



P. O. BOX 793 PHONE 793-7903

GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET 25187

Formation Miss. Elevation 1712 K.B. Eff. Pay _____ Ft.

District Augusta Date 9/5/76 Customer Order No. _____

COMPANY NAME McCoy Petroleum Co.

ADDRESS 816 Vickers - K.S.B. & T Building, Wichita, Kansas, 67202

LEASE AND WELL NO. Kauterbach #1 COUNTY Kingman STATE Kansas Sec 20 Twp. 30S Rge. 9W

Mail Inv. To Same Co. Name _____ Address _____ No. Copies Requested 1

Mail Charts To Same Address _____ No. Copies Requested 5

Formation Test No. 1 O.K. Misrun _____ Interval Tested From 4366 to 4382 Total Depth 4382

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

Top Packer Depth 4361 Ft. Size 6 3/4 Bottom Packer Depth 4366 Ft. Size 6 3/4

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

Tool Size 5 1/2 00 Tool Joint Size 4 1/2 FH Anchor Length 16 Ft. Size 5 1/2 00 Surface Choke Size 3/4 1" In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4375 Ft. Clock No. 6896 Depth 4378 Ft. Clock No. 6866

Top Make Kuster Cap. 4200 No. 1559 Inside _____ Outside _____ Bottom Make Kuster Cap. 3150 No. 1562 Inside _____ Outside _____

Below Straddle: Depth _____ Rec. No. _____ Clock No. _____ Depth _____ Fr. Rec. No. _____ Clock No. _____

Time Set Packer 9:28 P.M.

Tool Open I.F.P. From 9:30 M. to 10:00 M. Hr. 30 Min. From (B) 94 96 P.S.I. To (C) 83 89 P.S.I.

Tool Closed I.C.I.P. From 10:00 M. to 10:45 M. Hr. 45 Min. (D) 1096 1098 P.S.I.

Tool Open F.F.P. From 10:45 M. to 11:45 M. Hr. 60 Min. From (E) 761 42 P.S.I. To (F) 62 68 P.S.I.

Tool Closed F.C.I.P. From 11:45 M. to 12:45 M. Hr. 60 Min. (G) 1043 1033 P.S.I.

Initial Hydrostatic Pressure (A) 2,200 2200 P.S.I. Final Hydrostatic Pressure (H) 2,200 2196 P.S.I. Maximum Temp. 128

INFORMATION

BLOW Strong blow throughout test. See attached sheet for Gas measurements

Did Well Flow Yes No _____ Recovery Total Ft. 30' drlg. mud

Reversed Out Yes No _____ Mud Type Starch Viscosity 54 Weight 9.2 Water Loss 10.6 cc. Chlorides 38,000

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 #1 Length Drill Pipe 4102 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 FH In.

Length Weight Pipe _____ ft. I.D. Weight Pipe _____ In. Tool Joint Size _____ In. Length Drill Collars 280 ft. I.D. Drill Collars 2 1/4 In.

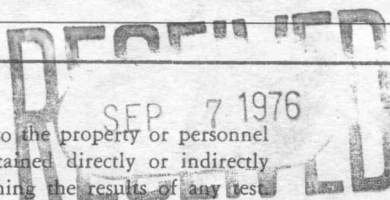
Tool Joint Size 4 1/4 90 In. Length D.S.T. Tool 36 ft.

Remarks Gas gauged; 436,000 C.F.P.D. Gas at 10:00 I.C.I.P. 3/4" choke

Gas gauged; 442,000 C.F.P.D. Gas at 11:45 F.C.I.P.

INVOICE SECTION

Open Hole Test	\$ 390
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 Robert E. McCann Western Representative Bee Baker

Signature of Customer or his Authorized Representative

Operator's Time _____ Hrs.

WESTERN TESTING CO., INC.

Pressure Data

Date 9/5 Test Ticket No. 25187
 Recorder No. 1559 Capacity 4200 Location 4375 Ft.
 Clock No. 6896 Elevation 1712 KB Well Temperature 128 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2206</u> P.S.I.	<u>9:28 P</u> M	
B First Initial Flow Pressure	<u>96</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>89</u> P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>1098</u> P.S.I.	<u>60</u> Mins.	
E Second Initial Flow Pressure	<u>142</u> P.S.I.	<u>60</u> Mins.	
F Second Final Flow Pressure	<u>68</u> P.S.I.		
G Final Closed-in Pressure	<u>1033</u> P.S.I.		
H Final Hydrostatic Mud	<u>2196</u> P.S.I.		

PRESSURE BREAKDOWN

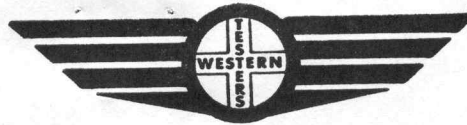
First Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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	<u>96</u>	0	<u>89</u>	0	<u>142</u>	0	<u>68</u>
P 2	<u>94</u>	3	<u>968</u>	3	<u>88</u>	3	<u>704</u>
P 3	<u>94</u>	6	<u>923</u>	6	<u>84</u>	6	<u>824</u>
P 4	<u>94</u>	9	<u>981</u>	9	<u>79</u>	9	<u>875</u>
P 5	<u>92</u>	12	<u>1013</u>	12	<u>75</u>	12	<u>908</u>
P 6	<u>90</u>	15	<u>1031</u>	15	<u>75</u>	15	<u>929</u>
P 7	<u>89</u>	18	<u>1046</u>	18	<u>73</u>	18	<u>948</u>
P 8		21	<u>1056</u>	21	<u>72</u>	21	<u>962</u>
P 9		24	<u>1065</u>	24	<u>71</u>	24	<u>973</u>
P10		27	<u>1071</u>	27	<u>70</u>	27	<u>983</u>
P11		30	<u>1077</u>	30	<u>69</u>	30	<u>992</u>
P12		33	<u>1084</u>	33	<u>68</u>	33	<u>998</u>
P13		36	<u>1088</u>	36	<u>68</u>	36	<u>1002</u>
P14		39	<u>1092</u>	39		39	<u>1008</u>
P15		42	<u>1094</u>	42		42	<u>1013</u>
P16		45	<u>1098</u>	45		45	<u>1017</u>
P17		48		48		48	<u>1023</u>
P18		51		51		51	<u>1025</u>
P19		54		54		54	<u>1027</u>
P19		57		57		57	<u>1031</u>
P20		60		60		60	<u>1033</u>



GAS FLOW REPORT

No 464

Date 9/5/76 Ticket 25187 Company McCoy Petroleum Co.
Well Name and No. Lauterbach #1 Dst No. #1 Interval Tested 4366'-4382'
County Kingman State Kansas Sec. 20 Twp. 30S Rg. 9W

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						
Tool open 9:30 B.S.T. 2min.						
9:35 PM	5 min.	3/4" choke		19	P.S.I.G	384,000 C.F.P.D. Gas
:40 PM	10 min.	"		22		424,000 C.F.P.D. Gas
:45 PM	15 min.	"		23		436,000 C.F.P.D. Gas
:50	20	"		"		" " " " "
9:55	25	"		"		" " " " "
10:00	30	3/4" choke		23		436,000 C.F.P.D. Gas
SECOND FLOW For I.C.I.P. [OPEN 10:45]						
Tool Closed 10:00 to 10:45						
10:50	35	1" choke		14	P.S.I.G	577,000 C.F.P.D. Gas
:55	40	"		13		552,000 C.F.P.D. " -10
11:00	45	"		12		526,000 " " " "
:05	50	"		"		499,000 " " " " -20
:10	55	"		10		472,000 " " " "
:15	60	"		"		" " " " " " -30
:20	65	"		"		" " " " " "
:25	70	"		9		442,000 " " " " -40
:30	75	"		"		" " " " " "
:35	80	"		9		442,000 " " " " 50
:40	85	"		9		442,000 " " " "
11:45 PM	90	1" choke		9		442,000 C.F.P.D. Gas 60

GAS BOTTLE

Serial No. _____ Date Bottle Filled 9/5/76 Date to be Invoiced 9/5/76

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 Robert E. McCann



INC.

P. O. Box 1599
Wichita, Kansas 67201

Company McCoy Petroleum Co. Lease & Well No. Lauterbach #1
Elevation 1712 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. #25187
Date 9-5-76 Sec. 20 Twp. 30S Range 9W County Kingman State Kansas
Test Approved by Robert E. McCann Western Representative Bill Baker

Formation Test No. 1 O.K. Misrun Interval Tested From 4366' to 4382' Total Depth 4382'
Size Main Hole 77/8 Rat Hole Conv. B.T. Damaged Yes No Conv. B.T. Damaged Yes No
Top Packer Depth 4361' Ft. Size 6 3/4 Bottom Packer Depth 4366' 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 16 Ft. Size 5 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 4375' Ft. Clock No. 6896 Depth 4375' Ft. Clock No. 6866
Top Make Kuster Cap. 4200 No. 1559 Inside Outside Bottom Make Kuster Cap. 3150 No. 1562 Inside Outside
Below Straddle: Depth Rec. No. Clock No. Inside Outside Depth Ft. Rec. No. Clock No. Inside Outside

Time Set Packer 9:28 P M
Tool Open I.F.P. From 9:30 P.M. to 10:00 P.M. - Hr. 30 Min. From (B) 96 P.S.I. To (C) 89 P.S.I.
Tool Closed I.C.I.P. From 10:00 P.M. to 10:45 P.M. - Hr. 45 Min (D) 1098 P.S.I.
Tool Open F.F.P. From 10:45 P.M. to 11:45 P.M. - Hr. 60 Min. From (E) 142 P.S.I. To (F) 68 P.S.I.
Tool Closed F.C.I.P. From 11:45 P.M. to 12:45 A.M. - Hr. 60 Min. (G) 1033 P.S.I.
Initial Hydrostatic Pressure (A) 2206 P.S.I. Final Hydrostatic Pressure (H) 2196 P.S.I. Maximum Temp. 128

INFORMATION

BLOW Strong Blow throughout test. See attached sheet for gas measurements.

Did Well Flow Yes No Recovery Total Ft. 30' drilling mud.

Reversed Out Yes No Mud Type Starch Viscosity 54 Weight 9.2 Water Loss 10.6 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 #1 Length Drill Pipe 4102 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 FH In.

Length Weight Pipe Ft. I.D. Weight Pipe In. Tool Joint Size In. Length Drill Collars 280 Ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4" H90. Length D.S.T. Tool 36 Ft.

Remarks:
Gas gauged; 436,000 C.F.P.D., gas at 10:00 - I.C.I.P. 3/4" choke
Gas gauged; 442,000 C.F.P.D., gas at 11:45 - F.C.I.P.



INC.

P. O. Box 1599

Wichita, Kansas 67201

GAS FLOW REPORT

Date 9-5-76 Ticket #25187 Company McCoy Petroleum Co.
 Well Name and No. Lauterbach #1 Dst No. #1 Interval Tested 4366' - 4382'
 County Kingman State Kansas Sec. 20 Twp. 30S Rg. 9W

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 9:30 P.M. - G.S.T. 2 min. PRE FLOW						
9:30 P.M.	5 min.	3/4" choke		19 P.S.I.G.		384,000 C.F.P.D. Gas
:40 P.M.	10 min.	3/4" choke		22 P.S.I.G.		424,000 C.F.P.D. Gas
:45 P.M.	15 min.	3/4" choke		23 P.S.I.G.		436,000 C.F.P.D. Gas
:50 P.M.	20 min.	3/4" choke		23 P.S.I.G.		436,000 C.F.P.D. Gas
:55 P.M.	25 min.	3/4" choke		23 P.S.I.G.		436,000 C.F.P.D. Gas
10:00 P.M.	30 min.	3/4" choke		23 P.S.I.G.		436,000 C.F.P.D. Gas
Tool closed 10:00 to 10:45 for I.C.I.P. SECOND FLOW Open 10:45						
10:50 P.M.	35 min.	1" choke		14 P.S.I.G.		577,000 C.F.P.D. Gas
:55 P.M.	40 min.	1" choke		13 P.S.I.G.		552,000 C.F.P.D. Gas
11:00 P.M.	45 min.	1" choke		12 P.S.I.G.		526,000 C.F.P.D. Gas
:05 P.M.	50 min.	1" choke		11 P.S.I.G.		499,000 C.F.P.D. Gas
:10 P.M.	55 min.	1" choke		10 P.S.I.G.		472,000 C.F.P.D. Gas
:15 P.M.	60 min.	1" choke		10 P.S.I.G.		472,000 C.F.P.D. Gas
:20 P.M.	65 min.	1" choke		10 P.S.I.G.		472,000 C.F.P.D. Gas
:25 P.M.	70 min.	1" choke		9 P.S.I.G.		442,000 C.F.P.D. Gas
:30 P.M.	75 min.	1" choke		9 P.S.I.G.		442,000 C.F.P.D. Gas
:35 P.M.	80 min.	1" choke		9 P.S.I.G.		442,000 C.F.P.D. Gas
:40 P.M.	85 min.	1" choke		9 P.S.I.G.		442,000 C.F.P.D. Gas
11:45 P.M.	90 min.	1" choke		9 P.S.I.G.		442,000 C.F.P.D. Gas

GAS BOTTLE

Serial No. - Date Bottle Filled 9-5-76 Date to be Invoiced 9-5-76

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 Robert E. McCann

WESTERN TESTING CO., INC.
Pressure Data

Date 9-5-76

Test Ticket No. #25187

Recorder No. 1559 Capacity 4200 Location 4375 Ft.

Clock No. 6896 Elevation 1712 Kelly Bushing Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2206</u>	<u>P.S.I.</u>	<u>9:28 P</u>	<u>M</u>
B First Initial Flow Pressure	<u>96</u>	<u>P.S.I.</u>	<u>30</u>	<u>Mins.</u>
C First Final Flow Pressure	<u>89</u>	<u>P.S.I.</u>	<u>45</u>	<u>Mins.</u>
D Initial Closed-in Pressure	<u>1098</u>	<u>P.S.I.</u>	<u>60</u>	<u>Mins.</u>
E Second Initial Flow Pressure	<u>142</u>	<u>P.S.I.</u>	<u>60</u>	<u>Mins.</u>
F Second Final Flow Pressure	<u>68</u>	<u>P.S.I.</u>		
G Final Closed-in Pressure	<u>1033</u>	<u>P.S.I.</u>		
H Final Hydrostatic Mud	<u>2196</u>	<u>P.S.I.</u>		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>20</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>0</u>	<u>0</u>	<u>89</u>	<u>0</u>	<u>142</u>	<u>0</u>	<u>68</u>
P 2	<u>5</u>	<u>3</u>	<u>768</u>	<u>5</u>	<u>88</u>	<u>3</u>	<u>704</u>
P 3	<u>10</u>	<u>6</u>	<u>923</u>	<u>10</u>	<u>84</u>	<u>6</u>	<u>824</u>
P 4	<u>15</u>	<u>9</u>	<u>981</u>	<u>15</u>	<u>79</u>	<u>9</u>	<u>875</u>
P 5	<u>20</u>	<u>12</u>	<u>1013</u>	<u>20</u>	<u>75</u>	<u>12</u>	<u>908</u>
P 6	<u>25</u>	<u>15</u>	<u>1031</u>	<u>25</u>	<u>75</u>	<u>15</u>	<u>929</u>
P 7	<u>30</u>	<u>18</u>	<u>1046</u>	<u>30</u>	<u>73</u>	<u>18</u>	<u>948</u>
P 8	<u>35</u>	<u>21</u>	<u>1056</u>	<u>35</u>	<u>72</u>	<u>21</u>	<u>962</u>
P 9	<u>40</u>	<u>24</u>	<u>1065</u>	<u>40</u>	<u>71</u>	<u>24</u>	<u>973</u>
P10	<u>45</u>	<u>27</u>	<u>1071</u>	<u>45</u>	<u>70</u>	<u>27</u>	<u>983</u>
P11	<u>50</u>	<u>30</u>	<u>1077</u>	<u>50</u>	<u>69</u>	<u>30</u>	<u>992</u>
P12	<u>55</u>	<u>33</u>	<u>1084</u>	<u>55</u>	<u>68</u>	<u>33</u>	<u>998</u>
P13	<u>60</u>	<u>36</u>	<u>1088</u>	<u>60</u>	<u>68</u>	<u>36</u>	<u>1002</u>
P14		<u>39</u>	<u>1092</u>	<u>65</u>		<u>39</u>	<u>1008</u>
P15		<u>42</u>	<u>1094</u>	<u>70</u>		<u>42</u>	<u>1013</u>
P16		<u>45</u>	<u>1098</u>	<u>75</u>		<u>45</u>	<u>1017</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>1023</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	<u>1025</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>1027</u>
P20		<u>57</u>				<u>57</u>	<u>1031</u>
		<u>60</u>				<u>60</u>	<u>1033</u>

TKT# 25187

I

