

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Company, Inc.**

P.O.Box 124
Kiowa, KS 67070-1912

ATTN: Arden Ratzlaff

36-34s-12w Barber KS

YATES A #8

Start Date: 2011.01.14 @ 07:10:00

End Date: 2011.01.14 @ 19:15:00

Job Ticket #: 39320

DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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YATES A #8

P.O.Box 124
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Job Ticket: 39320

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ATTN: Arden Ratzlaff

Test Start: 2011.01.14 @ 07:10:00

GENERAL INFORMATION:

Formation: **MISNER**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:08:45

Time Test Ended: 19:15:00

Test Type: Conventional Bottom Hole

Tester: Jake Fahrenbruch

Unit No: 43

Interval: 5059.00 ft (KB) To 5072.00 ft (KB) (TVD)

Total Depth: 5072.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1399.00 ft (KB)

1389.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6799

Outside

Press@RunDepth: 154.67 psig @ 5060.00 ft (KB)

Start Date: 2011.01.14

End Date:

2011.01.14

Capacity: 8000.00 psig

Last Calib.: 2011.01.14

Start Time: 07:10:05

End Time:

19:15:00

Time On Btm: 2011.01.14 @ 11:05:45

Time Off Btm: 2011.01.14 @ 15:28:45

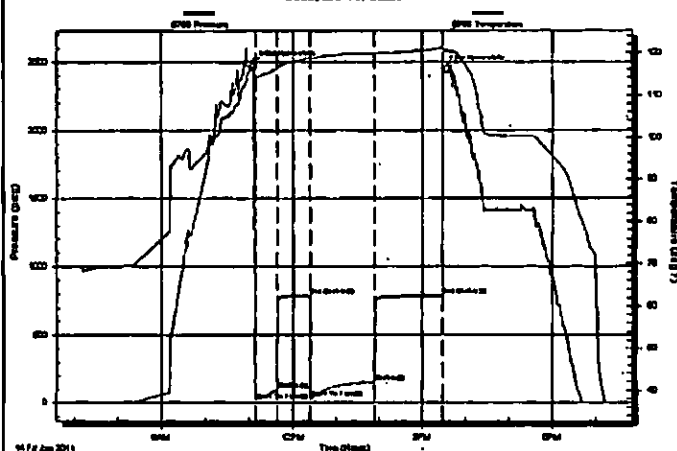
TEST COMMENT: IF: Strong blow, BOB 1 minute, GTS 14 minutes.

IS: Bled off, no blow back.

FF: Strong blow, BOB immediately.

FS: Bled off, no blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2485.43	116.58	Initial Hydro-static
3	20.05	114.24	Open To Flow (1)
33	94.88	116.30	Shut-in(1)
77	785.62	118.85	End Shut-in(1)
79	37.24	118.62	Open To Flow (2)
168	154.67	119.72	Shut-in(2)
262	787.53	121.10	End Shut-in(2)
263	2448.43	120.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	MUD 100% m	0.21

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	28.00	67.26
Last Gas Rate	0.25	131.00	230.66
Max. Gas Rate	0.25	131.00	230.66



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TOOL DIAGRAM

Chieftain Oil Company, Inc.

YATES A #8

P.O. Box 124
Klowa, KS 67070-1912

36-34s-12w Barber KS

Job Ticket: 39320

DST#: 1

ATTN: Arden Ratziuff

Test Start: 2011.01.14 @ 07:10:00

Tool Information

Drill Pipe:	Length: 5046.00 ft	Diameter: 3.80 inches	Volume: 70.78 bbl	Tool Weight: 2300.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			Total Volume: 70.78 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	5059.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			5041.00	
Hydraulic tool	5.00			5046.00	
Safety Joint	3.00			5049.00	
Packer	5.00			5054.00	23.00 Bottom Of Top Packer
Packer	5.00			5059.00	
Stubb	1.00			5060.00	
Recorder	0.00	8648	Inside	5060.00	
Recorder	0.00	6799	Outside	5060.00	
Perforations	7.00			5067.00	
Bullnose	5.00			5072.00	13.00 Bottom Packers & Anchor
Total Tool Length:	36.00				



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FLUID SUMMARY

Chieftain Oil Company, Inc.

YATES A #8

P.O. Box 124
Klows, KS 67070-1912

36-34s-12w Barber KS

Job Ticket: 39320

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2011.01.14 @ 07:10:00

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:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	MUD 100% m	0.210

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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GAS RATES

Chieftain Oil Company, Inc.

YATES A #8

P.O. Box 124
Kiowa, KS 67070-1912

36-34s-12w Barber KS

Job Ticket: 39320

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2011.01.14 @ 07:10:00

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

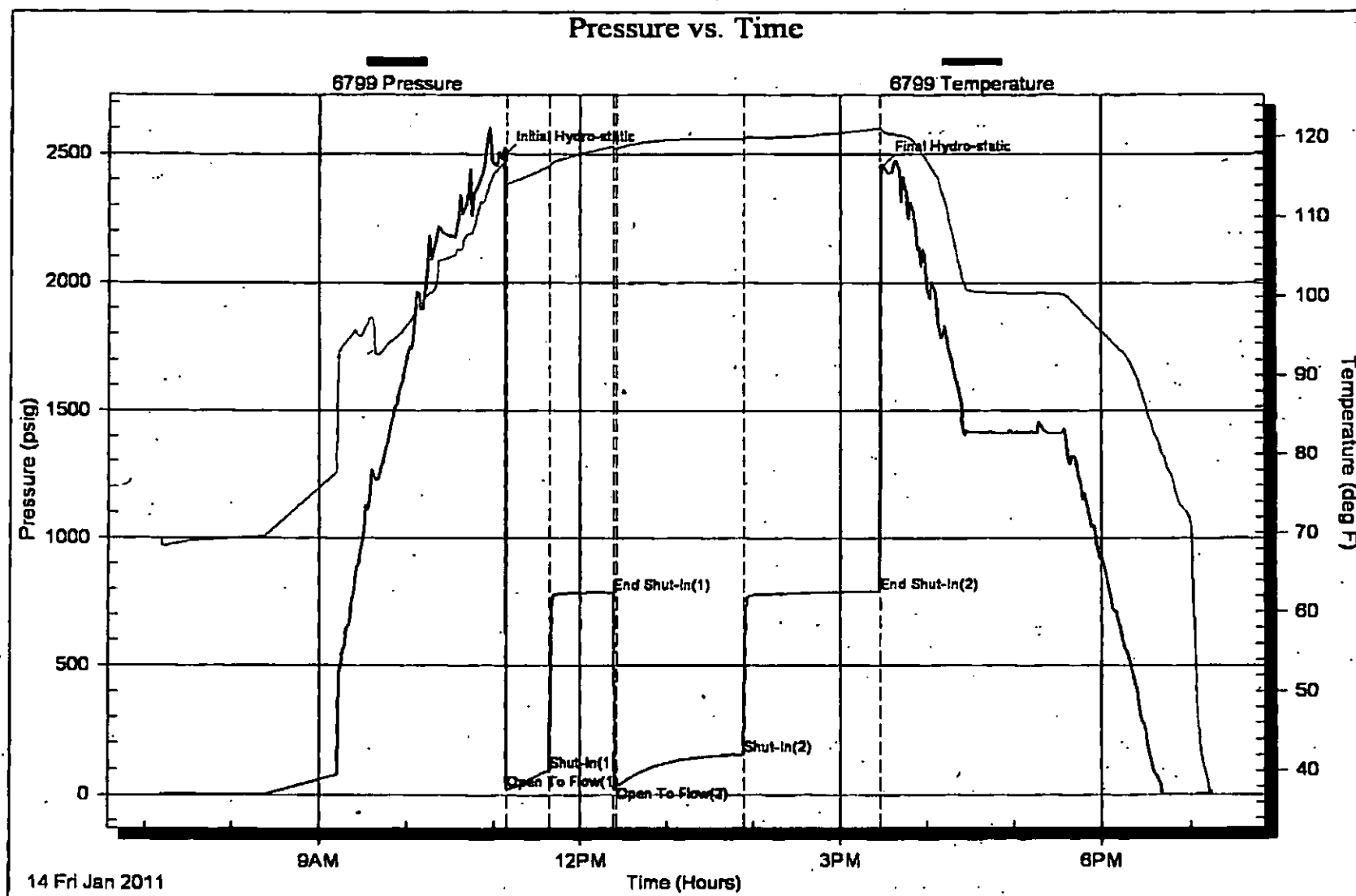
Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	15	0.25	28.00	67.26
1	15	0.25	28.00	67.26
1	20	0.25	43.00	91.06
1	25	0.25	56.00	111.68
1	30	0.25	69.00	132.31
2	10	0.25	44.00	92.65
2	20	0.25	69.00	132.31
2	30	0.25	89.00	164.03
2	40	0.25	109.00	195.76
2	50	0.25	117.00	208.45
2	60	0.25	122.00	216.39
2	70	0.25	128.00	225.90
2	90	0.25	131.00	230.66

Serial #: 6799

Outside Chieftain Oil Company, Inc.

36-34s-12w Barber KS

OST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 039321 15297

RECEIVED
JAN 20 2011

Well Name & No. YATES A #8 BY: Test No. ONE Date 14. JAN. 2011
Company CHIEFTAIN OIL COMPANY, INC. Elevation 1399 KB 1389 GL
Address 605 S. 6TH, P.O. Box 124, KIOWA, KANSAS, 67076-1921
Co. Rep / Geo. ARLEN RATZLAFF Rig MAVERICK #106
Location: Sec. 36 Twp. 34 S Rge. 12 W Co. BARBER State KANSAS

Interval Tested 5059-5072 Zone Tested MISNER
Anchor Length 13 Drill Pipe Run 5046' (4 1/2" X O) Mud Wt. 9.4
Top Packer Depth 5054 Drill Collars Run NONE Vis 53
Bottom Packer Depth 5059 Wt. Pipe Run NONE WL 7.2
Total Depth 5072 Chlorides 2,100 ppm System LCM TRACE

Blow Description IF: STRONG BLOW, BOB 1 MINUTE, GTS 14 MINUTES
ISI: BLED OFF, NO BLOWBACK
FF: STRONG BLOW, BOB IMMEDIATELY
FST: BLED OFF, NO BLOWBACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>MUD</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 121°F Gravity NA API RW - @ - °F Chlorides NA ppm

(A) Initial Hydrostatic <u>2485</u>	☒ Test <u>\$1,325.00</u>	T-On Location <u>0550</u>
(B) First Initial Flow <u>20</u>	☐ Jars	T-Started <u>0710</u>
(C) First Final Flow <u>95</u>	☒ Safety Joint <u>\$75.00</u>	T-Open <u>1108</u>
(D) Initial Shut-In <u>786</u>	☒ Circ Sub <u>NO CHARGE</u>	T-Pulled <u>1527</u>
(E) Second Initial Flow <u>37</u>	☒ Hourly Standby <u>250</u>	T-Out <u>1910 13.5</u>
(F) Second Final Flow <u>155</u>	☒ Mileage <u>100 R.T. \$125.00</u>	Comments
(G) Final Shut-In <u>788</u>	☐ Sampler	
(H) Final Hydrostatic <u>2448</u>	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
	☐ Extra Packer	☐ Extra Copies
	☐ Extra Recorder	Sub Total <u>8</u>
	☐ Day Standby	Total <u>1775</u>
	☐ Accessibility	MP/DST Disc't
	Sub Total <u>1775</u>	

Initial Open 30
Initial Shut-In 45
Final Flow 90
Final Shut-In 90

Approved By Arden Ratzlaff

Our Representative Jacob L. Jan

Triobite 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.

620.770.9479 OR 785.650.7709



P.O. Box 1733 • Hays, Kansas 67601

JAN 20 2011

CHIEFTAIN OIL COMPANY

YATES A #8

DST No.

[illegible]

Gas sample taken during final flow period.
Will be sent to Caraway Analytical Lab. in Liberal, Kansas.
Prob taken 1-14-61

Jacob C. Faber 1-14-01