



DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st ST STE B
Wichita KS, 67205

ATTN: Jeff Lawler

Thompson Unit # 1-19

19-11s-15w Russell KS

Start Date: 2014.06.01 @ 13:52:00

End Date: 2014.06.01 @ 20:50:15

Job Ticket #: 54050 DST #: 2

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

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IA Operating Inc
19-11s-15w Russell KS
Thompson Unit # 1-19
DST # 2
LKC "E&F"
2014.06.01



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc
9915 W 21st ST STE B
Wichita KS, 67205
ATTN: Jeff Lawler

19-11s-15w Russell KS
Thompson Unit # 1-19
Job Ticket: 54050 **DST#: 2**
Test Start: 2014.06.01 @ 13:52:00

GENERAL INFORMATION:

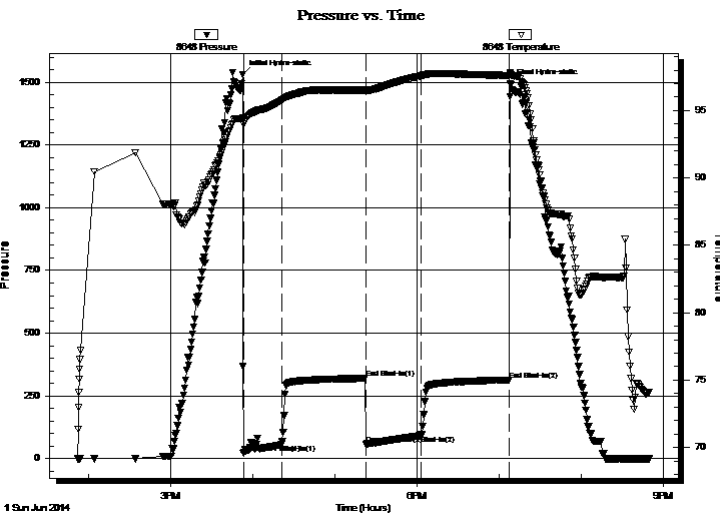
Formation: **LKC "E&F"**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 15:53:00 Tester: Cody Bloedorn
Time Test Ended: 20:50:15 Unit No: 73
Interval: 3094.00 ft (KB) To 3127.00 ft (KB) (TVD) Reference Elevations: 1792.00 ft (KB)
Total Depth: 3127.00 ft (KB) (TVD) 1784.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8648

Inside

Press@RunDepth: 91.21 psig @ 3100.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.06.01 End Date: 2014.06.01 Last Calib.: 2014.06.01
Start Time: 13:52:05 End Time: 20:50:14 Time On Btm: 2014.06.01 @ 15:52:30
Time Off Btm: 2014.06.01 @ 19:08:00

TEST COMMENT: 30 - IF- 9" blow
60 - IS- Surface return
45 - FF- 4" blow
60 - FS- Surface return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1530.79	94.43	Initial Hydro-static
1	19.82	93.99	Open To Flow (1)
29	54.99	95.73	Shut-In(1)
90	319.43	96.51	End Shut-In(1)
91	58.22	96.42	Open To Flow (2)
131	91.21	97.56	Shut-In(2)
195	313.00	97.60	End Shut-In(2)
196	1494.52	97.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	MW - Show of oil, 20%M, 80%W	1.47
20.00	GO, 5%G, 95%O	0.28

* Recovery from multiple tests

Gas Rates

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



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TOOL DIAGRAM

IA Operating Inc
9915 W 21st ST STE B
Wichita KS, 67205
ATTN: Jeff Lawler

19-11s-15w Russell KS
Thompson Unit # 1-19
Job Ticket: 54050 **DST#: 2**
Test Start: 2014.06.01 @ 13:52:00

Tool Information

Drill Pipe:	Length: 3066.00 ft	Diameter: 3.80 inches	Volume: 43.01 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: 30000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 43.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3094.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	54.00 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			3074.00	
Shut In Tool	5.00			3079.00	
Hydraulic tool	5.00			3084.00	
Packer	5.00			3089.00	21.00 Bottom Of Top Packer
Packer	5.00			3094.00	
Stubb	1.00			3095.00	
Perforations	5.00			3100.00	
Recorder	0.00	8648	Inside	3100.00	
Recorder	0.00	8940	Outside	3100.00	
Perforations	24.00			3124.00	
Bullnose	3.00			3127.00	33.00 Bottom Packers & Anchor

Total Tool Length: 54.00



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FLUID SUMMARY

IA Operating Inc

19-11s-15w Russell KS

9915 W 21st ST STE B
Wichita KS, 67205

Thompson Unit # 1-19

Job Ticket: 54050

DST#: 2

ATTN: Jeff Lawler

Test Start: 2014.06.01 @ 13:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

33000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
124.00	MW - Show of oil, 20%M, 80%W	1.466
20.00	GO, 5%G, 95%O	0.281

Total Length: 144.00 ft Total Volume: 1.747 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

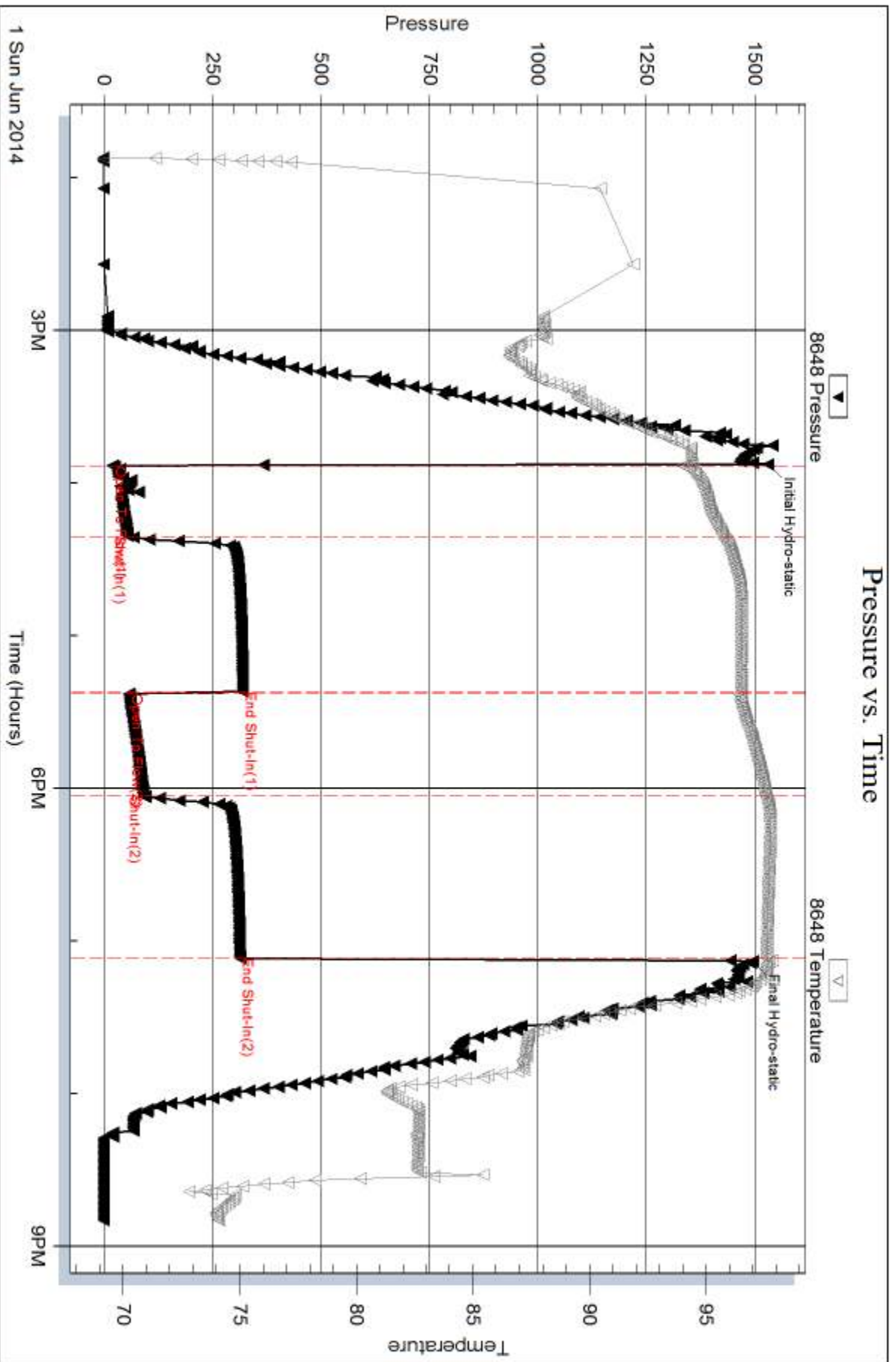
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity: 27 @ 70 Degrees = 28

Salinity: .25 @ 60 Degrees = 33,000

Pressure vs. Time



Serial #: 8940

Outside IA Operating Inc

Thompson Unit # 1-19

DST Test Number: 2

