



## DRILL STEM TEST REPORT

Prepared For: **Black Tea Oil LLC**

1011 Centennial Boulevard  
Suite B  
Hays, Kansas 67601

ATTN: Kevin Bailey

**#1 Krebs H**

**33/14S/32W/Logan**

Start Date: 2013.11.17 @ 02:32:00

End Date: 2013.11.17 @ 10:03:30

Job Ticket #: 17065                      DST #: 1

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

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**DST#: 1**

Test Start: 2013.11.17 @ 02:32:00

## GENERAL INFORMATION:

Formation: **Kansas City zone E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:31:30

Time Test Ended: 10:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City

**Interval: 3730.00 ft (KB) To 3820.00 ft (KB) (TVD)**

Reference Elevations: 2699.00 ft (KB)

Total Depth: 3820.00 ft (KB) (TVD)

2690.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Poor

KB to GR/CF: 9.00 ft

**Serial #: 6666**

**Inside**

Press @ RunDepth: 218.33 psia @ 3815.43 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.11.17

End Date: 2013.11.17

Last Calib.: 2013.11.17

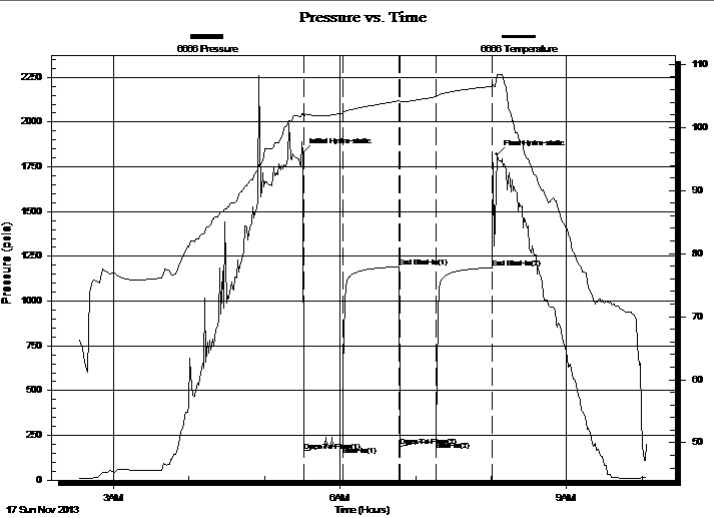
Start Time: 02:32:00

End Time: 10:03:30

Time On Btm: 2013.11.17 @ 05:30:30

Time Off Btm: 2013.11.17 @ 08:04:30

**TEST COMMENT:** 1ST Open 30 Minutes/Fair blow/Blow built to 6 inches  
1ST Shut In 45 Minutes/No blow back  
2ND Open 30 Minutes/Weak blow/Blow built to 3 1/2 inches  
2ND Shut In 45 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1828.31	102.13	Initial Hydro-static
1	161.34	101.74	Open To Flow (1)
32	190.06	102.28	Shut-In(1)
76	1191.88	104.20	End Shut-In(1)
77	190.48	104.04	Open To Flow (2)
106	218.33	104.91	Shut-In(2)
151	1186.97	106.51	End Shut-In(2)
154	1819.65	108.34	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
315.00	Lightly oil spotted w water cut mud	3.60
0.00	Water 10% Mud 90%	0.00

## Gas Rates

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



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Time Test Ended: 10:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City

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Reference Elevations: 2699.00 ft (KB)

Total Depth: 3820.00 ft (KB) (TVD)

2690.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Poor

KB to GR/CF: 9.00 ft

**Serial #: 6749 Outside**

Press @ RunDepth: 1189.56 psia @ 3816.43 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.11.17

End Date: 2013.11.17

Last Calib.: 2013.11.17

Start Time: 02:32:00

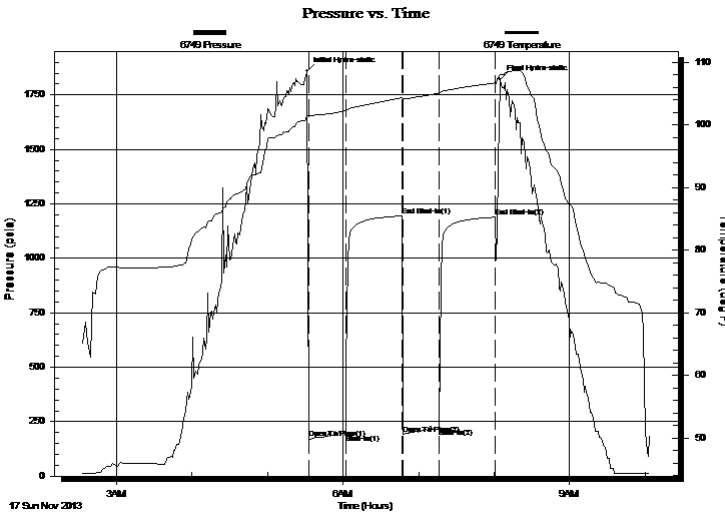
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1ST Shut In 45 Minutes/No blow back  
2ND Open 30 Minutes/Weak blow/Blow built to 3 1/2 inches  
2ND Shut In 45 Minutes/No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1859.19	101.42	Initial Hydro-static
1	174.56	101.41	Open To Flow (1)
31	193.25	102.25	Shut-In(1)
75	1194.48	104.32	End Shut-In(1)
76	193.47	104.15	Open To Flow (2)
105	221.46	105.05	Shut-In(2)
150	1189.56	106.72	End Shut-In(2)
153	1822.62	108.01	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
315.00	Lightly oil spotted w water cut mud	3.60
0.00	Water 10% Mud 90%	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Tea Oil LLC

33/14S/32W/Logan

1011 Centennial Boulevard  
Suite B  
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ATTN: Kevin Bailey

#1 Krebs H

Job Ticket: 17065

DST#: 1

Test Start: 2013.11.17 @ 02:32:00

## Tool Information

Drill Pipe:	Length: 3630.00 ft	Diameter: 3.80 inches	Volume: 50.92 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: 90.00 ft	Diameter: 2.25 inches	Volume: 0.44 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 51.36 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 41000.00 lb
Depth to Top Packer:	3730.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.43 ft			
Tool Length:	116.43 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale packer used

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3708.00	
Hydraulic Tool	5.00			3713.00	
Jars	5.00			3718.00	
Safety Joint	2.00			3720.00	
Packer	5.00			3725.00	27.00 Bottom Of Top Packer
Packer	5.00			3730.00	
Perforations	5.00			3735.00	
Change Over Sub	0.75			3735.75	
Drill Pipe	60.93			3796.68	
Change Over Sub	0.75			3797.43	
Anchor	17.00			3814.43	
Recorder	1.00	6666	Inside	3815.43	
Recorder	1.00	6749	Outside	3816.43	
Bullnose	3.00			3819.43	89.43 Bottom Packers & Anchor

**Total Tool Length: 116.43**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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Test Start: 2013.11.17 @ 02:32:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 58.00 sec/qt  
Water Loss: 7.20 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 2500.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psia

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
315.00	Lightly oil spotted w ater cut mud	3.599
0.00	Water 10% Mud 90%	0.000

Total Length: 315.00 ft      Total Volume: 3.599 bbl

Num Fluid Samples: 0

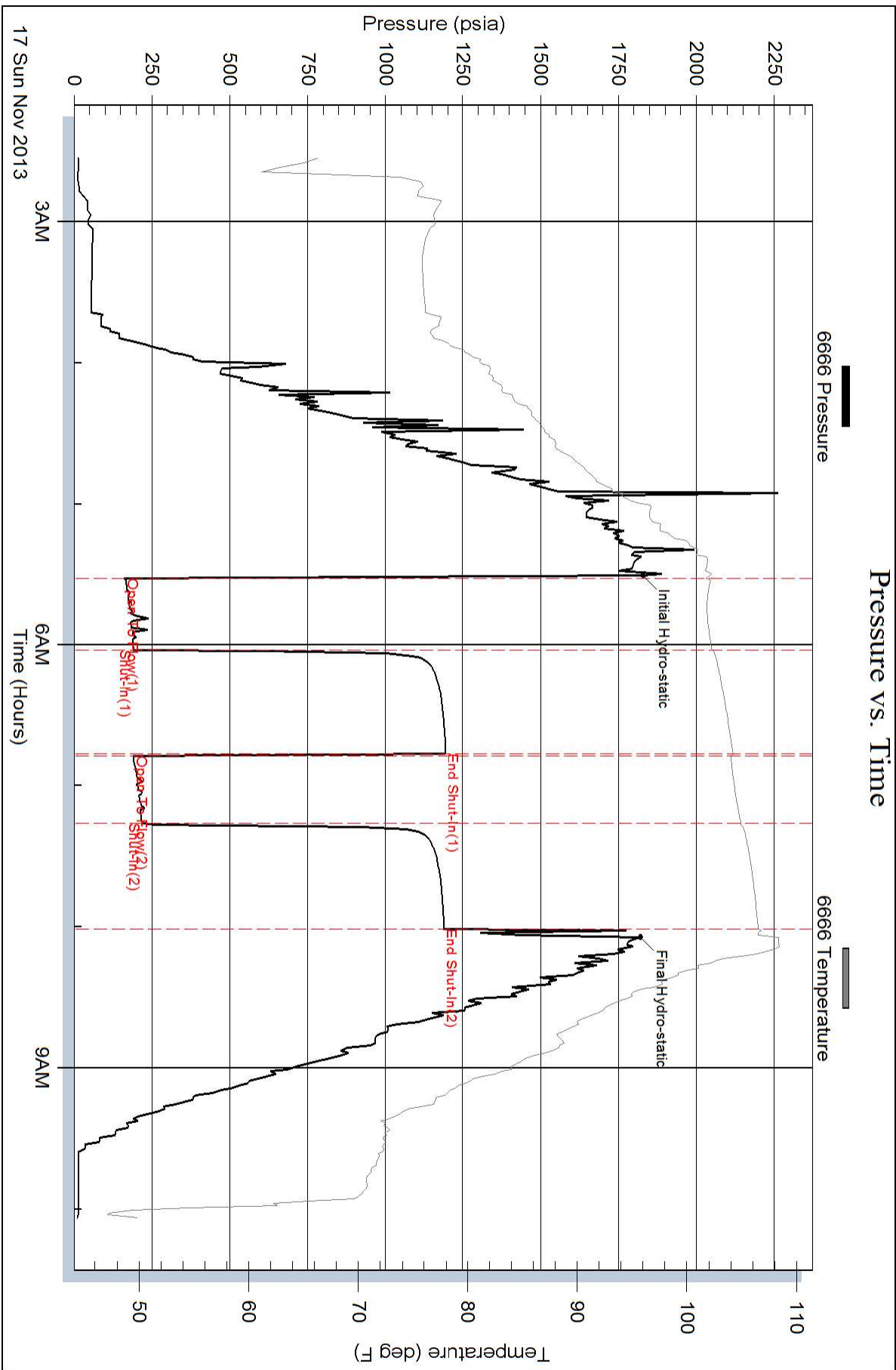
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



### Pressure vs. Time

