



DRILL STEM TEST REPORT

Prepared For: **Bear Petroleum LLC**

PO Box 438
Haysville, KS 67060+0438

ATTN: Jim Musgrove

GL Schmidt #B1

26-21s-8w Rice,KS

Start Date: 2016.04.13 @ 00:43:00

End Date: 2016.04.13 @ 09:04:30

Job Ticket #: 65088 DST #: 1

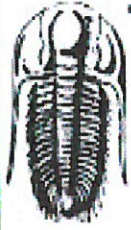
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.04.15 @ 09:56:46

Bear Petroleum LLC
26-21s-8w Rice,KS
GL Schmidt #B1
DST # 1
Mississippi
2016.04.13



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Bear Petroleum LLC
 PO Box 438
 Haysville, KS 67060+0438
 ATTN: Jim Musgrove

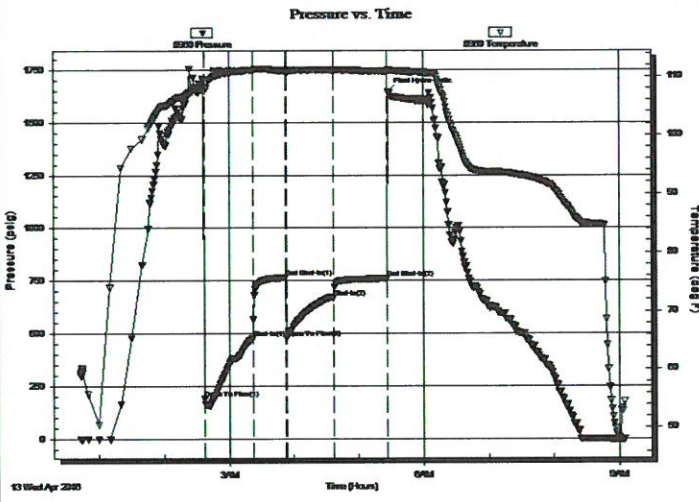
26-21s-8w Rice,KS
GL Schmidt #B1
 Job Ticket: 65088 **DST#: 1**
 Test Start: 2016.04.13 @ 00:43:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 02:37:30 Tester: Ken Swinney
 Time Test Ended: 09:04:30 Unit No: 72
 Interval: **3330.00 ft (KB) To 3367.00 ft (KB) (TVD)** Reference Elevations: 1639.00 ft (KB)
 Total Depth: 3367.00 ft (KB) (TVD) 1629.00 ft (CF)
 Hole Diameter: 7.80 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8960 Outside
 Press@RunDepth: 671.63 psig @ 3364.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.04.13 End Date: 2016.04.13 Last Calib.: 2016.04.13
 Start Time: 00:43:05 End Time: 09:04:29 Time On Btm: 2016.04.13 @ 02:37:00
 Time Off Btm: 2016.04.13 @ 05:27:30

TEST COMMENT: IIFP BOB in 30 seconds-GTS in 8 minutes
 ISI Blow back built to BOB
 FFP Bob in 10 seconds
 FSI Blow back built to BOB



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1701.37	107.90	Initial Hydro-static
1	190.28	107.52	Open To Flow (1)
45	476.57	111.11	Shut-In(1)
76	764.90	111.00	End Shut-In(1)
77	479.71	110.92	Open To Flow (2)
120	671.63	111.07	Shut-In(2)
170	759.40	110.90	End Shut-In(2)
171	1644.63	111.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
945.00	GMCW with show of oil G 5% M 10% W 13.26%	
378.00	GMCWO Mud 10% Gas 10% Water 20% 5.30%	
94.00	Mud with show of oil Mud 100%	1.32

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	10.00	9.13
Last Gas Rate	0.13	11.00	9.51
Max. Gas Rate	0.13	31.00	16.99



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DRILL STEM TEST REPORT

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 Haysville, KS 67060+0438
 ATTN: Jim Musgrove

26-21s-8w Rice, KS
GL Schmidt #B1
 Job Ticket: 65088 **DST#: 1**
 Test Start: 2016.04.13 @ 00:43:00

GENERAL INFORMATION:

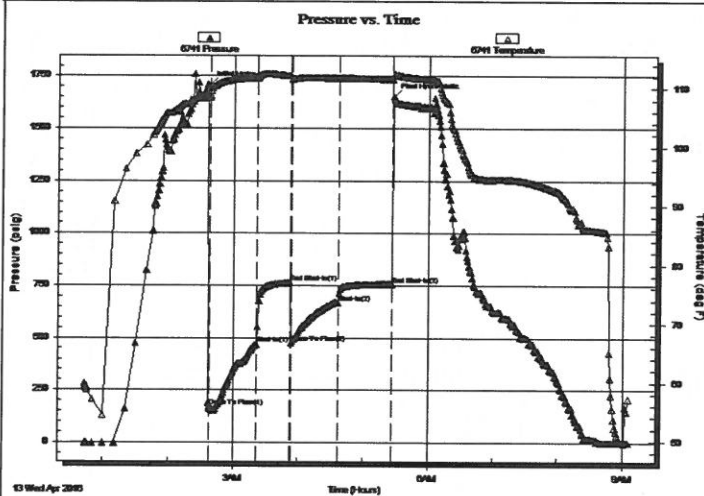
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 Deviated: No Whipstock: ft (KB)
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 Time Test Ended: 09:04:30
 Interval: **3330.00 ft (KB) To 3367.00 ft (KB) (TVD)**
 Total Depth: 3367.00 ft (KB) (TVD)
 Hole Diameter: 7.80 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72
 Reference Elevations: 1639.00 ft (KB)
 1629.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6741

Inside

Press@RunDepth: 757.10 psig @ 3363.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.04.13 End Date: 2016.04.13 Last Calib.: 2016.04.13
 Start Time: 00:43:05 End Time: 09:04:29 Time On Btm: 2016.04.13 @ 02:37:00
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TEST COMMENT: IIFP BOB in 30 seconds-GTS in 8 minutes
 ISI Blow back built to BOB
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PRESSURE SUMMARY

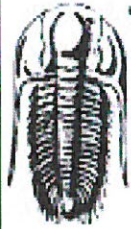
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1705.06	108.69	Initial Hydro-static
1	170.80	108.82	Open To Flow (1)
45	468.83	111.77	Shut-In(1)
76	762.34	112.08	End Shut-In(1)
77	476.54	111.54	Open To Flow (2)
120	669.62	111.72	Shut-In(2)
170	757.10	111.56	End Shut-In(2)
171	1650.30	112.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
945.00	GMCW with show of oil G 5% M 10% W 13.26	
378.00	GMCWO Mud 10% Gas 10% Water 20% 5.303%	
94.00	Mud with show of oil Mud 100%	1.32

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	10.00	9.13
Last Gas Rate	0.13	11.00	9.51
Max. Gas Rate	0.13	31.00	16.99



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bear Petroleum LLC
PO Box 438
Haysville, KS 67060+0438

ATTN: Jim Musgrove

26-21s-8w Rice,KS
GL Schmidt #B1
Job Ticket: 65088 **DST#: 1**
Test Start: 2016.04.13 @ 00:43:00

Tool Information

Drill Pipe:	Length: 3330.00 ft	Diameter: 3.80 inches	Volume: 46.71 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 46.71 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3330.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	57.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3315.00	
Hydraulic tool	5.00			3320.00	
Top Packer	5.00			3325.00	
Packer	5.00			3330.00	20.00 Bottom Of Top Packer
Anchor	32.00			3362.00	
Recorder	1.00	6741	Inside	3363.00	
Recorder	1.00	8960	Outside	3364.00	
Bullnose	3.00			3367.00	37.00 Anchor Tool

Total Tool Length: 57.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Bear Petroleum LLC
PO Box 438
Haysville, KS 67060+0438
ATTN: Jim Musgrove

26-21s-8w Rice,KS
GL Schmidt #B1
Job Ticket: 65088 **DST#: 1**
Test Start: 2016.04.13 @ 00:43:00

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:	44000 ppm
Viscosity: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
945.00	GMCW with show of oil G 5% M 10% W 85%	13.256
378.00	GMCWO Mud 10% Gas 10% Water 20% Oil 6	5.302
94.00	Mud with show of oil Mud 100%	1.319

Total Length: 1417.00 ft Total Volume: 19.877 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: Recov. Resist .20 ohms @ 64 deg



**TRILOBITE
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DRILL STEM TEST REPORT

GAS RATES

Bear Petroleum LLC
PO Box 438
Haysville, KS 67060+0438

ATTN: Jim Musgrove

26-21s-8w Rice,KS
GL Schmidt #B1
Job Ticket: 65088 **DST#: 1**
Test Start: 2016.04.13 @ 00:43:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

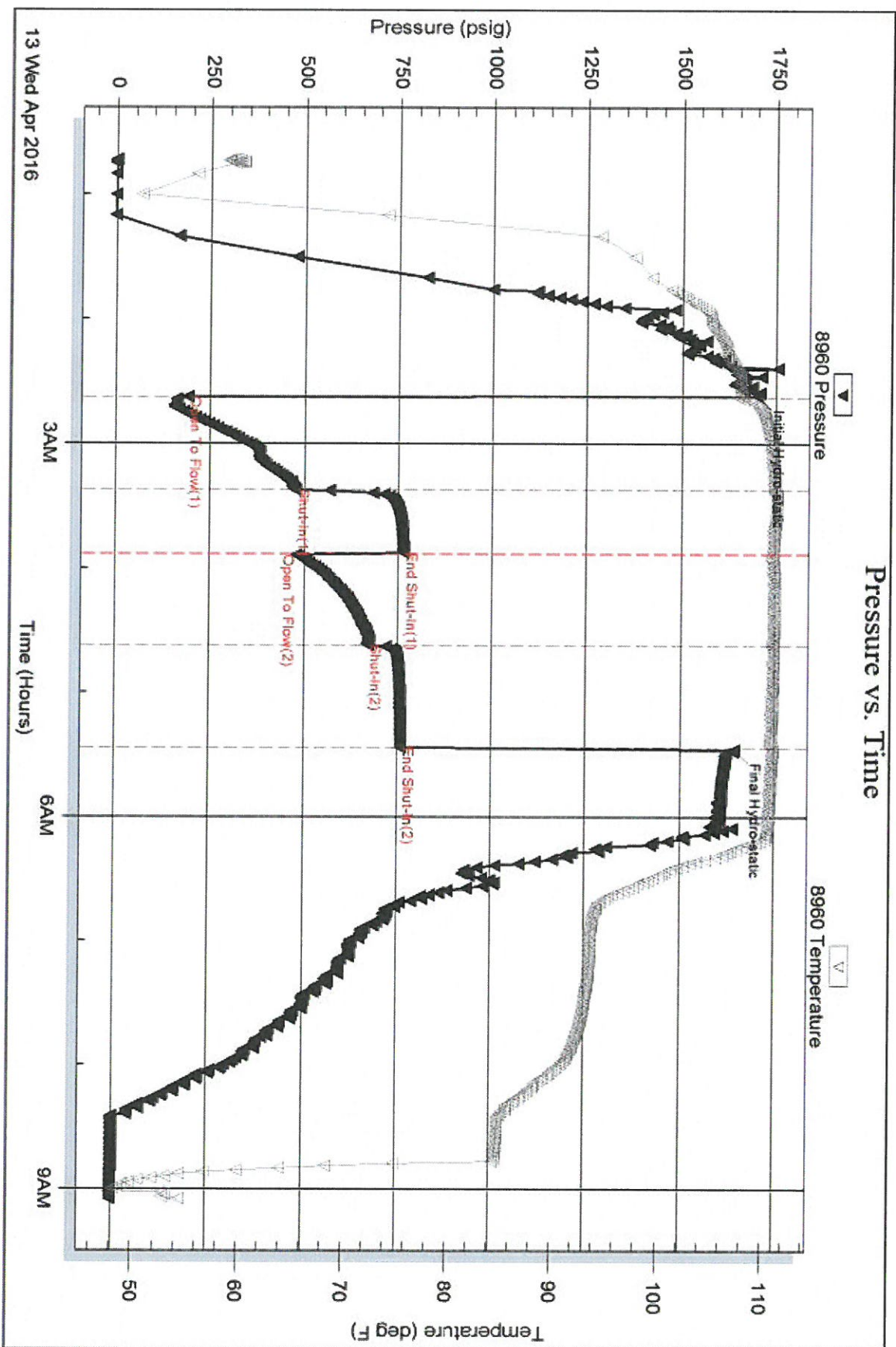
Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	10	0.13	10.00	9.13
1	20	0.13	31.00	16.99
1	30	0.25	17.00	49.81
1	40	0.25	16.00	48.23
2	10	0.13	10.00	9.13
2	20	0.13	12.00	9.88
2	30	0.13	11.00	9.51
2	40	0.13	11.00	9.51

Serial #: 8960

Outside Bear Petroleum LLC

GL Schmidt #B1

DST Test Number: 1



Serial #: 6741

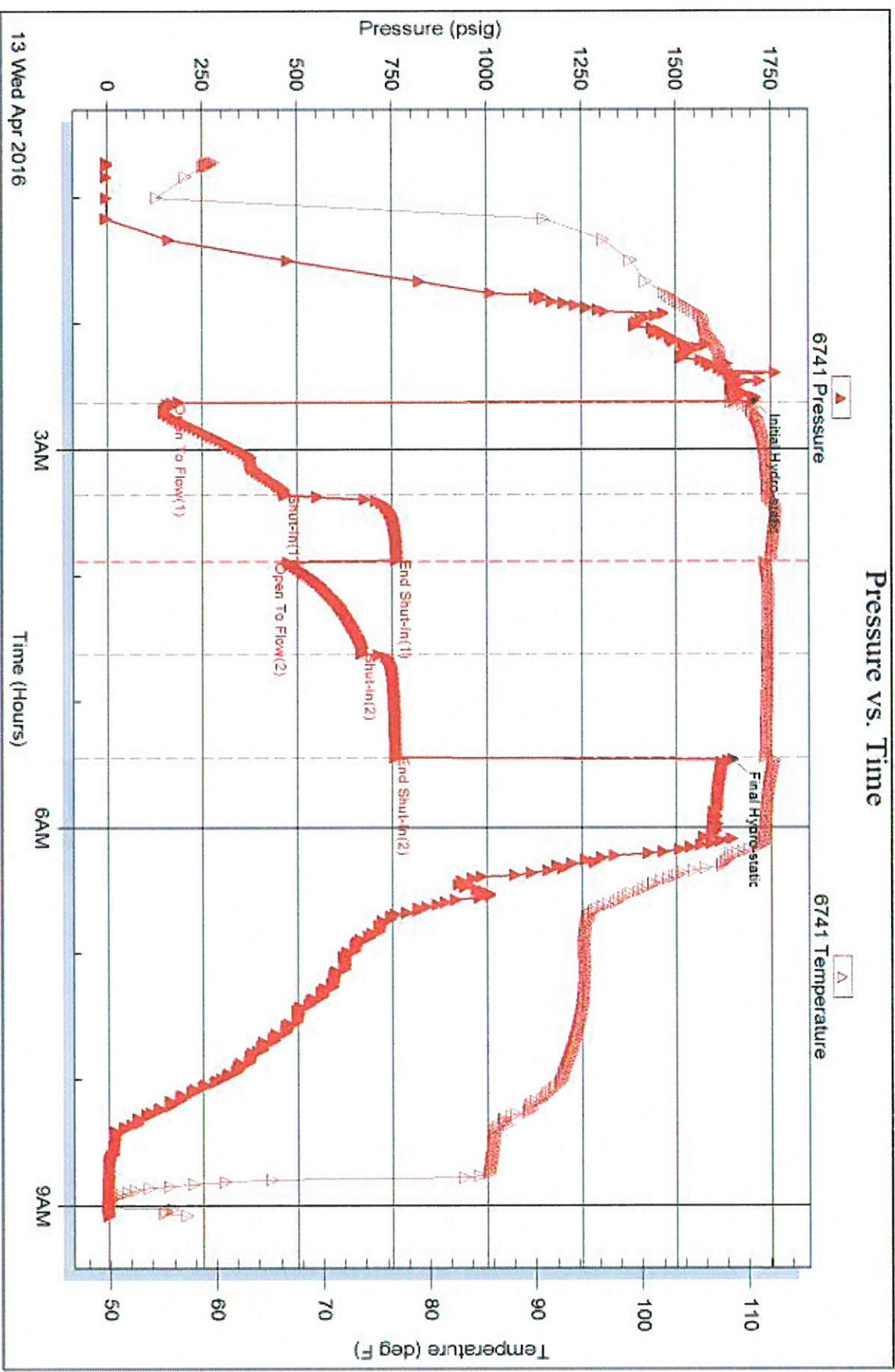
Inside

Bear Petroleum LLC

GL Schmidt #B1

DST Test Number: 1

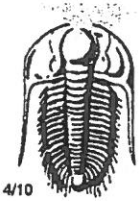
Pressure vs. Time



Triobite Testing, Inc

Ref. No: 65089

Printed: 2016 04 15 @ 09:56:48



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 65088

Well Name & No. GL Schmidt #B1 Test No. 1 Date 13 Apr 16
 Company Bear Petroleum LLC Elevation 1639 KB 1629 GL
 Address PO Box 438 Haysville, Kansas 67060+0438
 Co. Rep/Geo. Jim Musgrove Rig EC Services
 Location: Sec. 26 Twp. 21S Rge. 8W Co. Rice State KS

Interval Tested 3330-3367 Zone Tested Mississippi
 Anchor Length 37 Drill Pipe Run 3330 Mud Wt. 9.3
 Top Packer Depth 3325 Drill Collars Run — Vis 44
 Bottom Packer Depth 3330 Wt. Pipe Run — WL 8.8
 Total Depth 3367 Chlorides 4000 ppm System LCM 1/2 #

Blow Description Strong blow blow built to bottom of bucket in 30 seconds, Gas to surface in 8 minutes, Initial shut in blow back to bottom of bucket
Final flow blow built to bottom of bucket in 10 seconds, Final shut in blow back built to bottom of bucket.

Rec	Feet of	%gas	%oil	%water	%mud
<u>945</u>	<u>Feet of Gas cut muddy water w/ slow oil</u>	<u>5%</u>	<u>85%</u>	<u>10%</u>	<u>—</u>
<u>378</u>	<u>Feet of Mud + Gas cut watery oil</u>	<u>10%</u>	<u>60%</u>	<u>20%</u>	<u>10%</u>
<u>94.5</u>	<u>Feet of Mud with slow of oil</u>	<u>—</u>	<u>—</u>	<u>100%</u>	<u>—</u>
<u>—</u>	<u>Feet of</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>Feet of</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Rec Total 1417.5 BHT 111 Gravity — API RW .20 @ 64 °F Chlorides 44,000 ppm

(A) Initial Hydrostatic <u>1701</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>11:15 pm</u>
(B) First Initial Flow <u>190</u>	<input type="checkbox"/> Jars <u>—</u>	T-Started <u>12:43 am</u>
(C) First Final Flow <u>476</u>	<input type="checkbox"/> Safety Joint <u>—</u>	T-Open <u>2:37 am</u>
(D) Initial Shut-In <u>764</u>	<input type="checkbox"/> Circ Sub <u>—</u>	T-Pulled <u>5:22 am</u>
(E) Second Initial Flow <u>479</u>	<input type="checkbox"/> Hourly Standby <u>—</u>	T-Out <u>9:05 am</u>
(F) Second Final Flow <u>671</u>	<input checked="" type="checkbox"/> Mileage <u>88</u> <u>132</u>	Comments <u>pull test off bottom and let it finish off gassing</u>
(G) Final Shut-In <u>759</u>	<input type="checkbox"/> Sampler <u>—</u>	<u>loaded tools 16:00 4/14</u>
(H) Final Hydrostatic <u>1644</u>	<input type="checkbox"/> Straddle <u>—</u>	<input type="checkbox"/> Ruined Shale Packer <u>—</u>

Initial Open 45
 Initial Shut-In 30
 Final Flow 45
 Final Shut-In 45

Shale Packer —
 Extra Packer —
 Extra Recorder —
 Day Standby —
 Accessibility —
 Sub Total 1182

Ruined Packer —
 Extra Copies —
 Sub Total 0
 Total 1182
 MP/DST Disc't —

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.

