



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Fossil Resources, LLC

108 E 12th St #5
Hays, Ks 67607

ATTN: Lyle Herrman

11 13s 36w Logan, Ks

Plummer #2

Job Ticket: 64685

DST#: 1

Test Start: 2017.10.03 @ 19:29:00

GENERAL INFORMATION:

Formation: **LKC - C**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: **21:49:30**
 Time Test Ended: **03:09:45**
 Interval: **3851.00 ft (KB) To 3880.00 ft (KB) (TVD)**
 Total Depth: **3880.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition:

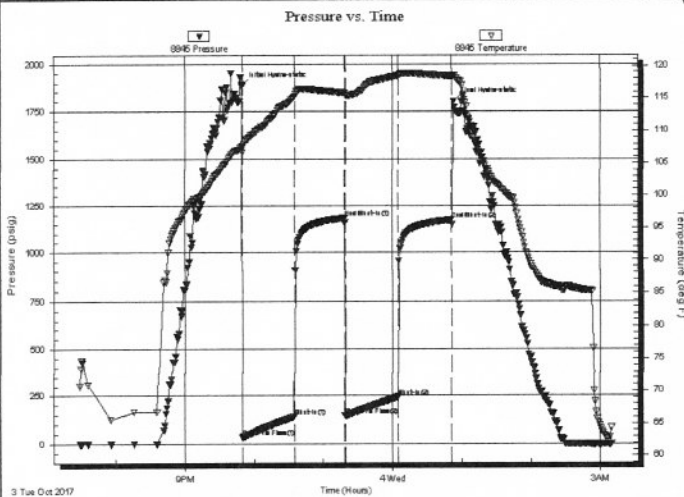
Test Type: **Conventional Bottom Hole (Initial)**
 Tester: **Bradley Walter**
 Unit No: **78**
 Reference Elevations: **3010.00 ft (KB)**
3004.00 ft (CF)
 KB to GR/CF: **6.00 ft**

Serial #: 8845

Outside

Press@RunDepth: **244.74 psig @ 3852.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2017.10.03** End Date: **2017.10.04** Last Calib.: **2017.10.04**
 Start Time: **19:29:00** End Time: **03:09:45** Time On Btm: **2017.10.03 @ 21:49:15**
 Time Off Btm: **2017.10.04 @ 00:52:45**

TEST COMMENT: IF: BOB @ 18 min.
 IS: No return.
 FF: BOB @ 21 min.
 FSI: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1884.09	107.57	Initial Hydro-static
1	35.34	106.65	Open To Flow (1)
46	140.88	115.26	Shut-In(1)
90	1182.46	115.81	End Shut-In(1)
90	145.34	115.37	Open To Flow (2)
136	244.74	118.41	Shut-In(2)
182	1173.56	118.34	End Shut-In(2)
184	1802.10	118.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
515.00	mcw 5m 95w (oil spots)	7.22
0.00	Oil show on top of tool	0.00

Gas Rates

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

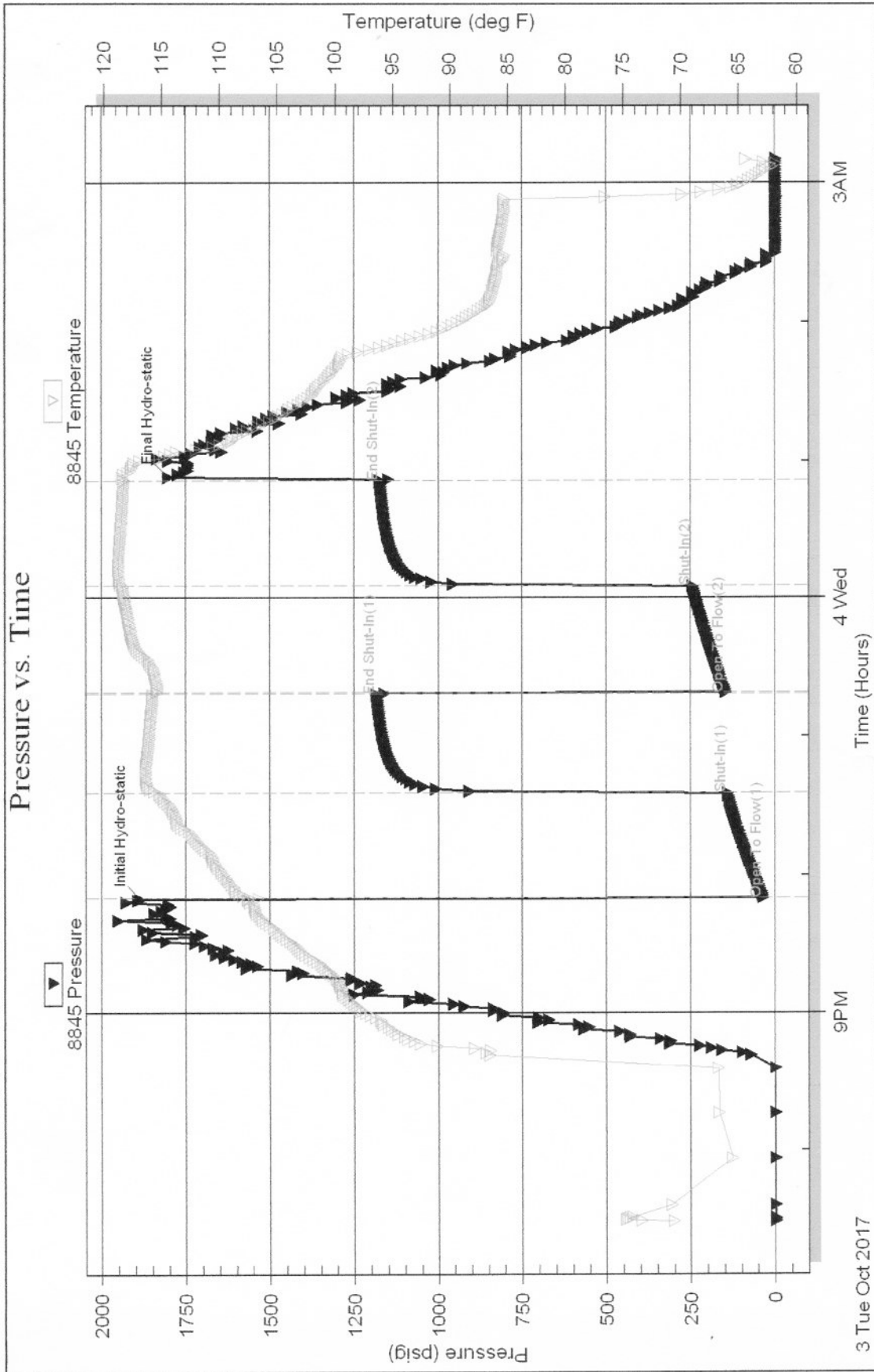
Serial #: 8845

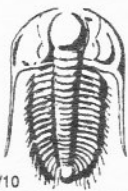
Outside Fossil Resources, LLC

Plummer #2

DST Test Number: 1

Pressure vs. Time





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64685

Well Name & No. Fossil Plummer #2 Test No. 1 Date 10/04/2017
 Company Fossil Resources, LLC Elevation 3010 KB 3004 GL
 Address 108 E 12th St #5 Hays, KS 67602
 Co. Rep / Geo. Lyle Herrman Rig Royal #1
 Location: Sec. 11 Twp. 13S Rge. 36W Co. Logan State Ks

Interval Tested 3851 3880 Zone Tested LRC C
 Anchor Length 29' Drill Pipe Run 3834 Mud Wt. 8.7
 Top Packer Depth 3846 Drill Collars Run Ø Vis 58
 Bottom Packer Depth 3851 Wt. Pipe Run Ø WL 9.4
 Total Depth 3880 Chlorides 10,000 ppm System LCM 3#
 Blow Description IF: BOB @ 18 min.
ISI: No return.
FF: BOB @ 21 min.
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>SIS</u>	<u>mcw oil spots</u>		<u>95</u>	<u>5</u>	
	<u>oil show on top of tool</u>				

Rec Total SIS BHT 118 Gravity — API RW .207 @ 64 °F Chlorides 38,000 ppm

(A) Initial Hydrostatic <u>1884</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>1830</u>
(B) First Initial Flow <u>35</u>	<input checked="" type="checkbox"/> Jars	T-Started <u>1929</u>
(C) First Final Flow <u>141</u>	<input checked="" type="checkbox"/> Safety Joint	T-Open <u>2149</u>
(D) Initial Shut-In <u>1182</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>0049</u>
(E) Second Initial Flow <u>145</u>	<input type="checkbox"/> Hourly Standby	T-Out
(F) Second Final Flow <u>245</u>	<input checked="" type="checkbox"/> Mileage <u>125 RT</u>	Comments
(G) Final Shut-In <u>1174</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1802</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby	Total
	<input type="checkbox"/> Accessibility	MP/DST Disc't
Sub Total		

Approved By _____ 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.

DRILL STEM TEST REPORT

Fossil Resources, LLC

11 13s 36w Logan, Ks

108 E 12th St #5
Hays, Ks 67607

Plummer #2

Job Ticket: 64686

DST#: 2

ATTN: Lyle Herrman

Test Start: 2017.10.05 @ 10:44:00

GENERAL INFORMATION:

Formation: **Pleasanton**

Deviated: **No** Whipstock: ft (KB)

Time Tool Opened: 12:34:45

Time Test Ended: 17:39:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: **4145.00 ft (KB) To 4170.00 ft (KB) (TVD)**

Total Depth: 4170.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3010.00 ft (KB)

3004.00 ft (CF)

KB to GR/CF: 6.00 ft

Serial #: 8845 **Outside**

Press@RunDepth: 46.27 psig @ 4146.00 ft (KB)

Start Date: 2017.10.05

End Date: 2017.10.05

Start Time: 10:44:00

End Time: 17:39:45

Capacity: 8000.00 psig

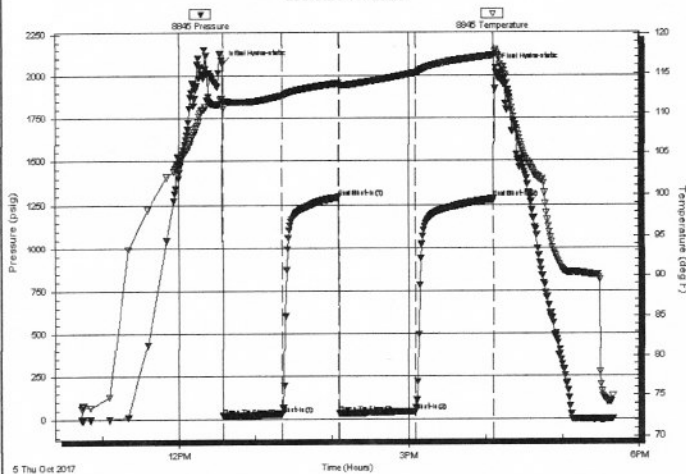
Last Calib.: 2017.10.05

Time On Btm: 2017.10.05 @ 12:34:15

Time Off Btm: 2017.10.05 @ 16:07:15

TEST COMMENT: IF: 3 1/2" blow.
IS: No return.
FF: 2 1/2" blow.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2070.39	111.93	Initial Hydro-static
1	18.39	110.60	Open To Flow (1)
47	30.24	112.24	Shut-In(1)
91	1293.66	113.81	End Shut-In(1)
92	31.85	113.30	Open To Flow (2)
151	46.27	115.09	Shut-In(2)
212	1283.48	117.25	End Shut-In(2)
213	2047.94	117.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
85.00	mcw (oil specks) 30m 70w	1.19
0.00	oil puddle on top	0.00

* Recovery from multiple tests

Gas Rates

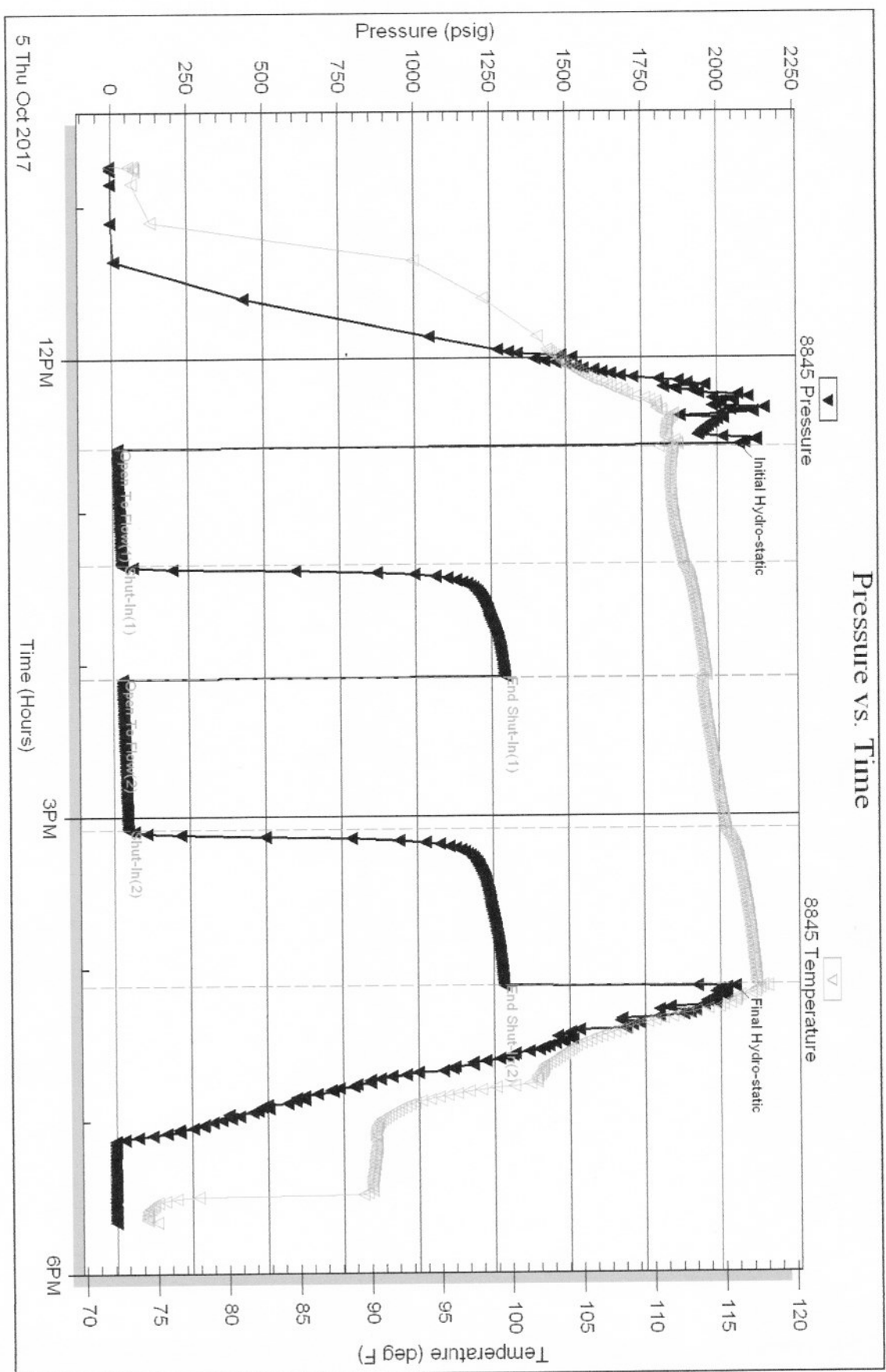
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

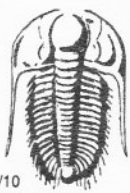
Serial #: 8845

Outside Fossil Resources, LLC

Flumer #2

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64686

Well Name & No. Plummer #2 Test No. 2 Date 10/05/2016
 Company Fossil Resources, LLC Elevation 3010 KB 3004 GL
 Address 108 E 12th St #5 Hays, Ks 67607
 Co. Rep / Geo. Lyle Herrman Rig Royal #1
 Location: Sec. 11 Twp. 13S Rge. 36W Co. Logan State Ks

Interval Tested 4145-4170 Zone Tested Pleasanton
 Anchor Length 25' Drill Pipe Run 4122 Mud Wt. 8.9
 Top Packer Depth 4140 Drill Collars Run 0 Vis 48
 Bottom Packer Depth 4145 Wt. Pipe Run 0 WL 134
 Total Depth 4170 Chlorides 13,000 ppm System LCM 2#
 Blow Description IF: 3 1/2" blow.
ISI: No return.
FF: 2 1/2" blow.
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>85</u>	<u>new oil specks</u>		<u>70</u>	<u>30</u>	
	<u>oil puddle on top</u>				

Rec Total 85 BHT 117 Gravity - API RW 212 @ 75 °F Chlorides 36,000 ppm

(A) Initial Hydrostatic <u>2620</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>1040</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars	T-Started <u>1043</u>
(C) First Final Flow <u>30</u>	<input checked="" type="checkbox"/> Safety Joint	T-Open <u>1235</u>
(D) Initial Shut-In <u>1294</u>	<input checked="" type="checkbox"/> Circ Sub <u>2 1/2</u>	T-Pulled <u>1605</u>
(E) Second Initial Flow <u>32</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1740</u>
(F) Second Final Flow <u>46</u>	<input checked="" type="checkbox"/> Mileage <u>125AT</u>	Comments _____
(G) Final Shut-In <u>1283</u>	<input type="checkbox"/> Sampler	_____
(H) Final Hydrostatic <u>2048</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total _____
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby	Total _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total _____	

Approved By _____ Our Representative [Signature]
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TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Fossil Resources, LLC

11 13s 36w Logan, Ks

108 E 12th St #5
Hays, Ks 67607

Plummer #2

Job Ticket: 64687

DST#: 3

ATTN: Lyle Herrman

Test Start: 2017.10.06 @ 07:30:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:28:30

Time Test Ended: 15:18:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: **4177.00 ft (KB) To 4270.00 ft (KB) (TVD)**

Total Depth: 4270.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3010.00 ft (KB)

3004.00 ft (CF)

KB to GR/CF: 6.00 ft

Serial #: 8365

Inside

Press@RunDepth: 56.52 psig @ 4178.00 ft (KB)

Start Date: 2017.10.06

End Date:

2017.10.06

Start Time: 07:30:00

End Time:

15:18:00

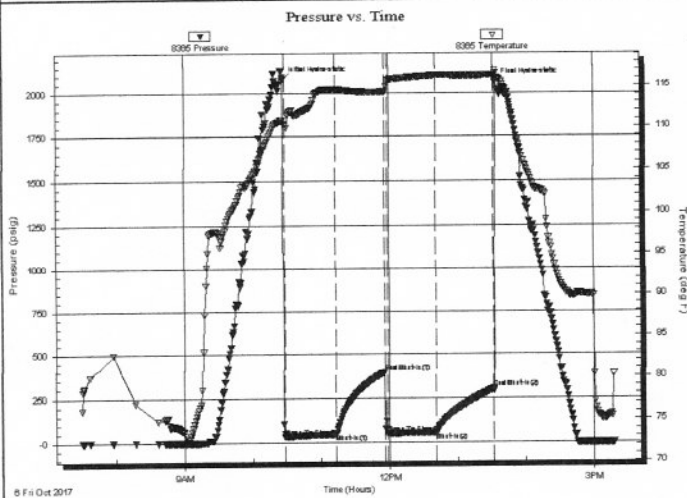
Capacity: 8000.00 psig

Last Calib.: 2017.10.06

Time On Btm: 2017.10.06 @ 10:27:00

Time Off Btm: 2017.10.06 @ 13:33:30

TEST COMMENT: IF: 6" blow.
IS: No return.
FF: 1/2" blow.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2081.76	110.88	Initial Hydro-static
2	32.86	110.20	Open To Flow (1)
47	48.12	114.49	Shut-In(1)
89	393.96	114.27	End Shut-In(1)
92	51.48	115.59	Open To Flow (2)
134	56.52	116.28	Shut-In(2)
185	297.22	116.33	End Shut-In(2)
187	2063.49	116.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	w cm 20w 80m (oil specks)	1.12

* Recovery from multiple tests

Gas Rates

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

Serial #: 8365

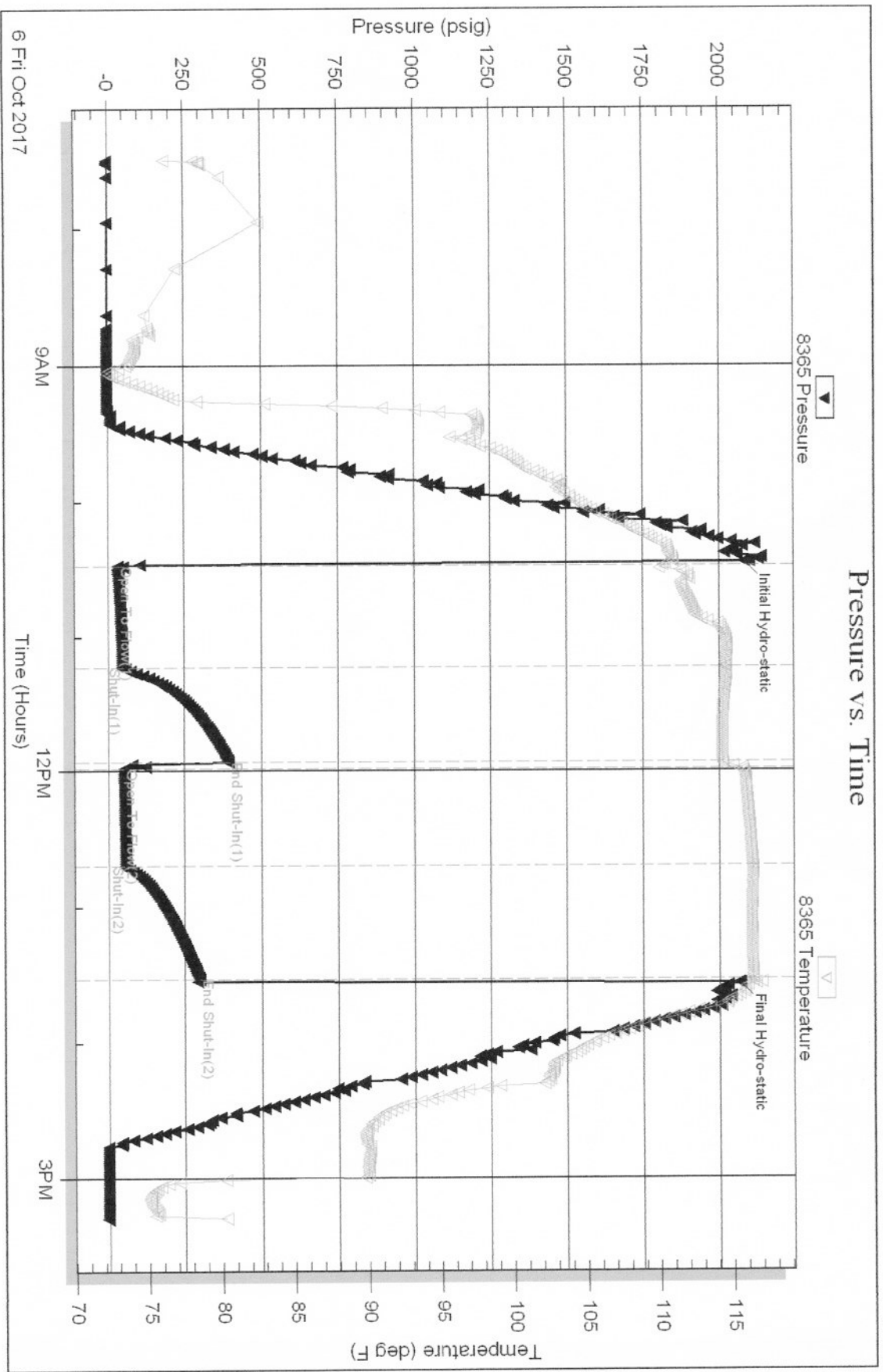
Inside

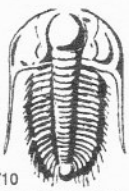
Fossil Resources, LLC

Plummer #2

DST Test Number: 3

Pressure vs. Time





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64687

Well Name & No. Plummer #2 Test No. 3 Date 10/06/2017
 Company Fossil Resources, LLC Elevation 3010 KB 3004 GL
 Address 108 E 12th St Hays, KS 67607
 Co. Rep / Geo. Lyle Herrman Rig Royal #1
 Location: Sec. 11 Twp. 13S Rge. 36W Co. Logan State KS

Interval Tested 4177 - 4270 Zone Tested Marmaton
 Anchor Length 93' Drill Pipe Run 4157 Mud Wt. 9.1
 Top Packer Depth 4172 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 4177 Wt. Pipe Run 0 WL 12.6
 Total Depth 4270 Chlorides 11000 ppm System LCM 2#
 Blow Description IF 6" blow.
ISI No return.
FF 1/2" blow
FSI No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>wcm</u>			<u>20</u>	<u>20</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 80 BHT 116 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2082</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>0715</u>
(B) First Initial Flow <u>33</u>	<input checked="" type="checkbox"/> Jars	T-Started <u>0730</u>
(C) First Final Flow <u>48</u>	<input checked="" type="checkbox"/> Safety Joint	T-Open <u>1028</u>
(D) Initial Shut-In <u>394</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>1328</u>
(E) Second Initial Flow <u>51</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1518</u>
(F) Second Final Flow <u>57</u>	<input type="checkbox"/> Mileage	Comments
(G) Final Shut-In <u>297</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2063</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby	Total
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total	

Approved By _____ Our Representative [Signature]

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