS

P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

No. 585

Date 10-30-76 Ticket 21705 Company McCOX PETROLUEM Co.

Well Name and No. WELLS-TOWNER #1 Dst No. 4 Interval Tested

County KINGMAN State KS. Sec. 18 Twp. 30 S Rg. 7 W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
TOOL OPEN 5:25 P.M.				**PRE FLOW**		1/4" Orifice Plate
GAS TO SURFACE 35 MIN						
6:20	55	10				5,320 CFPD
6:25	60	10				5,320 "
TOOL OPEN - 7:25				**SECOND FLOW**		
7:30	5	66				13,600 CFPD
7:35	10	66				13,600
7:40	15	62				13,200
7:45	20	60				13,000
7:50	25	64				13,400
7:55	30	64				13,400
8:00	35	66				13,600
8:05	40	66				13,600
8:10	45	66				13,600
8:15	50	66				13,600
8:20	55	66				13,600
8:25	60	66				13,600

GAS BOTTLE

Serial No. Date Bottle Filled Date to be Invoiced

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME

Authorized by

FORM WTC 9

WESTERN TESTING CO., INC.

Pressure Data

Date 10-30-76 Test Ticket No. 21705

Recorder No. 2604 Capacity 4150 Location 1341

Clock No. 4763 Elevation 1485 K B. Well Temperature 90

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	701 P.S.I.	Open Tool	5:23 P M	
B First Initial Flow Pressure	40 P.S.I.	First Flow Pressure	60 Mins.	65 Mi
C First Final Flow Pressure	60 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mi
D Initial Closed-in Pressure	507 P.S.I.	Second Flow Pressure	60 Mins.	60 Mi
E Second Initial Flow Pressure	43 P.S.I.	Final Closed-in Pressure	60 Mins.	20 Mi
F Second Final Flow Pressure	60 P.S.I.			
G Final Closed-in Pressure	516 P.S.I.			
H Final Hydrostatic Mud	701 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: 13 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	40
P 2	5	40
P 3	10	41
P 4	15	45
P 5	20	47
P 6	25	49
P 7	30	50
P 8	35	51
P 9	40	53
P10	45	54
P11	50	55
P12	55	58
P13	60	59
P14	65	60
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In

Breakdown: 19 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
0		60
3		124
6		192
9		254
12		312
15		367
18		410
21		438
24	3.5	464
27	3.2	479
30	3	487
33	2.8	496
36	2.66	498
39	2.53	500
42	2.42	503
45	2.33	505
48	2.25	506
51	2.17	506
54	2.11	507
57	2.05	507
60		

Second Flow Pressure

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

Point	Minutes	Press.
0		43
5		45
10		45
15		47
20		49
25		51
30		53
35		54
40		58
45		58
50		59
55		60
60		60
65		
70		
75		
80		
85		
90		

Final Shut-In

Breakdown: Inc. of 3 min. and a final inc. of 0 Min.

Point	Minutes	Press.
0		60
3		207
6		340
9		414
12		459
15		483
18		494
21		502
24	3.5	506
27	3.2	508
30	3	510
33	2.8	511
36	2.66	512
39	2.53	512
42	2.42	513
45	2.33	513
48	2.25	515
51	2.17	515
54	2.11	516
57	2.05	516
60	2.0	516

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

Company McCoy Petroleum Co. Lease & Well No. Wells-Towner #1

Elevation 1485 Kelly Bushing Formation - Effective Pay - Ft. Ticket No. #21705

Date 10-30-76 Sec. 18 Twp. 30S Range 7W County Kingman State Kansas

Test Approved by H. Deane Jirrels Western Representative Bill Hager

Formation Test No. 4 O.K. X Misrun - Interval Tested From 1337' to 1367' Total Depth 4330'

Size Main Hole 77/8 Rat Hole - Conv. X B.T. - Damaged - Yes X No Conv. - B.T. X Damaged - Yes X No

Top Packer Depth 1332 Ft. Size 6 3/4 Bottom Packer Depth 1337 Ft. Size 6 3/4

Straddle X Conv. X B.T. - Damaged - Yes X No Packer Depth 1367 Ft. Size 6 3/4

Tool Size 5½ OD Tool Joint Size 4½ FH Anchor Length 30 Ft. Size 5½ OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 1341 Ft. Clock No. 4763 Depth 1344 Ft. Clock No. 9712

Top Make Kuster Cap. 4150 No. 2604 ~~Outside~~ Inside Bottom Make Kuster Cap. 4000 No. 3660 ~~Inside~~ Outside

Below Straddle: Depth 1372 Rec. No. 3474 Clock No. 8376 ~~Outside~~ Inside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 5:23 P M

Tool Open I.F.P. From 5:25P M. to 6:25P M. 1 Hr. - Min. From (B) 40 P.S.I. To (C) 60 P.S.I.

Tool Closed I.C.I.P. From 6:25P M. to 7:25P M. 1 Hr. - Min (D) 507 P.S.I.

Tool Open F.F.P. From 7:25P M. to 8:25P M. 1 Hr. - Min. From (E) 43 P.S.I. To (F) 60 P.S.I.

Tool Closed F.C.I.P. From 8:25P M. to 9:25P M. 1 Hr. - Min. (G) 516 P.S.I.

Initial Hydrostatic Pressure (A) 701 P.S.I. Final Hydrostatic Pressure (H) 701 P.S.I. Maximum Temp. 90

INFORMATION

BLOW Strong blow throughout test. See attached sheet #585.

Did Well Flow - Yes X No Recovery Total Ft. 130' drilling mud.

Reversed Out - Yes X No Mud Type starch Viscosity 55 Weight 9.6 Water Loss 13.2 cc. Chlorides 30,000 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 Sweetman Drilling Length Drill Pipe? 1316 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½FH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 252 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4H90 In. Length D.S.T. Tool 91 Ft.

Remarks:

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

GAS FLOW REPORT

Date 10-30-76 Ticket 21705 Company McCoy Petroleum Co.

Well Name and No. Wells-Towner #1 Dst No. 4 Interval Tested 1337-1367' total 433

County Kingman State Kansas Sec. 18 Twp. 30S Rg. 7W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
PRE FLOW						
6:20PM	55 min.	10" of water	1/4"	choke		5,320 C.F.P.D.
6:25PM	60 min.	10" of water	1/4"	choke		5,320 C.F.P.D.
Gas to surface in 35 minutes.						
All measurements were taken with a 2" merla orifice well tester with a 1/4" choke.						
SECOND FLOW						
7:30PM	5 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
7:35PM	10 min.	66' of water	1/4"	choke		13,600 C.F.P.D.
7:40PM	15 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
7:45PM	20 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
7:50PM	25 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
7:55PM	30 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
8;00PM	35 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
8:05PM	40 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
8:10PM	45 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
8:15PM	50 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
8:20PM	55 min.	66" of water	1/4"	choke		13,600 C.F.P.D.
8:25PM	60 min.	66" of water	1/4"	choke		13,600 C.F.P.D.

GAS BOTTLE

Serial No. _____ Date Bottle Filled 10-30-76 Date to be Invoiced 10-30-76

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME McCoy Petroleum Co.

Authorized by H. Deane Jirrels

WESTERN TESTING CO., INC.
Pressure Data

Date 10-30-76 Test Ticket No. #21705

Recorder No. 2604 Capacity 4150 Location 1341 Ft.

Clock No. 4763 Elevation 1485 Kelly Bushing Well Temperature 90 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	701 P.S.I.	Open Tool	5:23 P M	
B First Initial Flow Pressure	40 P.S.I.	First Flow Pressure	60 Mins.	65 Mins.
C First Final Flow Pressure	60 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	507 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	43 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	60 P.S.I.			
G Final Closed-in Pressure	516 P.S.I.			
H Final Hydrostatic Mud	701 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 13 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	40
P 2 5	40
P 3 10	41
P 4 15	45
P 5 20	47
P 6 25	49
P 7 30	50
P 8 35	51
P 9 40	53
P10 45	54
P11 50	55
P12 55	58
P13 60	59
P14 65	60
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	60
3	124
6	192
9	254
12	312
15	367
18	410
21	438
24	464
27	479
30	487
33	496
36	498
39	500
42	503
45	505
48	506
51	506
54	507
57	507

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

Point Minutes	Press.
0	43
5	45
10	45
15	47
20	49
25	51
30	53
35	54
40	58
45	58
50	59
55	60
60	60

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

Point Minutes	Press.
0	60
3	207
6	340
9	414
12	459
15	483
18	494
21	502
24	506
27	508
30	510
33	511
36	512
39	512
42	513
45	513
48	515
51	515
54	516
57	516
60	516

Gas Production

B.T. Gauge Numbers	2604		**Ticket Number**		21705
		Pressure			
Initial Hydrostatic		701	Elevation		1485 K.B. ft.
Final Hydrostatic		701	Production Rate	Intial	5.320 m cu. ft.
	Time			Final	13.600 m cu. ft.
1st Flow Initial	— — — —	40	Hole Size		7 7/8 in.
1st Flow Final		60	Footage Tested		30 ft.
Initial Closed In Pressure		507	Mud Weight		9.6 lbs. gal.
2nd Flow Initial	— — — —	43	Gas Viscosity		.018 cp
2nd Flow Final		60	Gas Gravity		.70 —
Final Closed In Pressure		516	Gas Compressibility		.82 —
Extrapolated Static Pressure Initial		494 - 518			
Extrapolated Static Pressure Final		485 - 526			
Slope Psi²/cycle Initial		24,288			
Slope Psi²/cycle Final		41.451			

Remarks:

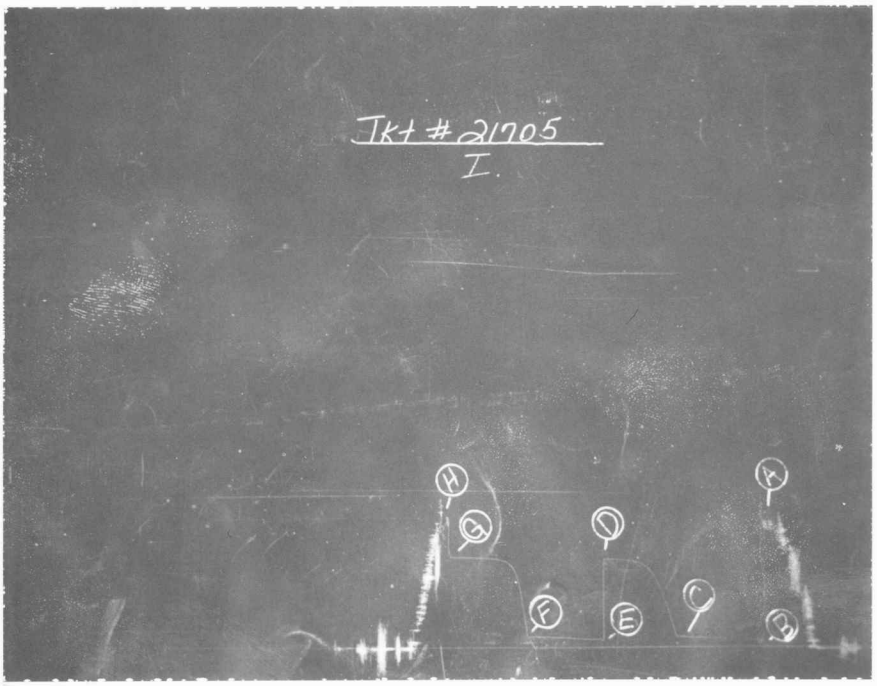
SUMMARY

BT Gauge Number Depth

Product	Equation	Initial	Final	Units
Transmissability	$\frac{Kh}{\mu} = \frac{1637\ Q_g\ ZT}{m}$	151.985	249.355	$\frac{\text{md. ft.}}{\text{cp}}$
Theoretical Flow Capacity	$Kh = \frac{Kh}{\mu}\ \mu$	2.735	4,488	md. ft.
Average Effective Permeability	$K = \frac{Kh}{h}$	.091	.149	md.
	$K_1 = \frac{Kh}{h_1}$	.091	.149	md.
Indicated Flow Capacity	$(Kh)_2 = \frac{3200\ Q_g\ \mu\ ZT\ \text{Log}(0.472\ b/r_w)}{P_s^2 - P_F^2}$	.450	1.356	md. ft.
Damage Ratio	$DR = \frac{\text{Theo. Flow Cap}}{\text{Indicated Flow Cap}}\ \frac{Kh}{(Kh)_2}$	6.07	3.31	—
Indicated Flow Rate	$OF_1 = \frac{Q_g}{P_s^2 - P_F^2}$ OF_1	5.068	13.756	MCFD
	OF_2	5.033	14.092	MCFD
Theoretical Potential Rate	$OF_3 = OF_1\ DR$ Max.	30.763	45.532	MCFD
	$OF_4 = OF_2\ DR$ Min.	30.550	46.645	MCFD
Approx. Radius of Investigation	$b \leftrightarrows \sqrt{Kt}$ or $\sqrt{Kt_0}$	2.337	2.990	ft.
	$b_1 \leftrightarrows \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$	2.337	2.990	ft.
Potentiometric Surface *	$Pot. = (El - GD) + (2.319\ Ps)$			ft.

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Tests pressure charts, and are furnished you for your information. In furnishing such calculations and evaluations based thereon, Western Testing Co., Inc., is merely expressing its opinion. You agree that Western Testing Co., Inc., make no warranty express or implied as to the accuracy of such calculations or opinions, and that Western Testing Co., Inc., shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

INTERPRETATIONS AND CALCULATIONS


Jkt # 21705
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