

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mike Kelso Oil Inc**
PO Box 467
Chase KS 67524+0467

ATTN: Mike Kelso

FHW-Wierman #15-1

15-17s-21w Ness,KS

Start Date: 2016.09.30 @ 00:06:00

End Date: 2016.09.30 @ 06:58:15

Job Ticket #: 63484 DST #: 5

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.09.30 @ 08:28:17

Mike Kelso Oil Inc
15-17s-21w Ness,KS
FHW-Wierman #15-1
DST # 5
Mississippi
2016.09.30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mike Kelso Oil Inc
 PO Box 467
 Chase KS 67524+0467
 ATTN: Mike Kelso

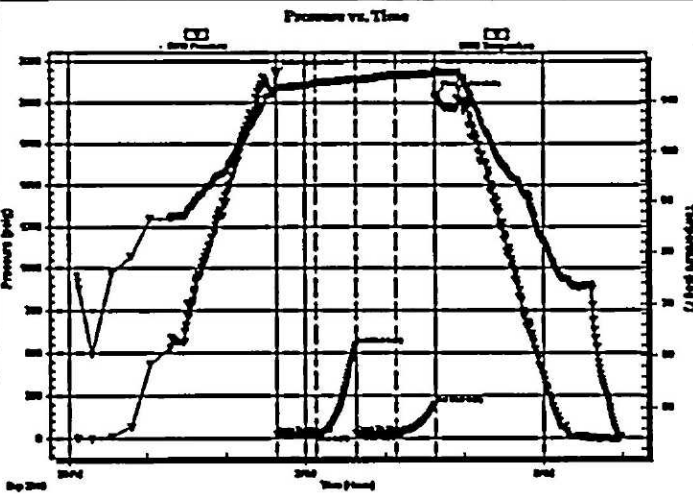
15-17s-21w Ness, KS
 FHW-Wierman #15-1
 Job Ticket: 63484 DST#:5
 Test Start: 2016.09.30 @ 00:06:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: **No Whipstock** ft (KB)
 Test Type: **Conventional Straddle (Reset)**
 Time Tool Opened: **02:39:00**
 Tester: **Spencer J. Staab**
 Time Test Ended: **06:58:15**
 Unit No: **84**
 Interval: **4192.00 ft (KB) To 4220.00 ft (KB) (TVD)**
 Reference Elevations: **2210.00 ft (KB)**
 Total Depth: **4250.00 ft (KB) (TVD)**
2203.00 ft (CF)
 Hole Diameter: **7.88 inches** Hole Condition: **Poor**
 KB to GR/CF: **7.00 ft**

Serial #: **8938** Inside
 Press@RunDepth: **25.07 psig @ 4193.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2016.09.30** End Date: **2016.09.30** Last Calib.: **2016.09.30**
 Start Time: **00:06:15** End Time: **06:58:15** Time On Bltt: **2016.09.30 @ 02:38:45**
 Time Off Bltt: **2016.09.30 @ 04:38:45**

TEST COMMENT: **30-F-Weak Blow; Built to 1 and 1/4"**
30-ISI-No Blow
30-FF-Weak surface blow; died
30-FSI-No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2174.43	112.39	Initial Hydro-static
1	22.20	112.04	Open To Flow (1)
30	22.70	113.51	Shut-h(1)
59	548.05	114.29	End Shut-h(1)
60	25.91	114.05	Open To Flow (2)
90	25.07	115.11	Shut-h(2)
119	199.41	115.42	End Shut-h(2)
120	2049.64	115.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/ oil spots	0.21

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mike Kelso Oil Inc
 PO Box 467
 Chase KS 67524-0467
 ATTN: Mike Kelso

15-17s-21w Ness,KS
 FHW-Wierman #15-1
 Job Ticket: 63484 DST#:5
 Test Start: 2016.09.30 @ 00:06:00

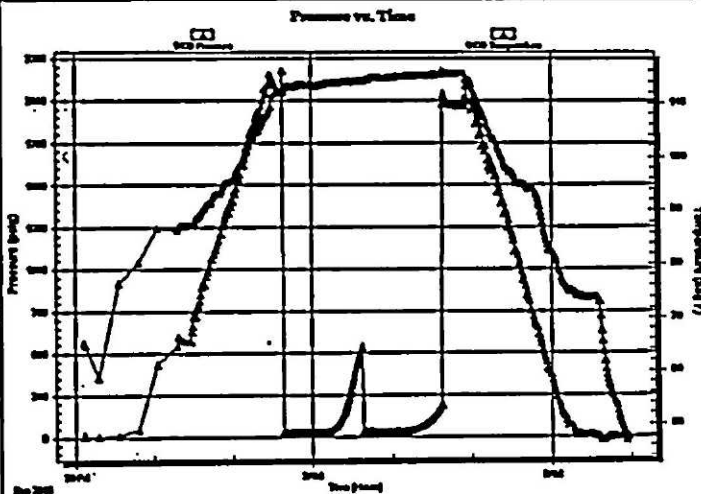
GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: **No Whipstock** ft (KB)
 Time Tool Opened: **02:39:00**
 Time Test Ended: **06:58:15**
 Interval: **4192.00 ft (KB) To 4220.00 ft (KB) (TVD)**
 Total Depth: **4250.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 Inches** Hole Condition: **Poor**
 Test Type: **Conventional Straddle (Reset)**
 Tester: **Spencer J. Staab**
 Unit No: **84**
 Reference Elevations: **2210.00 ft (KB)**
2203.00 ft (CF)
 KB to GR/CF: **7.00 ft**

Serial #: **9120** Outside
 Press@RunDepth: **psig @ 4193.00 ft (KB)**
 Start Date: **2016.09.30** End Date: **2016.09.30** Capacity: **8000.00 psig**
 Start Time: **00:06:15** End Time: **06:58:15** Last Calib.: **2016.09.30**
 Time On Bltt
 Time Off Bltt

TEST COMMENT: **30-F-Weak Blow; Built to 1 and 1/4"**
30-IS-No Blow
30-FF-Weak surface blow; died
30-FS-No Blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/ oil spots	0.21

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mike Kelso Oil Inc
PO Box 467
Chase KS 67524+0467

ATTN: Mike Kelso

15-17s-21w Ness,KS
FHW-Wierman #15-1
Job Ticket: 63484 **DST#: 5**
Test Start: 2016.09.30 @ 00:06:00

Tool Information

Drill Pipe:	Length: 3724.00 ft	Diameter: 3.82 inches	Volume: 52.79 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 460.00 ft	Diameter: 2.70 inches	Volume: 3.26 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 51000.00 lb
			Total Volume: 56.05 bbl	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4192.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	4220.00 ft			
Interval between Packers:	28.00 ft			
Tool Length:	84.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4170.00	
Shut In Tool	5.00			4175.00	
Hydraulic tool	5.00			4180.00	
Safety Joint	3.00			4183.00	
Packer	5.00			4188.00	23.00 Bottom Of Top Packer
Packer	4.00			4192.00	
Stubb	1.00			4193.00	
Recorder	0.00	9120	Outside	4193.00	
Recorder	0.00	8938	Inside	4193.00	
Perforations	23.00			4216.00	
Blank Off Sub	1.00			4217.00	
top of s.packer	3.00			4220.00	28.00 Tool Interval
Packer	0.00			4220.00	
Stubb	1.00			4221.00	
Change Over Sub	1.00			4222.00	
Recorder	0.00	8353	Below	4222.00	
Change Over Sub	1.00			4223.00	
Drill Pipe	30.00			4253.00	33.00 Bottom Packers & Anchor

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mika Kelso Oil Inc
PO Box 467
Chase KS 67524+0467
ATTN: Mika Kelso

15-17s-21w Ness,KS
FHW-Wierman #15-1
Job Ticket: 63484 DST#:5
Test Start: 2016.09.30 @ 00:06:00

Mud and Cushion Information

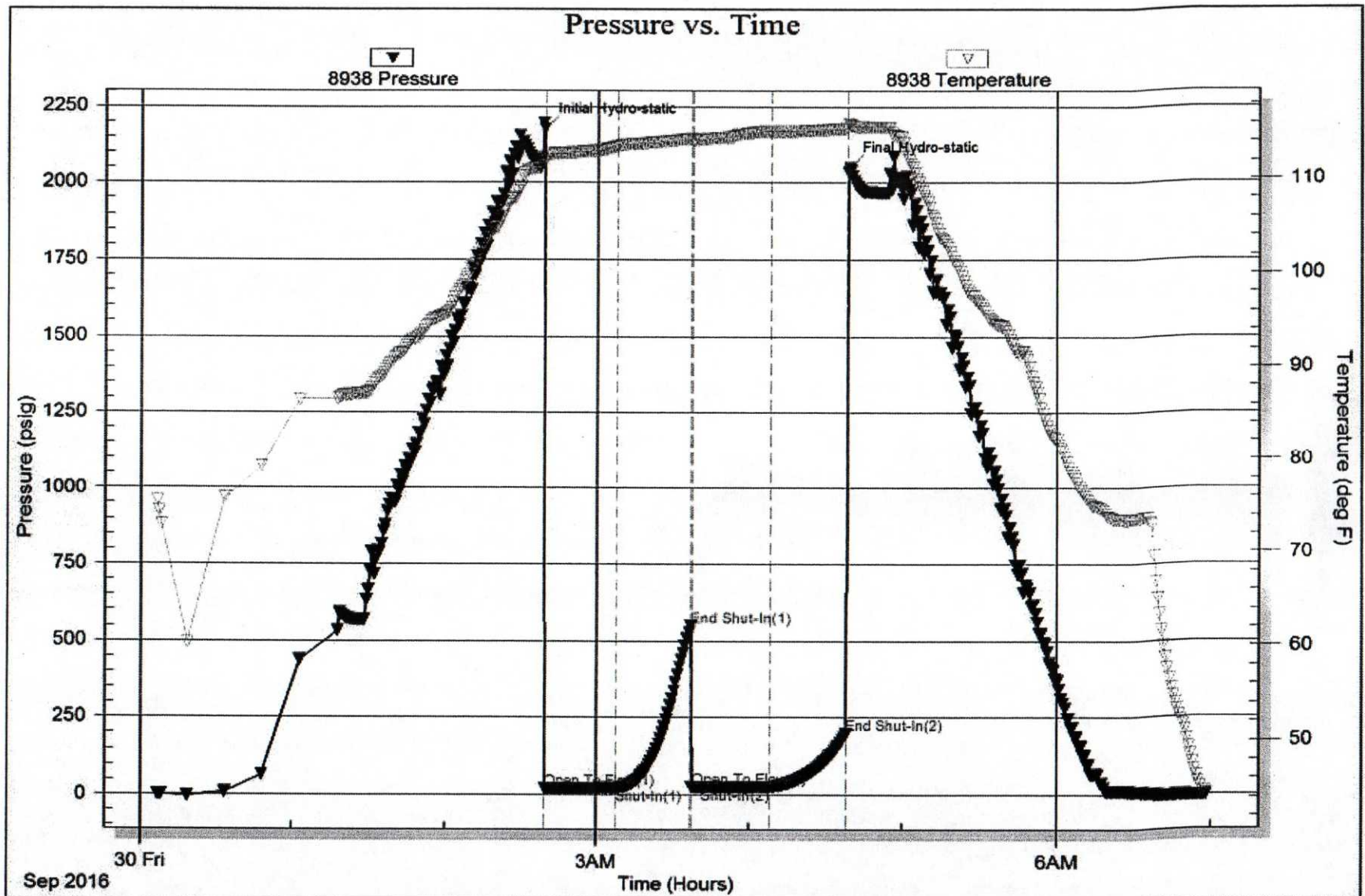
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6800.00 ppm			
Filter Cake: inches			

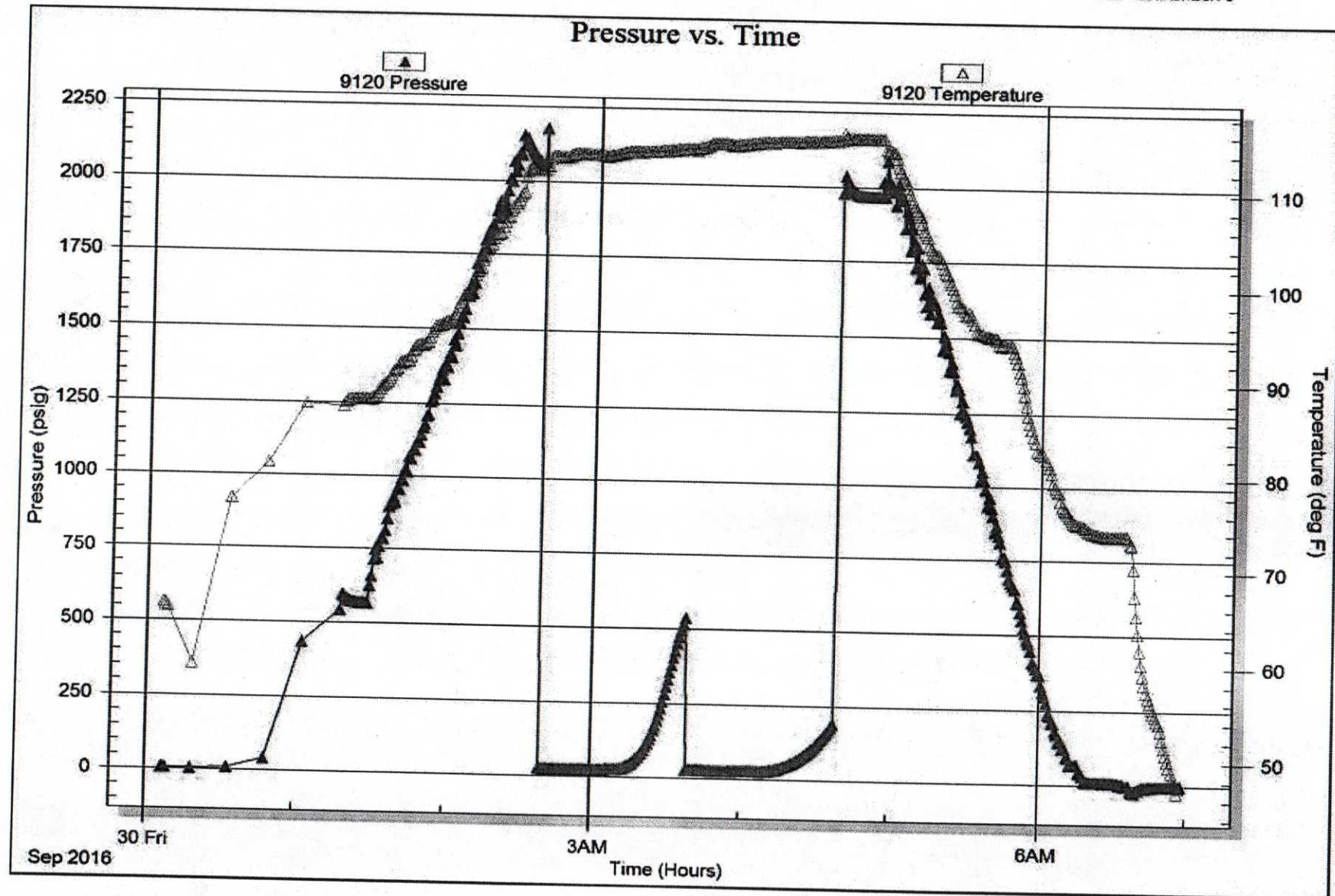
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud w/ oil spots	0.212

Total Length: 30.00 ft Total Volume: 0.212 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



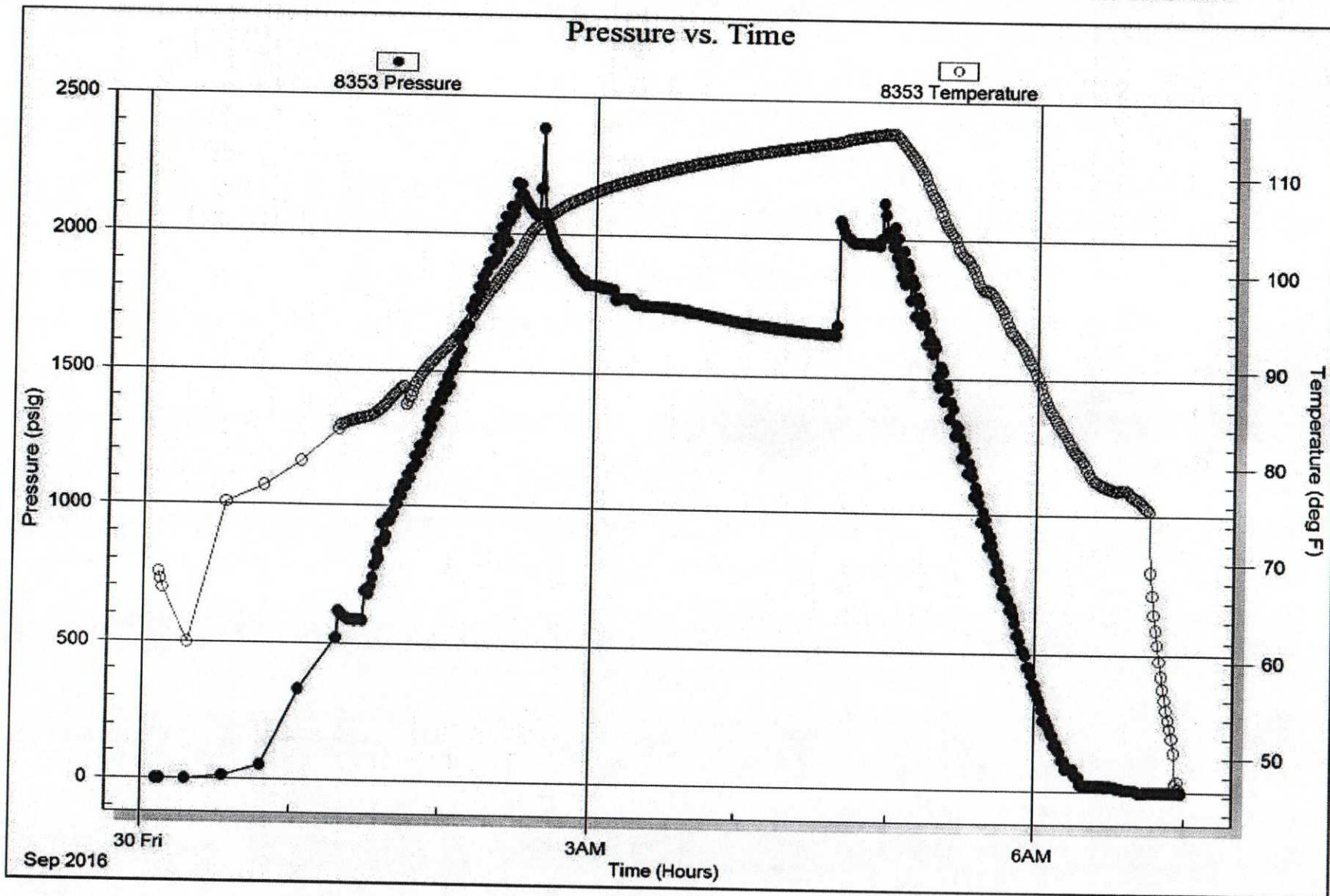


Serial #: 8353

Below (Straddle) Iso Oil Inc

FHW-Wierman #15-1

DST Test Number: 5





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63484

Well Name & No. F.H.W. - Wiexman #15-1 Test No. 5 Date 09/29/2016
 Company Mike Kelso Oil Inc Elevation 2210 KB 2203 GL
 Address PO BOX 467 Chase KS 67524 + 0467
 Co. Rep / Geo. Pat Dennihan / Mike Kelso Rig Skytop #1
 Location: Sec. 15 Twp. 17S Rge. 21W Co. Ness State KS

Interval Tested 4192-4220 Zone Tested Mississippi
 Anchor Length 28 Drill Pipe Run 3724 Mud Wt. 9.4
 Top Packer Depth 4192 Drill Collars Run — Vis 51
 Bottom Packer Depth 4220 Wt. Pipe Run 460 WL 9.8
 Total Depth 4250 Chlorides 6800 ppm System LCM 1.5#
 Blow Description IF - Weak Blow; Built to 1 1/4 inch
ISI - No Blow
FF - Weak Surface Blow; died
FST - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud w/ oil spots</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 30 BHT 115° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2174</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>23:00</u>
(B) First Initial Flow <u>22</u>	<input type="checkbox"/> Jars <u>—</u>	T-Started <u>00:06 09/30/2016</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>02:38</u>
(D) Initial Shut-In <u>548</u>	<input type="checkbox"/> Circ Sub <u>—</u>	T-Pulled <u>04:38</u>
(E) Second Initial Flow <u>26</u>	<input type="checkbox"/> Hourly Standby <u>—</u>	T-Out <u>06:58</u>
(F) Second Final Flow <u>25</u>	<input checked="" type="checkbox"/> Mileage <u>84 RT</u> ⁶³	Comments <u>—</u>
(G) Final Shut-In <u>200</u>	<input type="checkbox"/> Sampler <u>—</u>	
(H) Final Hydrostatic <u>2049</u>	<input type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer <u>—</u>
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer <u>—</u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer <u>—</u>	<input type="checkbox"/> Extra Copies <u>—</u>
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder <u>—</u>	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby <u>—</u>	Total <u>2138</u>
	<input type="checkbox"/> Accessibility <u>—</u>	MP/DST Disc't <u>—</u>
	Sub Total <u>2138</u>	

Approved By _____ Our Representative Spencer J. Smith
 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.