



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste. 300
Wichita KS 67202

ATTN: Keith Reavis

Jacquart #1-28

28-28s-40w Stanton,KS

Start Date: 2017.11.05 @ 09:50:15

End Date: 2017.11.05 @ 19:53:15

Job Ticket #: 62240 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2017.11.06 @ 15:07:41



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Keith Reavis

28-28s-40w Stanton, KS

Jacquart #1-28

Job Ticket: 62240

DST#: 1

Test Start: 2017.11.05 @ 09:50:15

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:03:45

Time Test Ended: 19:53:15

Test Type: Conventional Straddle (Initial)

Tester: Mike Roberts

Unit No: 81

Interval: **5307.00 ft (KB) To 5407.00 ft (KB) (TVD)**

Reference Elevations: 3272.00 ft (KB)

Total Depth: 5750.00 ft (KB) (TVD)

3261.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 6749 Outside

Press@RunDepth: 219.42 psig @ 5308.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.11.05

End Date:

2017.11.05

Last Calib.: 2017.11.05

Start Time: 09:50:15

End Time:

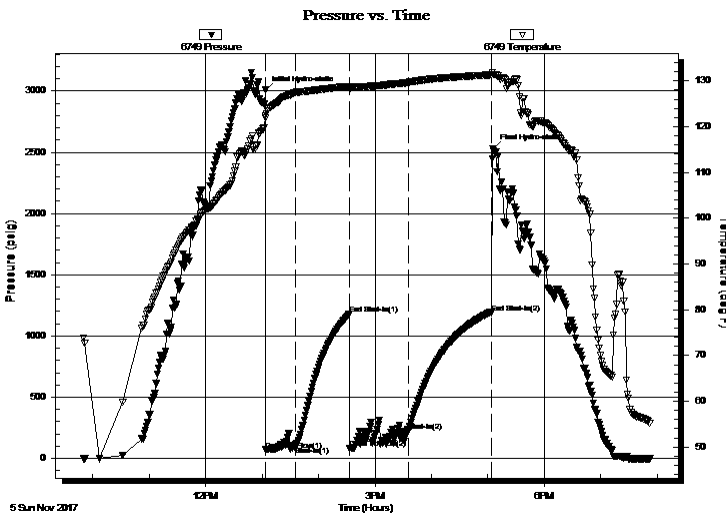
19:53:15

Time On Btm: 2017.11.05 @ 13:03:30

Time Off Btm: 2017.11.05 @ 17:05:45

TEST COMMENT: IF: Built to 1" blow
 IS: No return blow
 FF: Built to 1/2" blow that died in 28 min.
 FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3005.98	122.36	Initial Hydro-static
1	71.11	121.86	Open To Flow (1)
32	99.09	127.42	Shut-In(1)
90	1177.75	128.85	End Shut-In(1)
90	80.33	128.25	Open To Flow (2)
152	219.42	129.66	Shut-In(2)
241	1189.60	131.31	End Shut-In(2)
243	2530.23	131.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud	0.10

Gas Rates

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



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DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water Ste. 300
 Wichita KS 67202
 ATTN: Keith Reavis

28-28s-40w Stanton,KS
Jacquart #1-28
 Job Ticket: 62240 **DST#: 1**
 Test Start: 2017.11.05 @ 09:50:15

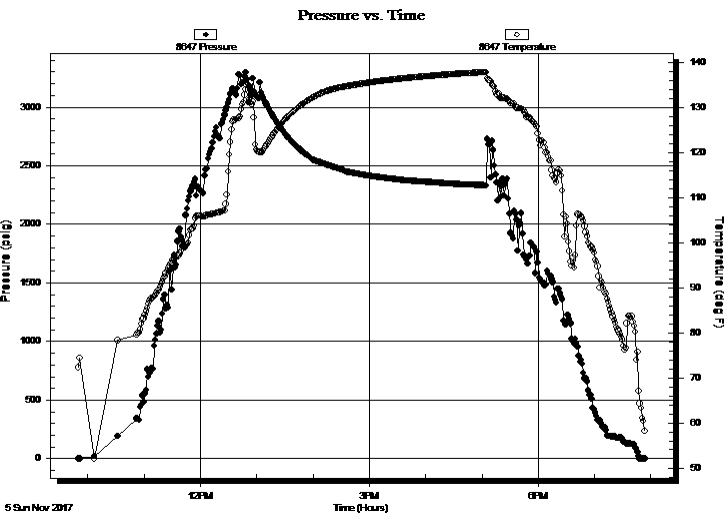
GENERAL INFORMATION:

Formation: **Morrow Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:03:45
 Time Test Ended: 19:53:15
 Interval: **5307.00 ft (KB) To 5407.00 ft (KB) (TVD)**
 Total Depth: 5750.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Straddle (Initial)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 3272.00 ft (KB)
 3261.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8647 Below (Straddle)

Press@RunDepth: psig @ 5408.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.11.05 End Date: 2017.11.05 Last Calib.: 2017.11.05
 Start Time: 09:50:15 End Time: 19:53:45 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Built to 1" blow
 IS: No return blow
 FF: Built to 1/2" blow that died in 28 min.
 FS: No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

28-28s-40w Stanton,KS

250 N. Water Ste. 300
Wichita KS 67202

Jacquart #1-28

Job Ticket: 62240

DST#: 1

ATTN: Keith Reavis

Test Start: 2017.11.05 @ 09:50:15

Tool Information

Drill Pipe:	Length: 5051.00 ft	Diameter: 3.80 inches	Volume: 70.85 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 72.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	5307.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	5750.00 ft			
Interval between Packers:	443.00 ft			
Tool Length:	471.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5280.00	
Shut In Tool	5.00			5285.00	
Hydraulic tool	5.00			5290.00	
Jars	5.00			5295.00	
Safety Joint	3.00			5298.00	
Packer	5.00			5303.00	28.00 Bottom Of Top Packer
Packer	4.00			5307.00	
Stubb	1.00			5308.00	
Recorder	0.00	8672	Inside	5308.00	
Recorder	0.00	6749	Outside	5308.00	
Perforations	4.00			5312.00	
Change Over Sub	1.00			5313.00	
Drill Pipe	64.00			5377.00	
Change Over Sub	1.00			5378.00	
Perforations	25.00			5403.00	
Blank Off Sub	1.00			5404.00	
Packer - Shale	3.00			5407.00	
Stubb	1.00			5408.00	
Recorder	0.00	8647	Below	5408.00	
Perforations	17.00			5425.00	
Change Over Sub	1.00			5426.00	
Drill Pipe	318.00			5744.00	
Change Over Sub	1.00			5745.00	
Bullnose	5.00			5750.00	443.00 Bottom Packers & Anchor
Total Tool Length:	471.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

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28-28s-40w Stanton,KS

250 N. Water Ste. 300
Wichita KS 67202

Jacquart #1-28

Job Ticket: 62240

DST#: 1

ATTN: Keith Reavis

Test Start: 2017.11.05 @ 09:50:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	mud	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

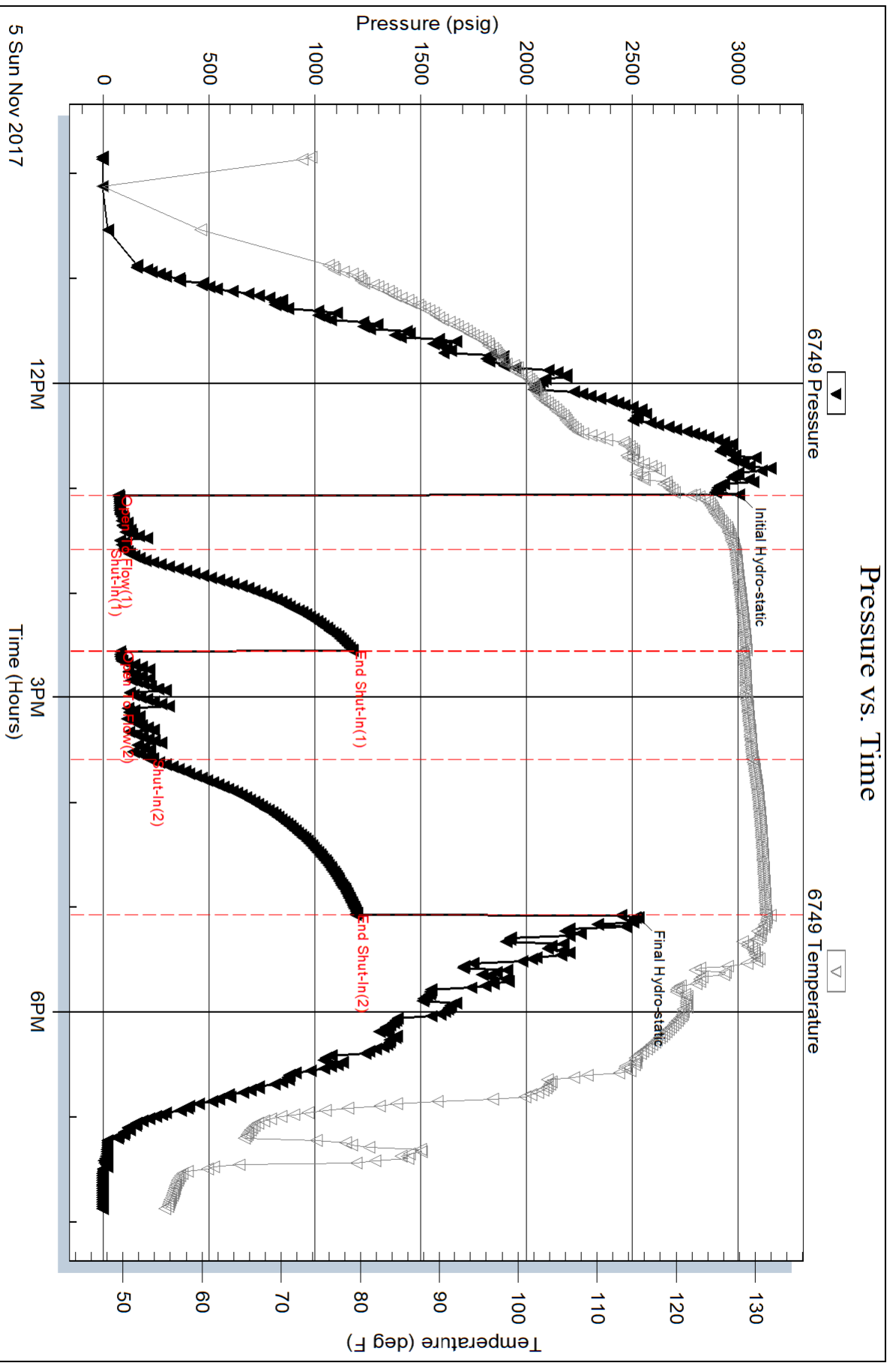
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



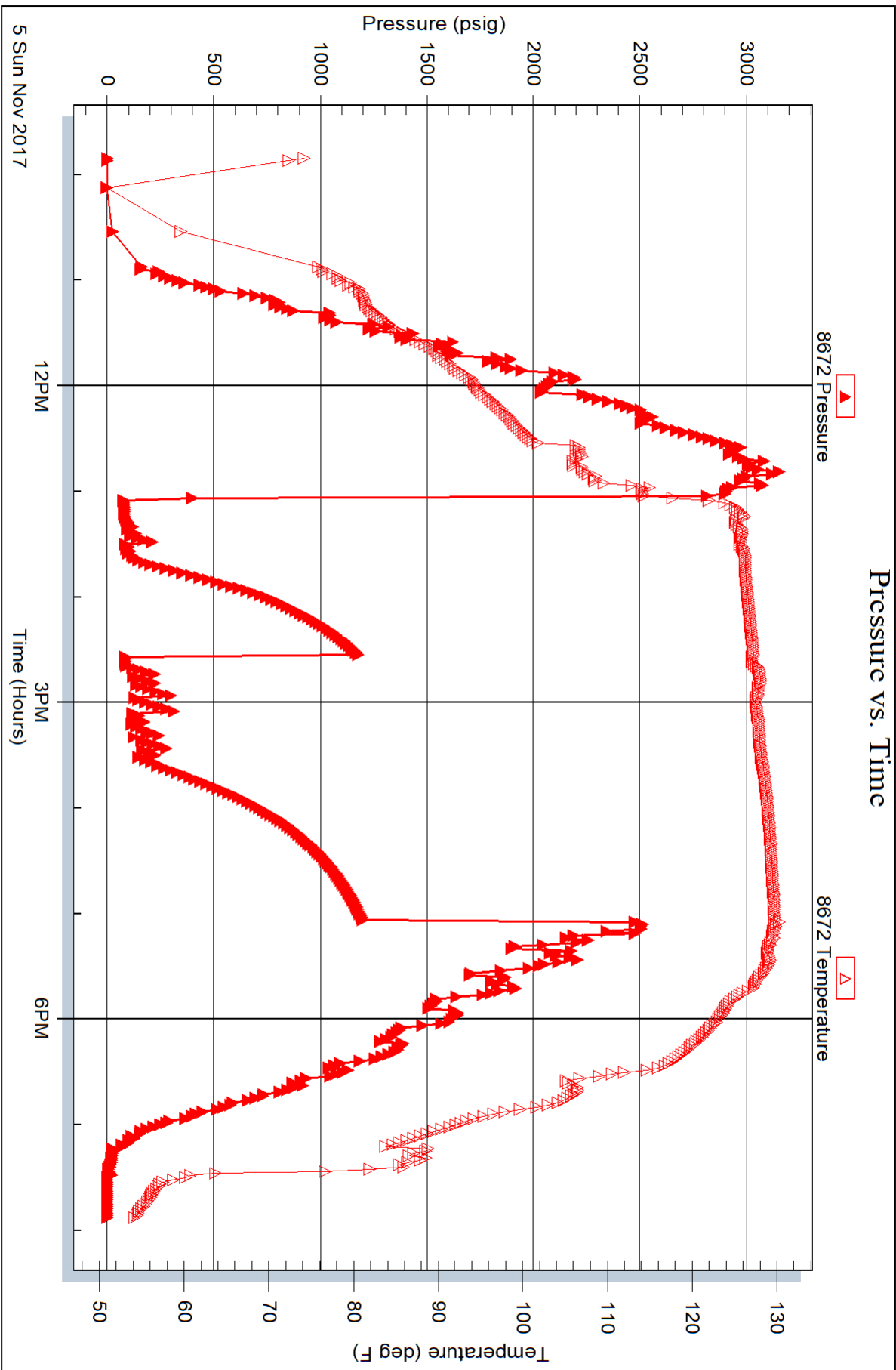
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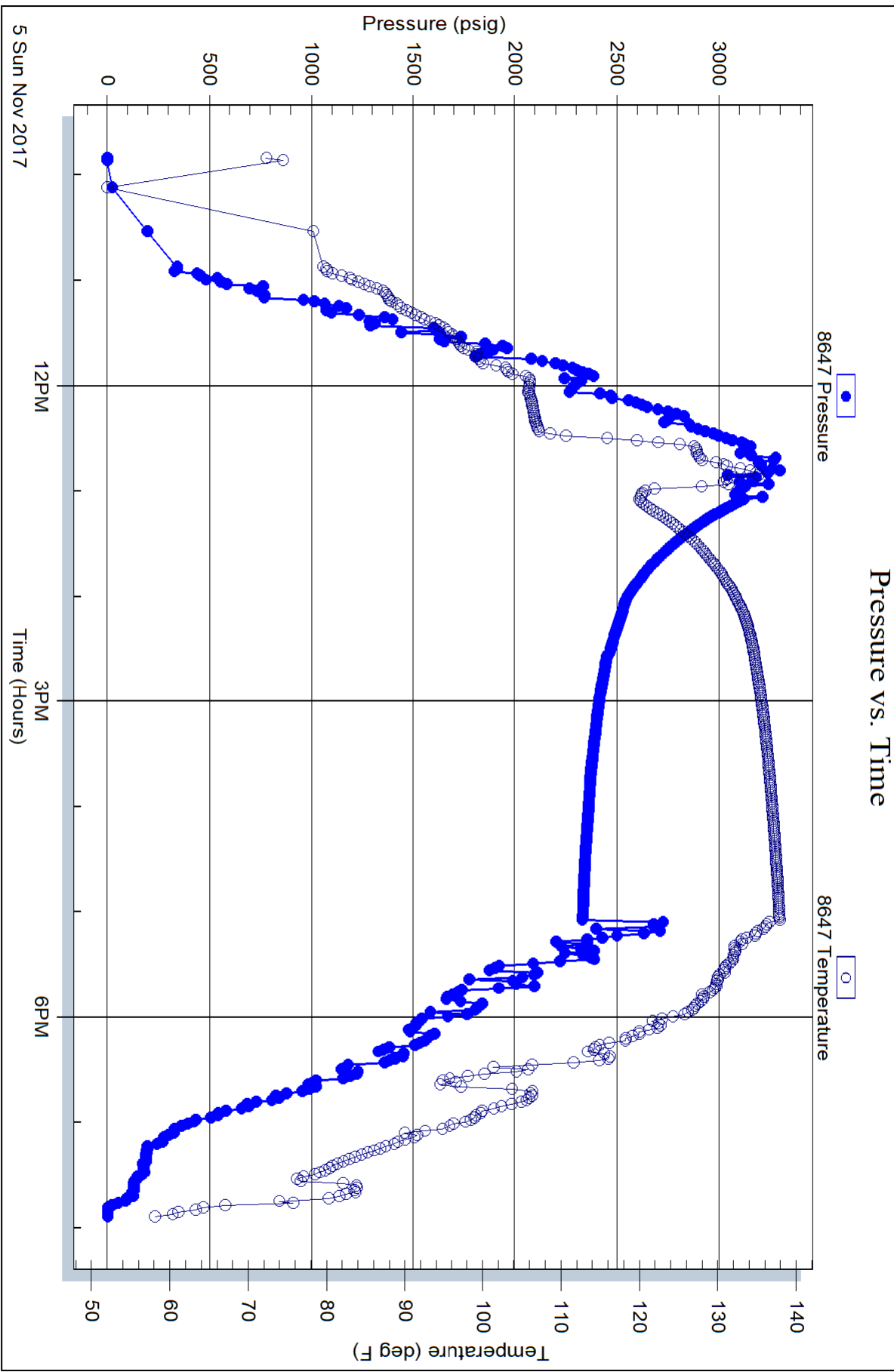
Inside

Murfin Drilling Co.

Jacquart #1-28

DST Test Number: 1







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64240**

Well Name & No. Jacouart 1-28 Test No. 1 Date 11-5-17
 Company Murfin Drilling Co Elevation 3272 KB ~~3261~~ 3261 GL
 Address 250 N. Water St 300 Wichita KS 67202
 Co. Rep / Geo. Keith Reavis Rig Murfin 21
 Location: Sec. 28 Twp. 28S Rge. 40W Co. _____ State KS

Interval Tested 5307-5407 Tal 343 Zone Tested Morrow Sand
 Anchor Length 100 Drill Pipe Run 5051 Mud Wt. 9.3
 Top Packer Depth 5302 Drill Collars Run 248 Vis 53
 Bottom Packer Depth 5307 Wt. Pipe Run 500 WL 8.0
 Total Depth 5750 Chlorides ~~500~~ 500 ppm System LCM 8 Pill Spotted & Logs
 Blow Description IF: Built to 1" Blow
IS: No Return Blow
FF: 1/2" Blow that Died in 28 Min.
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>MUD</u>			<u>20</u>	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 20 BHT 130 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>3005</u>	<input checked="" type="checkbox"/> Test <u>\$1250.00/-</u>	T-On Location <u>08:25</u>
(B) First Initial Flow <u>71</u>	<input checked="" type="checkbox"/> Jars <u>\$250.00/-</u>	T-Started <u>09:50</u>
(C) First Final Flow <u>99</u>	<input checked="" type="checkbox"/> Safety Joint <u>\$75.00/-</u>	T-Open <u>13:05</u>
(D) Initial Shut-In <u>1177</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>17:05</u>
(E) Second Initial Flow <u>80</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>19:53</u>
(F) Second Final Flow <u>219</u>	<input checked="" type="checkbox"/> Mileage <u>224 RT = 168.00/-</u>	Comments _____
(G) Final Shut-In <u>1189</u>	<input type="checkbox"/> Sampler <u>100rt 75</u>	<u>Brandon went to location 11/4</u>
(H) Final Hydrostatic <u>2530</u>	<input type="checkbox"/> Straddle <u>600</u>	<u>Lost circulation. \$75</u>
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>\$250.00/-</u>	<input type="checkbox"/> Ruined Shale Packer _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>75</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby _____	Total <u>2575</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2500</u> <u>\$1993.00/-</u>	

Approved By _____ Our Representative Mike Roberts

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