



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc**

PO Box 86
Plainville KS 67663-0086

ATTN: Marc Downing

Malsam #27-1

27-8s-25w Graham,KS

Start Date: 2014.12.05 @ 12:45:20

End Date: 2014.12.05 @ 19:00:14

Job Ticket #: 61130 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.12.10 @ 10:45:33



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Oil Operating Inc
PO Box 86
Plainville KS 67663-0086
ATTN: Marc Downing

27-8s-25w Graham,KS
Malsam #27-1
Job Ticket: 61130 **DST#: 1**
Test Start: 2014.12.05 @ 12:45:20

GENERAL INFORMATION:

Formation: **LKC I-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:36:15
Time Test Ended: 19:00:14
Interval: **3916.00 ft (KB) To 3975.00 ft (KB) (TVD)**
Total Depth: 3975.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair
Reference Elevations: 2460.00 ft (KB)
2453.00 ft (CF)
KB to GR/CF: 7.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schwager
Unit No: 70

Serial #: 8018

Inside

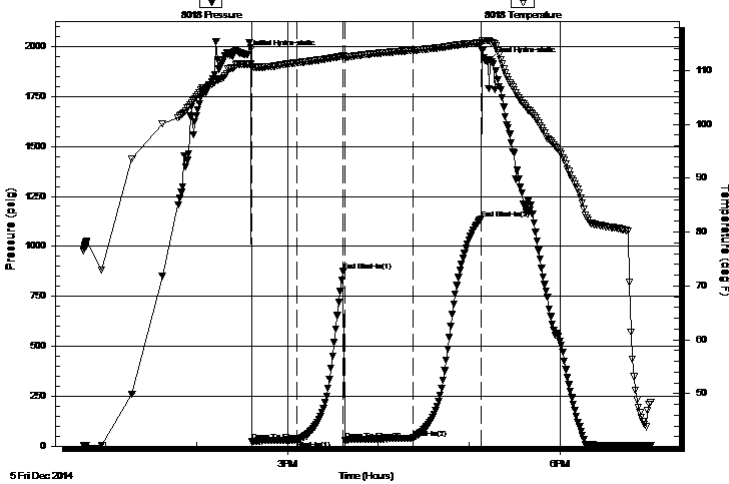
Press@RunDepth: 41.74 psig @ 3953.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.05 End Date: 2014.12.05 Last Calib.: 2014.12.05
Start Time: 12:45:20 End Time: 19:00:14 Time On Btm: 2014.12.05 @ 14:33:15
Time Off Btm: 2014.12.05 @ 17:12:14

TEST COMMENT: 30-IFP-w k bl thru-out 1/4" to 1" bl
30-ISIP-no bl
45-FFP-w k to a fr bl 2" to 4 1/2" bl
45-FSIP-no bl

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.33	111.10	Initial Hydro-static
3	22.42	110.57	Open To Flow (1)
33	31.68	111.39	Shut-In(1)
64	877.95	112.66	End Shut-In(1)
65	28.70	112.45	Open To Flow (2)
110	41.74	113.71	Shut-In(2)
155	1138.69	115.08	End Shut-In(2)
159	1923.46	115.55	Final Hydro-static

Pressure vs. Time



Recovery

Length (ft)	Description	Volume (bbl)
0.00	205' GIP	0.00
45.00	HO&GCM 5%G40%O55%M	0.36
2.00	CO	0.03

Gas Rates

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



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TOOL DIAGRAM

H&C Oil Operating Inc
PO Box 86
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ATTN: Marc Downing

27-8s-25w Graham,KS
Malsam #27-1
Job Ticket: 61130 **DST#: 1**
Test Start: 2014.12.05 @ 12:45:20

Tool Information

Drill Pipe:	Length: 3890.00 ft	Diameter: 3.80 inches	Volume: 54.57 bbl	Tool Weight:	2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 54.72 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3916.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	59.00 ft				
Tool Length:	80.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3896.00	
Shut In Tool	5.00			3901.00	
Hydraulic tool	5.00			3906.00	
Packer	5.00			3911.00	21.00 Bottom Of Top Packer
Packer	5.00			3916.00	
Stubb	1.00			3917.00	
Perforations	3.00			3920.00	
Blank Spacing	33.00			3953.00	
Recorder	0.00	8018	Inside	3953.00	
Recorder	0.00	8700	Outside	3953.00	
Perforations	19.00			3972.00	
Bullnose	3.00			3975.00	59.00 Bottom Packers & Anchor

Total Tool Length: 80.00



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FLUID SUMMARY

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Plainville KS 67663-0086
ATTN: Marc Downing

27-8s-25w Graham,KS
Malsam #27-1
Job Ticket: 61130 **DST#: 1**
Test Start: 2014.12.05 @ 12:45:20

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	205' GIP	0.000
45.00	HO&GCM 5%G40%O55%M	0.358
2.00	CO	0.028

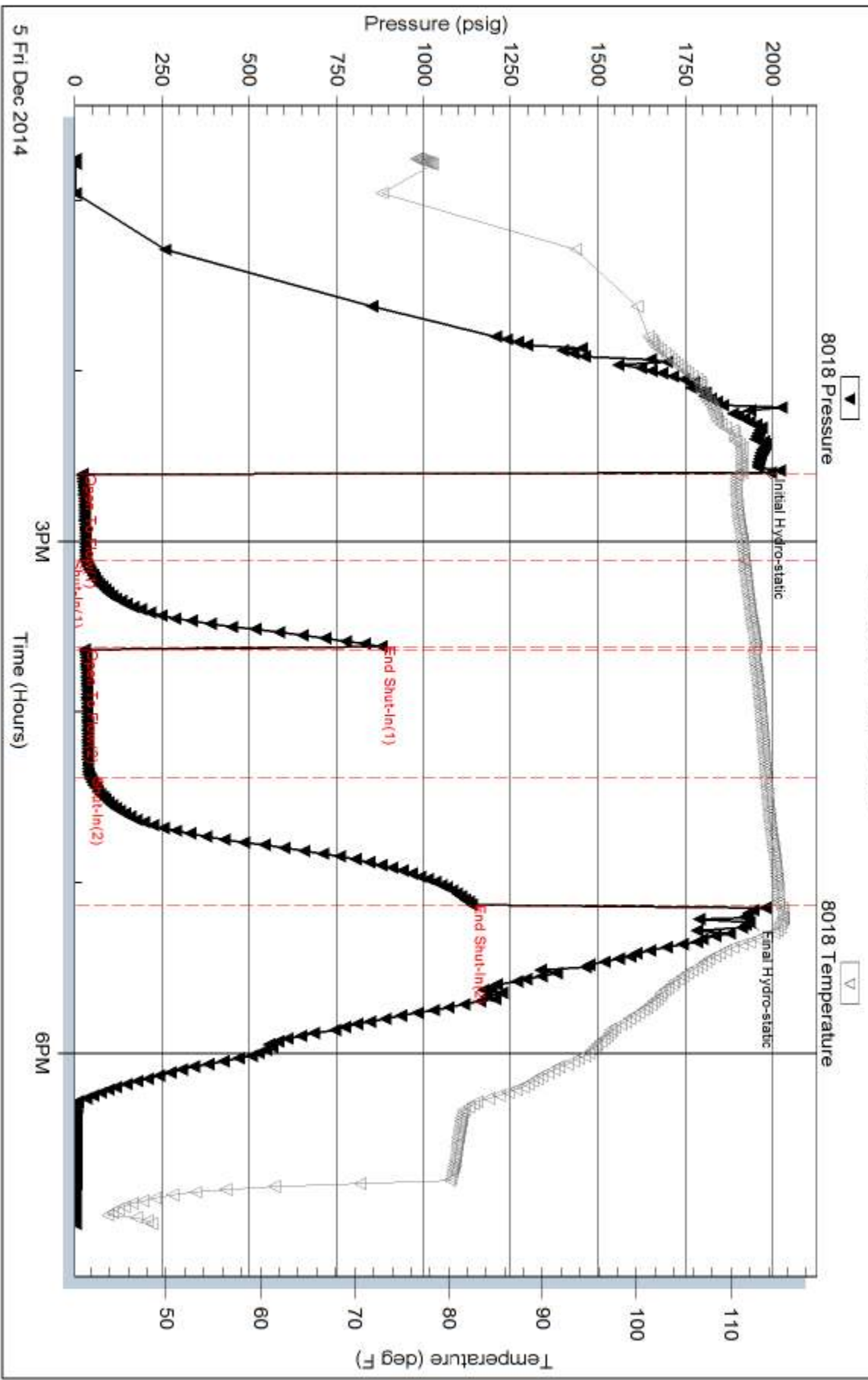
Total Length: 47.00 ft Total Volume: 0.386 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time

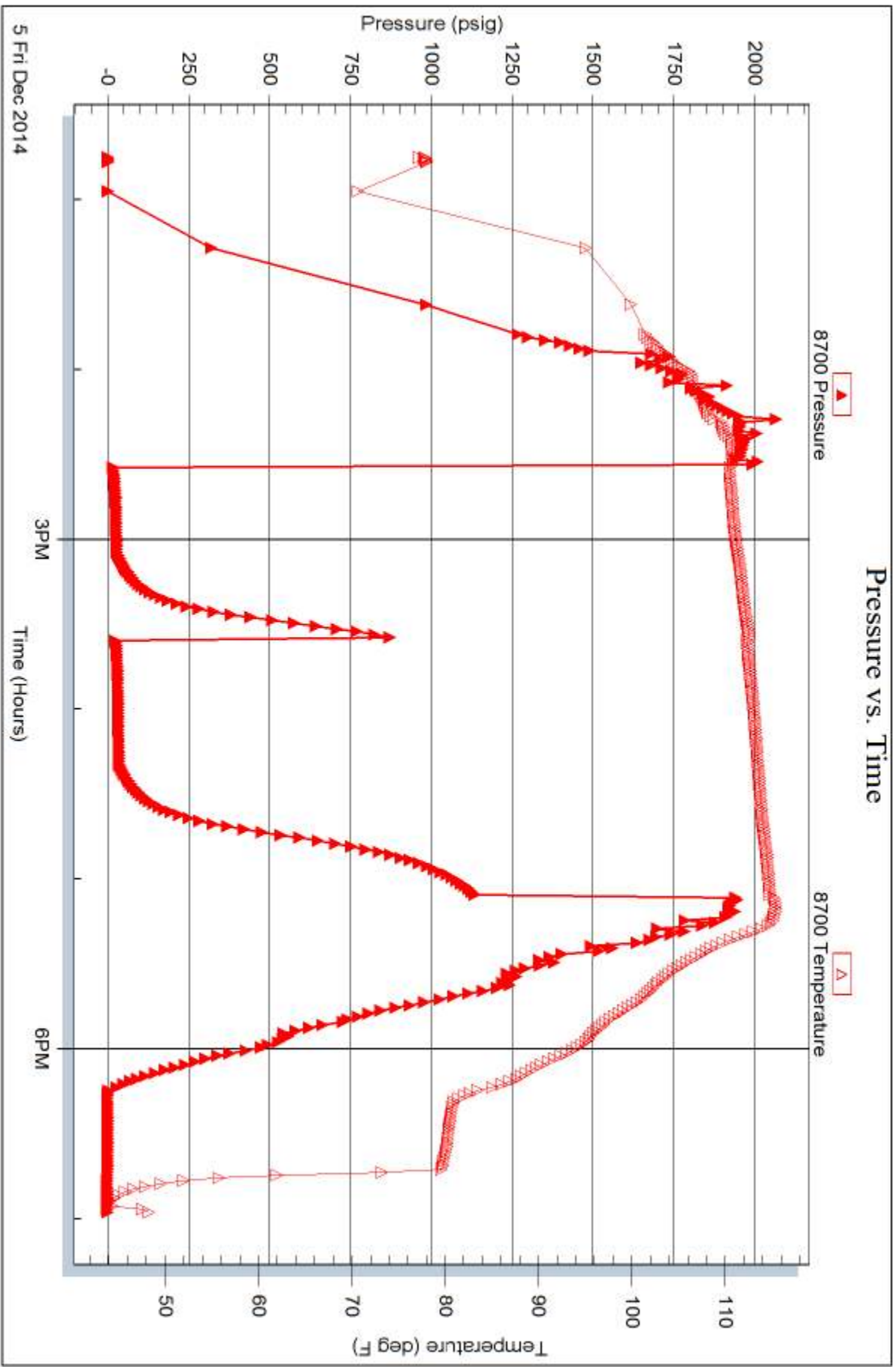


Serial #: 8700

Outside H&C Oil Operating Inc

Malsam #27-1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 61130

Printed: 2014.12.10 @ 10:45:35



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61130

Well Name & No. MALSAM 27-1 Test No. 1 Date 12-5-14
 Company H+C OIL OPERATING, INC Elevation 2460 KB 2453 GL
 Address PO Box 86 PLAINVILLE, Ks 67663-0086
 Co. Rep / Geo. MARC Downing Rig Am Eagle rig 2
 Location: Sec. 27 Twp. 8^s Rge. 25^w Co. GRAHAM State Ks

Interval Tested 3916-3975 Zone Tested LKC I-K
 Anchor Length 59 Drill Pipe Run 3890 Mud Wt. 9.8
 Top Packer Depth 3911 Drill Collars Run 30 Vis 56
 Bottom Packer Depth 3916 Wt. Pipe Run - WL 7.8
 Total Depth 3975 Chlorides 900 ppm System LCM TR

Blow Description I FP - WEAK Blow thru-out 1/4" To 1" Blow
ISIP - NO Blow
FFP - WEAK To A FAIR Blow 2" To 4 1/2" Blow
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>205</u>	<u>GIP</u>				
<u>2</u>	<u>CO</u>				
<u>45</u>	<u>40+6 CM</u>	<u>5</u>	<u>40</u>		<u>55</u>

Rec Total 47 BHT 115 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>1958</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1210</u>
(B) First Initial Flow <u>22</u>	<input type="checkbox"/> Jars	T-Started <u>1245</u>
(C) First Final Flow <u>31</u>	<input type="checkbox"/> Safety Joint	T-Open <u>1435</u>
(D) Initial Shut-In <u>877</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1705</u>
(E) Second Initial Flow <u>28</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1900</u>
(F) Second Final Flow <u>41</u>	<input checked="" type="checkbox"/> Mileage <u>150 RT</u> 232.50	Comments
(G) Final Shut-In <u>1138</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1923</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Day Standby	Total <u>1382.50</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1382.50</u>	

Approved By _____ Our Representative Ray Schwager *Thank you*

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