



## DRILL STEM TEST REPORT

Prepared For: **McCoy Petroleum Corp.**

9342 E Central  
Wichita, KS 67206

ATTN: Dave Williams

### **Koehn F #1-29**

#### **29-29s-31w Haskell,KS**

Start Date: 2019.11.08 @ 04:35:00

End Date: 2019.11.08 @ 14:14:55

Job Ticket #: 47662                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.11.13 @ 09:40:10



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

McCoy Petroleum Corp.

**29-29s-31w Haskell,KS**

9342 E Central  
Wichita, KS 67206

**Koehn F #1-29**

Job Ticket: 47662

**DST#: 1**

ATTN: Dave Williams

Test Start: 2019.11.08 @ 04:35:00

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: 2862.00 ft (KB)

Time Tool Opened: 07:38:40

Time Test Ended: 14:14:55

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

**Interval: 4761.00 ft (KB) To 4815.00 ft (KB) (TVD)**

Reference Elevations: 2862.00 ft (KB)

Total Depth: 4815.00 ft (KB) (TVD)

2851.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8289**

**Inside**

Press@RunDepth: 50.07 psig @ 4763.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.11.08

End Date:

2019.11.08

Last Calib.:

2019.11.08

Start Time: 04:35:02

End Time:

14:14:55

Time On Btm:

2019.11.08 @ 07:38:20

Time Off Btm:

2019.11.08 @ 11:53:30

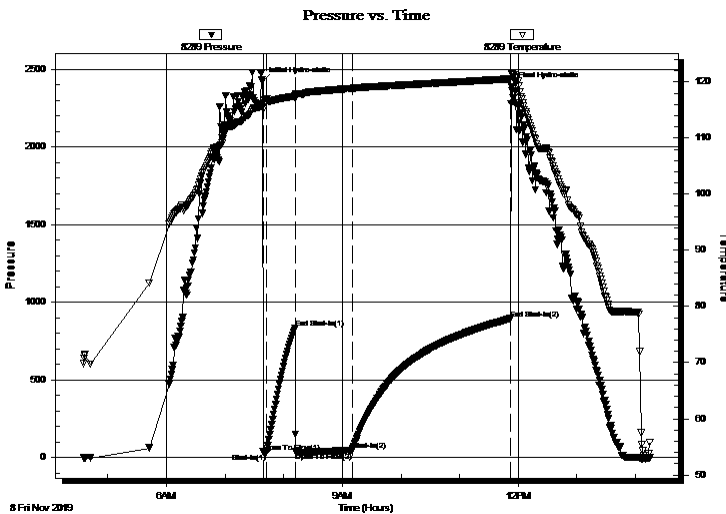
TEST COMMENT: IF: Stong building blow , 10.2"

IS: No blow back

FF: BOB ASAO, strong building blow , 131.25"

FS: No blow back

## PRESSURE SUMMARY



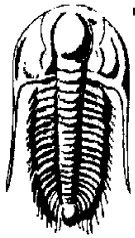
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2420.98	116.05	Initial Hydro-static
1	37.18	115.15	Open To Flow (1)
4	27.35	117.11	Shut-In(1)
34	834.16	117.48	End Shut-In(1)
34	37.10	117.75	Open To Flow (2)
92	50.07	118.87	Shut-In(2)
254	894.88	120.55	End Shut-In(2)
256	2386.48	121.71	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	gassy oily mud 10%G,5%O,85%M	0.44
0.00	2174' GIP	0.00

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

McCoy Petroleum Corp.

29-29s-31w Haskell, KS

9342 E Central  
Wichita, KS 67206

Koehn F #1-29

ATTN: Dave Williams

Job Ticket: 47662      **DST#: 1**  
Test Start: 2019.11.08 @ 04:35:00

### GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: 2862.00 ft (KB)

Time Tool Opened: 07:38:40

Time Test Ended: 14:14:55

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

**Interval: 4761.00 ft (KB) To 4815.00 ft (KB) (TVD)**

Total Depth: 4815.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2862.00 ft (KB)

2851.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 6672      Outside**

Press@RunDepth:                      psig @ 4763.00 ft (KB)

Start Date: 2019.11.08

End Date:

2019.11.08

Start Time: 04:35:02

End Time:

14:14:55

Capacity: 8000.00 psig

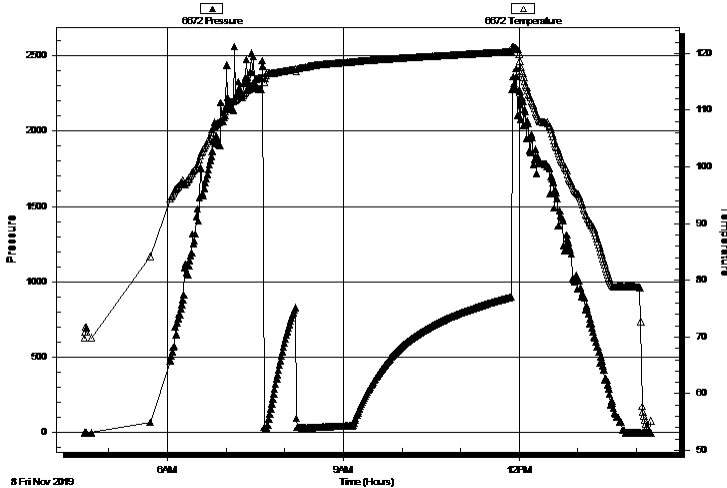
Last Calib.: 1899.12.30

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Stong building blow , 10.2"  
IS: No blow back  
FF: BOB ASAO, strong building blow , 131.25"  
FS: No blow back

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)
90.00	gassy oily mud 10%G,5%O,85%M	0.44
0.00	2174' GIP	0.00

### Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

McCoy Petroleum Corp.

**29-29s-31w Haskell, KS**

9342 E Central  
Wichita, KS 67206

**Koehn F #1-29**

Job Ticket: 47662

**DST#: 1**

ATTN: Dave Williams

Test Start: 2019.11.08 @ 04:35:00

## Tool Information

Drill Pipe:	Length: 4528.00 ft	Diameter: 3.80 inches	Volume: 63.52 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 211.00 ft	Diameter: 2.25 inches	Volume: 1.04 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 64.56 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4761.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4739.00	
Hydraulic tool	5.00			4744.00	
Jars	5.00			4749.00	
Safety Joint	3.00			4752.00	
Packer	5.00			4757.00	27.00 Bottom Of Top Packer
Packer	4.00			4761.00	
Stubb	1.00			4762.00	
Perforations	1.00			4763.00	
Recorder	0.00	8289	Inside	4763.00	
Recorder	0.00	6672	Outside	4763.00	
Perforations	15.00			4778.00	
Change Over Sub	1.00			4779.00	
Drill Pipe	32.00			4811.00	
Change Over Sub	1.00			4812.00	
Bullnose	3.00			4815.00	54.00 Bottom Packers & Anchor

**Total Tool Length: 81.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

McCoy Petroleum Corp.

**29-29s-31w Haskell,KS**

9342 E Central  
Wichita, KS 67206

**Koehn F #1-29**

Job Ticket: 47662

**DST#: 1**

ATTN: Dave Williams

Test Start: 2019.11.08 @ 04:35:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	gassy oily mud 10%G,5%O,85%M	0.443
0.00	2174' GIP	0.000

Total Length: 90.00 ft      Total Volume: 0.443 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2174' GIP

Serial #: 8289

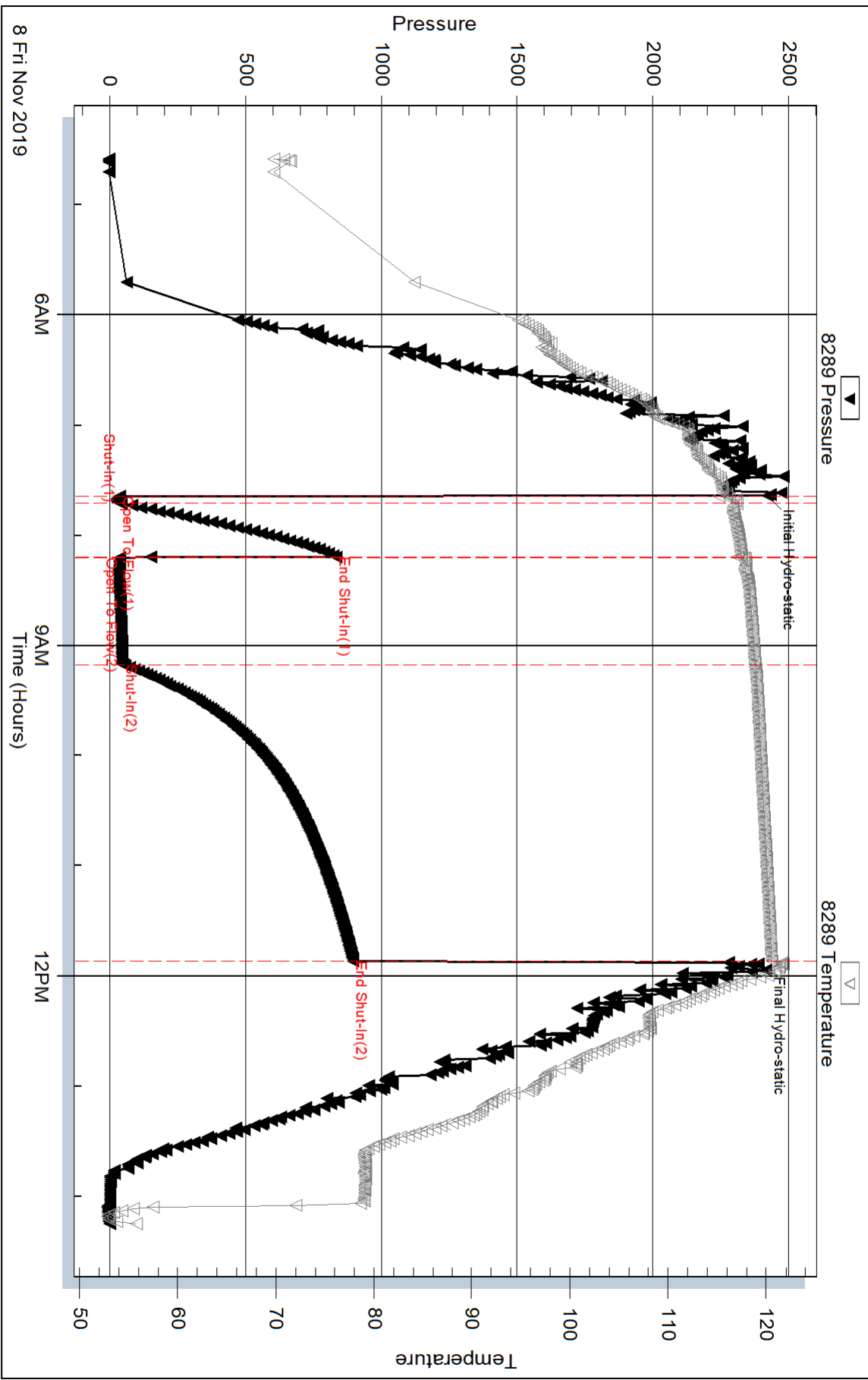
Inside

McCoy Petroleum Corp.

Koehn F#1-29

DST Test Number: 1

# Pressure vs. Time



Triobite Testing, Inc

Ref. No: 47662

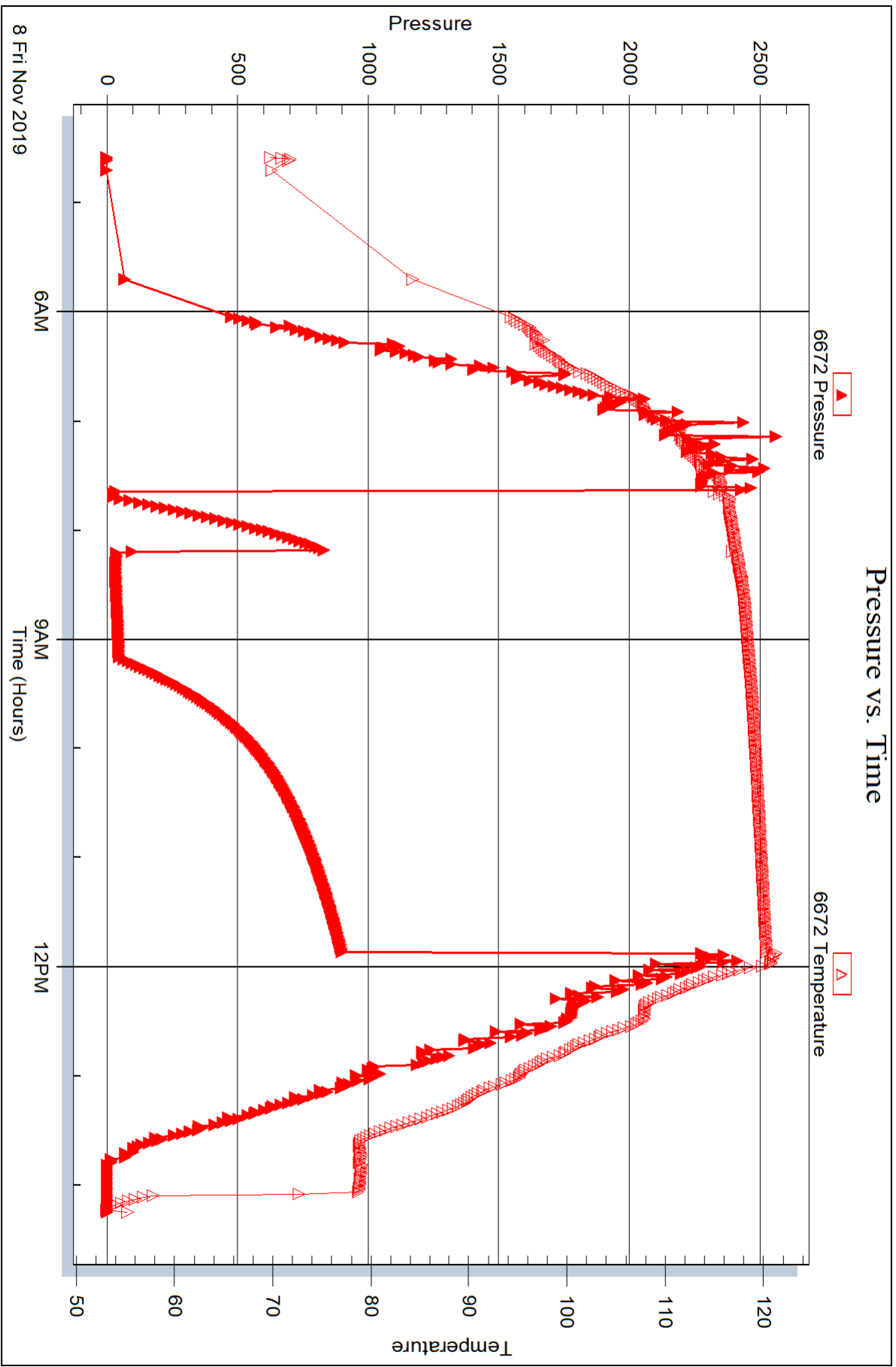
Printed: 2019-11-13 @ 09:40:12

Serial #: 6672

Outside McCoy Petroleum Corp.

Koehn F#1-29

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **McCoy Petroleum Corp.**

9342 E Central  
Wichita, KS 67206

ATTN: Dave Williams

### **Koehn F #1-29**

#### **29-29s-31w Haskell,KS**

Start Date: 2019.11.09 @ 18:52:00

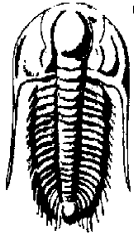
End Date: 2019.11.10 @ 04:11:40

Job Ticket #: 47663                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.11.13 @ 09:38:24





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

McCoy Petroleum Corp.

**29-29s-31w Haskell, KS**

9342 E Central  
Wichita, KS 67206

**Koehn F #1-29**

Job Ticket: 47663

**DST#: 2**

ATTN: Dave Williams

Test Start: 2019.11.09 @ 18:52:00

## GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: 2862.00 ft (KB)

Time Tool Opened: 21:45:05

Time Test Ended: 04:11:40

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

**Interval: 5182.00 ft (KB) To 5261.00 ft (KB) (TVD)**

Reference Elevations: 2862.00 ft (KB)

Total Depth: 5261.00 ft (KB) (TVD)

2851.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 8289**

**Inside**

Press@RunDepth: 24.46 psig @ 5184.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.11.09

End Date:

2019.11.10

Last Calib.:

2019.11.09

Start Time:

18:52:02

End Time:

04:11:40

Time On Btm:

2019.11.09 @ 21:44:45

Time Off Btm:

2019.11.10 @ 01:50:00

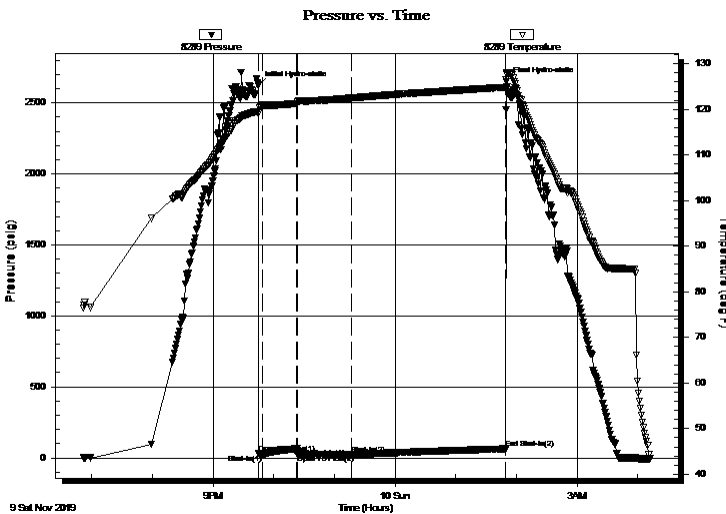
TEST COMMENT: IF: Weak surface blow, 1.1"

IS: No blow back

FF: Weak surface blow, 1.1", died

FS: No blow back

## PRESSURE SUMMARY



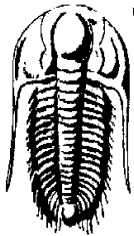
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2625.09	119.21	Initial Hydro-static
1	31.75	119.14	Open To Flow (1)
5	22.94	120.99	Shut-In(1)
38	64.80	121.29	End Shut-In(1)
39	22.81	121.33	Open To Flow (2)
93	24.46	122.51	Shut-In(2)
245	63.61	124.85	End Shut-In(2)
246	2648.82	127.90	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%	0.02

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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**Koehn F #1-29**

ATTN: Dave Williams

Job Ticket: 47663

**DST#: 2**

Test Start: 2019.11.09 @ 18:52:00

**GENERAL INFORMATION:**

Formation: **Miss.**

Deviated: No Whipstock: 2862.00 ft (KB)

Time Tool Opened: 21:45:05

Time Test Ended: 04:11:40

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

**Interval: 5182.00 ft (KB) To 5261.00 ft (KB) (TVD)**

Total Depth: 5261.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2862.00 ft (KB)

2851.00 ft (CF)

KB to GR/CF: 11.00 ft

**Serial #: 6672 Outside**

Press@RunDepth: psig @ 5184.00 ft (KB)

Start Date: 2019.11.09

End Date: 2019.11.10

Capacity: 8000.00 psig

Last Calib.: 2019.11.09

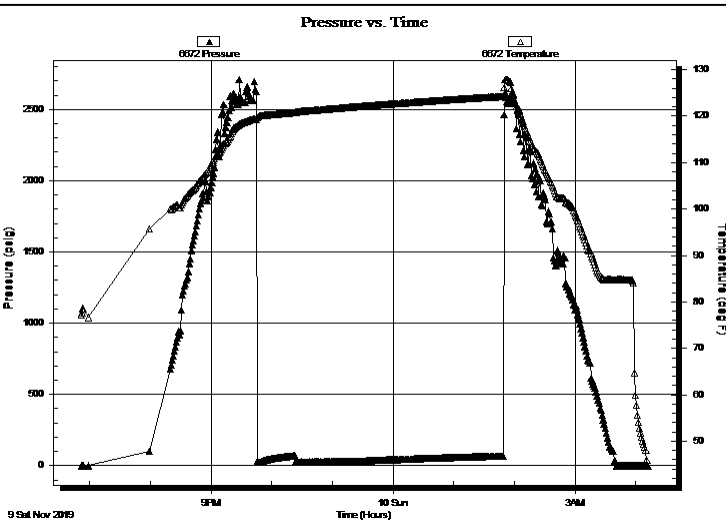
Start Time: 18:52:02

End Time: 04:11:40

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Weak surface blow, 1.1"  
IS: No blow back  
FF: Weak surface blow, 1.1", died  
FS: No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

**Recovery**

Length (ft)	Description	Volume (bbl)
5.00	mud 100%	0.02

**Gas Rates**

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

McCoy Petroleum Corp.

**29-29s-31w Haskell, KS**

9342 E Central  
Wichita, KS 67206

**Koehn F #1-29**

Job Ticket: 47663

**DST#: 2**

ATTN: Dave Williams

Test Start: 2019.11.09 @ 18:52:00

## Tool Information

Drill Pipe:	Length: 4975.00 ft	Diameter: 3.80 inches	Volume: 69.79 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 211.00 ft	Diameter: 2.25 inches	Volume: 1.04 bbl	Weight to Pull Loose: 100000.0 lb
			<u>Total Volume: 70.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	5182.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.00 ft			
Tool Length:	106.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			5160.00	
Hydraulic tool	5.00			5165.00	
Jars	5.00			5170.00	
Safety Joint	3.00			5173.00	
Packer	5.00			5178.00	27.00 Bottom Of Top Packer
Packer	4.00			5182.00	
Stubb	1.00			5183.00	
Perforations	1.00			5184.00	
Recorder	0.00	8289	Inside	5184.00	
Recorder	0.00	6672	Outside	5184.00	
Perforations	9.00			5193.00	
Change Over Sub	1.00			5194.00	
Drill Pipe	63.00			5257.00	
Change Over Sub	1.00			5258.00	
Bullnose	3.00			5261.00	79.00 Bottom Packers & Anchor

**Total Tool Length: 106.00**



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TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

McCoy Petroleum Corp.

**29-29s-31w Haskell, KS**

9342 E Central  
Wichita, KS 67206

**Koehn F #1-29**

Job Ticket: 47663

**DST#: 2**

ATTN: Dave Williams

Test Start: 2019.11.09 @ 18:52:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4600.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

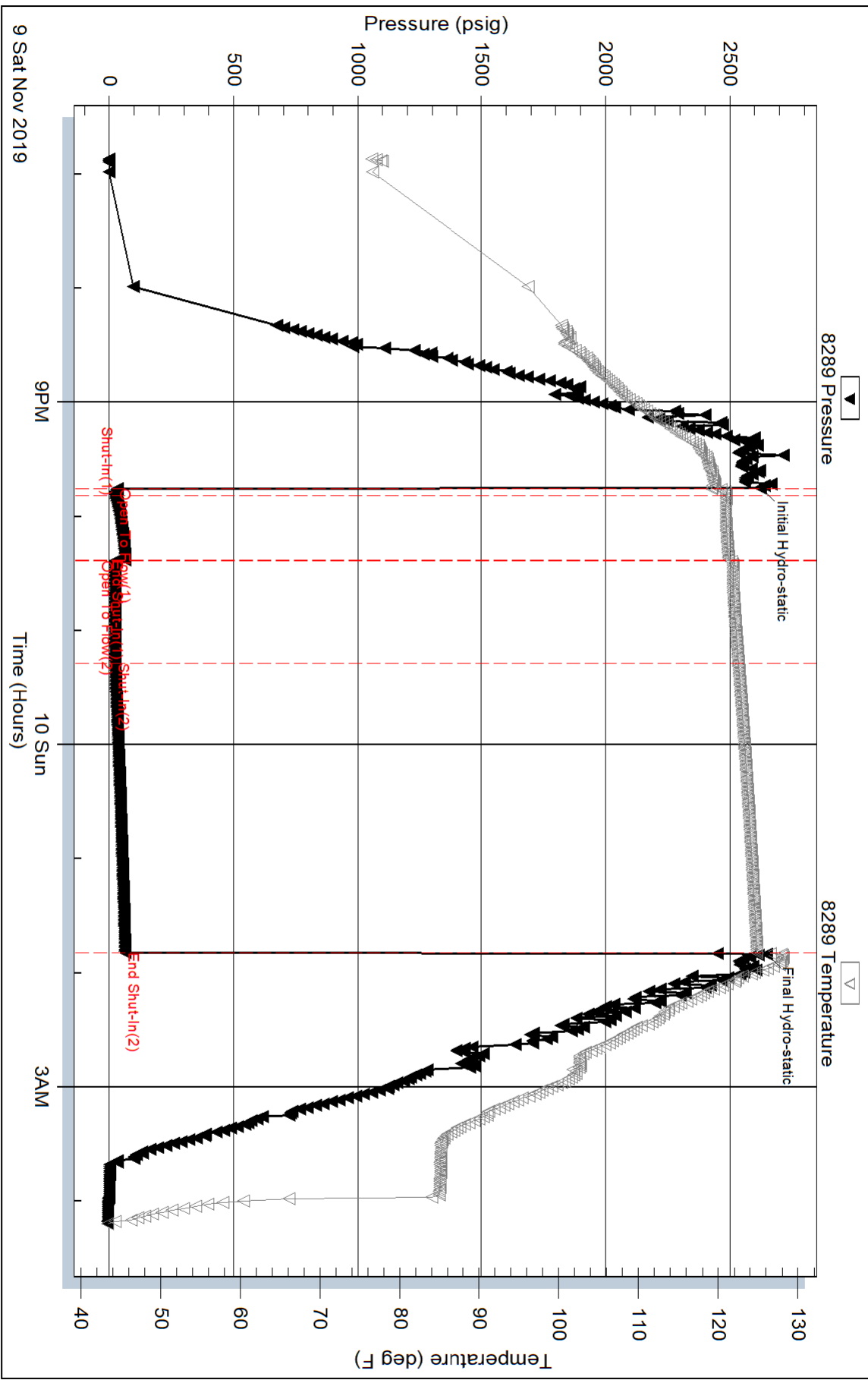
Serial #:

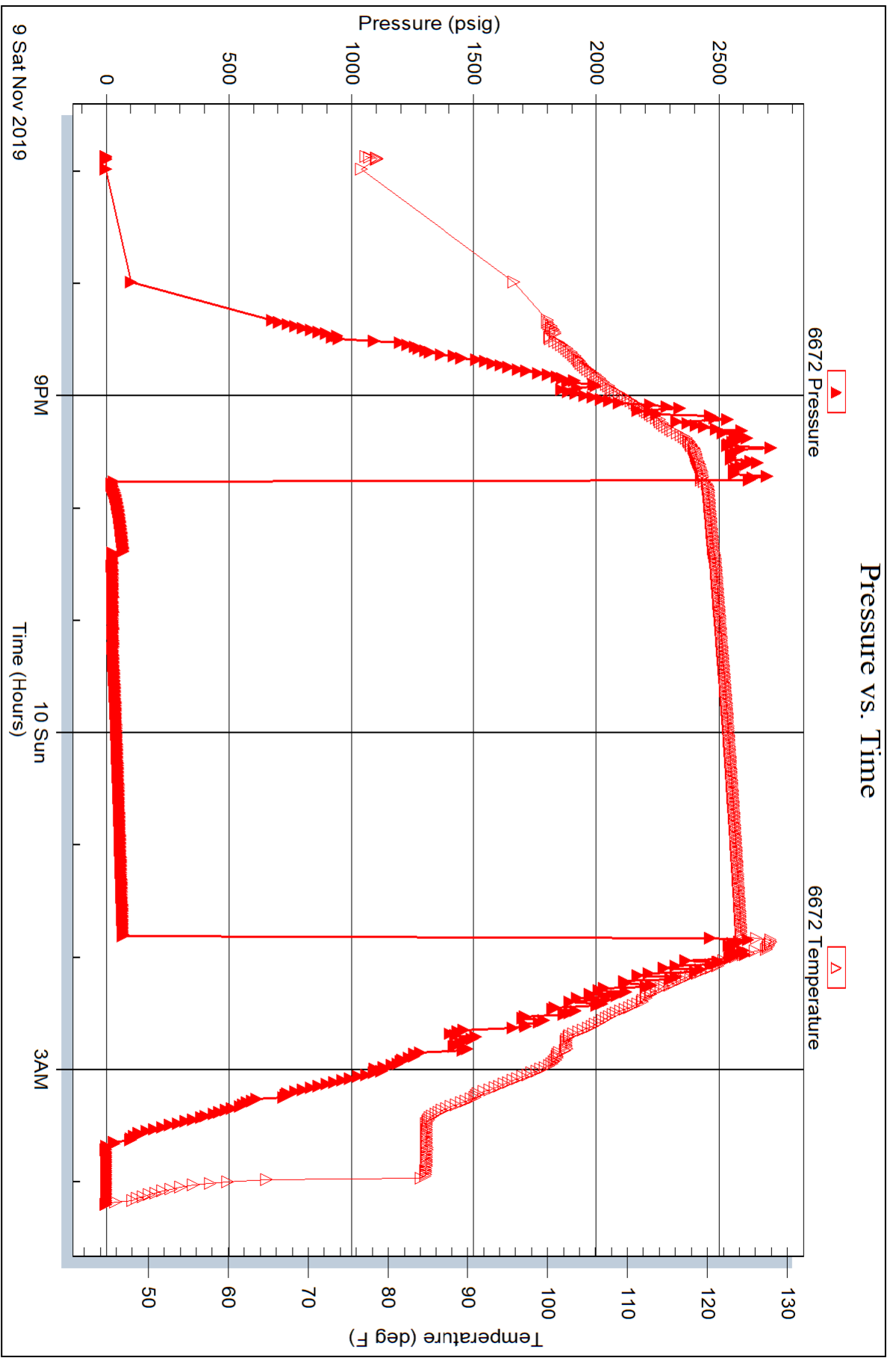
Laboratory Name:

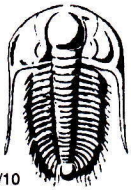
Laboratory Location:

Recovery Comments:

# Pressure vs. Time







# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 47662

Well Name & No. Koehn F 1-29 Test No. 1 Date 11-8-19  
 Company McCoy Petroleum Corp. Elevation 2862 KB 2851 GL  
 Address 9342 E Central Wichita, KS 67206  
 Co. Rep / Geo. Dave Williams Rig Starling #5  
 Location: Sec. 29 Twp. 29 Rge. 31 Co. Haskell State KS

Interval Tested 4761-4815 Zone Tested Morrison  
 Anchor Length 54' Drill Pipe Run 4528 Mud Wt. 9.2  
 Top Packer Depth 4756 Drill Collars Run 211 Vis 49  
 Bottom Packer Depth 4761 Wt. Pipe Run N.A. WL 9.2  
 Total Depth 4815 Chlorides 4800 ppm System LCM 2#

Blow Description IF: Strong building blow, 10.2 inches  
ISL: No blow back  
FF: BOB ASAO, strong building blow, 131.25 inches  
FSL: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>90</u>	<u>gassy oily mud</u>	<u>10</u>	<u>5</u>		<u>85</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>2174' GIP</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

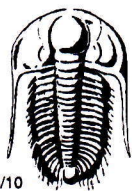
Rec Total 90 BHT 120 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2421</u>	<input checked="" type="checkbox"/> Test <u>CONV.</u> 1300	T-On Location <u>0300</u>
(B) First Initial Flow <u>37</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0500</u>
(C) First Final Flow <u>27</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0738</u>
(D) Initial Shut-In <u>834</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>1151</u>
(E) Second Initial Flow <u>37</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>1400</u>
(F) Second Final Flow <u>50</u>	<input checked="" type="checkbox"/> Mileage <u>90</u> 90	Comments <u>bits on @ 0435</u>
(G) Final Shut-In <u>895</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2386</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open <u>3</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>150</u>	<input type="checkbox"/> Day Standby _____	Total <u>1715</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1715</u>	

Approved By Dave P. Williams Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of 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 for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 47663

Well Name & No. Koehn F 1-29 Test No. 2 Date 10-9-19  
 Company McCoy Petroleum Corp. Elevation 2062 KB 2851 GL  
 Address 9342 E Central Wichita, KS 67206  
 Co. Rep / Geo. Dave Williams Rig Sterling #5  
 Location: Sec. 29 Twp. 29 Rge. 31 Co. Haskell State KS

Interval Tested S182-5261 Zone Tested M.S.S.  
 Anchor Length 79' Drill Pipe Run 4975 Mud Wt. 9.15  
 Top Packer Depth 5177 Drill Collars Run 211 Vis 50  
 Bottom Packer Depth 5182 Wt. Pipe Run N.A. WL 7.2  
 Total Depth 5261 Chlorides 4600 ppm System LCM 3#

Blow Description IF: Weak surface blow, 1.1 inches  
ISI: No blow back  
FP: Weak surface blow, 1.1 inches, dried  
FSI: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>S</u>	<u>Mud</u>				<u>100</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total S BHT 125 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2625  Test CONV. 1400 T-On Location 1830  
 (B) First Initial Flow ~~35~~ 32  Jars 250 T-Started 1930  
 (C) First Final Flow ~~32~~ 23  Safety Joint 75 T-Open 2143  
 (D) Initial Shut-In ~~63~~ 65  Circ Sub \_\_\_\_\_ T-Pulled 0146  
 (E) Second Initial Flow ~~25~~ 23  Hourly Standby \_\_\_\_\_ T-Out \_\_\_\_\_  
 (F) Second Final Flow ~~23~~ 24  Mileage 90 Comments lets on @ 1852  
 (G) Final Shut-In ~~64~~ 64  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2649  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 3  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 60  Day Standby \_\_\_\_\_ Total 1815  
 Final Shut-In 150  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1815

Approved By David P. Williams Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged or any kind of 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 for at cost by the party for whom the test is made.