

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Chieftain Oil Co. Inc.
605 S.6th, P.O.Box 124
Kiowa, KS 67070
ATTN: Arden Ratzlaff

Combrink#1
9-33s-10w Barber KS
Job Ticket: 042507 **DST#: 1**
Test Start: 2011.06.27 @ 21:18:33

GENERAL INFORMATION:

Formation: **Hertha**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 23:30:03
Time Test Ended: 05:59:33
Interval: **4297.00 ft (KB) To 4348.00 ft (KB) (TVD)**
Total Depth: **4348.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: Fair
Reference Elevations: **1509.00 ft (KB)**
1501.00 ft (CF)
KB to GR/CF: **8.00 ft**

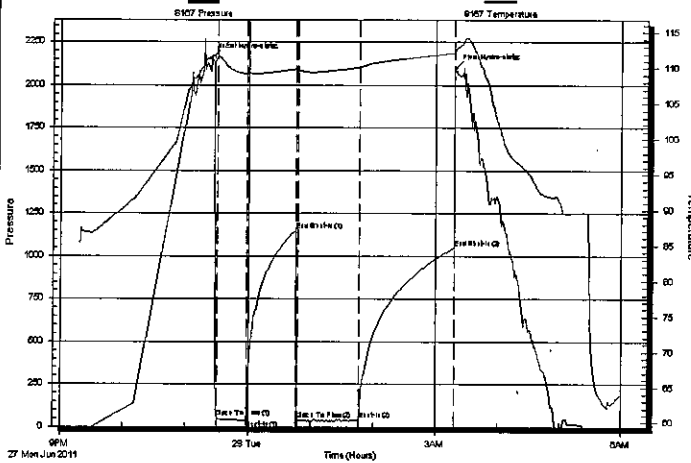
Serial #: 8167

Inside

Press@RunDepth: 42.75 psig @ 4298.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.06.27 End Date: 2011.06.28 Last Calib.: 2011.06.28
Start Time: 21:18:38 End Time: 05:59:33 Time On Btm: 2011.06.27 @ 23:24:18
Time Off Btm: 2011.06.28 @ 03:19:18

TEST COMMENT: IF: Strong blow . B.O.B. in 3 secs. GTS in 4 mins. (see gas flow report)
IS: No blow .
FF: Strong blow . (see gas flow report)
FSI: No blow .

Pressure vs. Time



PRESSURE SUMMARY

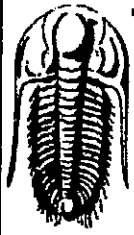
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2161.95	111.60	Initial Hydro-static
6	52.56	111.67	Open To Flow (1)
34	35.58	109.15	Shut-In(1)
82	1151.14	109.90	End Shut-In(1)
84	41.72	109.58	Open To Flow (2)
142	42.75	110.08	Shut-In(2)
234	1050.14	112.13	End Shut-In(2)
235	2099.98	112.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	GCM w trace of oil	0.44
0.00	thin layer of oil @ top of tool	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	8.00	82.06
Last Gas Rate	0.25	5.00	30.78
Max. Gas Rate	0.38	13.00	100.37



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Chieftain Oil Co. Inc.
605 S.6th, P.O.Box 124
Kiowa, KS 67070
ATTN: Arden Ratzlaff

Combrink#1
9-33s-10w Barber KS
Job Ticket: 042507 **DST#: 1**
Test Start: 2011.06.27 @ 21:18:33

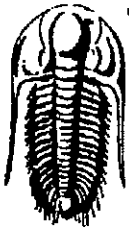
Tool Information

Drill Pipe:	Length: 4166.00 ft	Diameter: 3.80 inches	Volume: 58.44 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 59.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4297.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	74.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4275.00	
Shut in tool	5.00			4280.00	
HMV	5.00			4285.00	
Safety Joint	3.00			4288.00	
Packer	4.00			4292.00	23.00 Bottom Of Top Packer
Packer	5.00			4297.00	
Stubb	1.00			4298.00	
Recorder	0.00	8167	Inside	4298.00	
Recorder	0.00	8370	Outside	4298.00	
Perforations	7.00			4305.00	
Blank Spacing	32.00			4337.00	
Perforations	6.00			4343.00	
Bullnose	5.00			4348.00	51.00 Bottom Packers & Anchor

Total Tool Length: 74.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Chieftain Oil Co. Inc.
605 S.6th, P.O.Box 124
Kiowa, KS 67070
ATTN: Arden Ratzlaff

Combrink#1
9-33s-10w Barber KS
Job Ticket: 042507 **DST#: 1**
Test Start: 2011.06.27 @ 21:18:33

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:	3100 ppm
Viscosity: 61.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.58 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3100.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	GCM w trace of oil	0.443
0.00	thin layer of oil @ top of tool	0.000

Total Length: 90.00 ft Total Volume: 0.443 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 1 Serial #: gp-1
 Laboratory Name: Caraway Laboratory Location: Liberal, KS
 Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

Chieftain Oil Co. Inc.

Combrink#1

605 S.6th, P.O.Box 124
Kiowa, KS 67070

9-33s-10w Barber KS

Job Ticket: 042507

DST#: 1

ATTN: Arden Ratzlaff

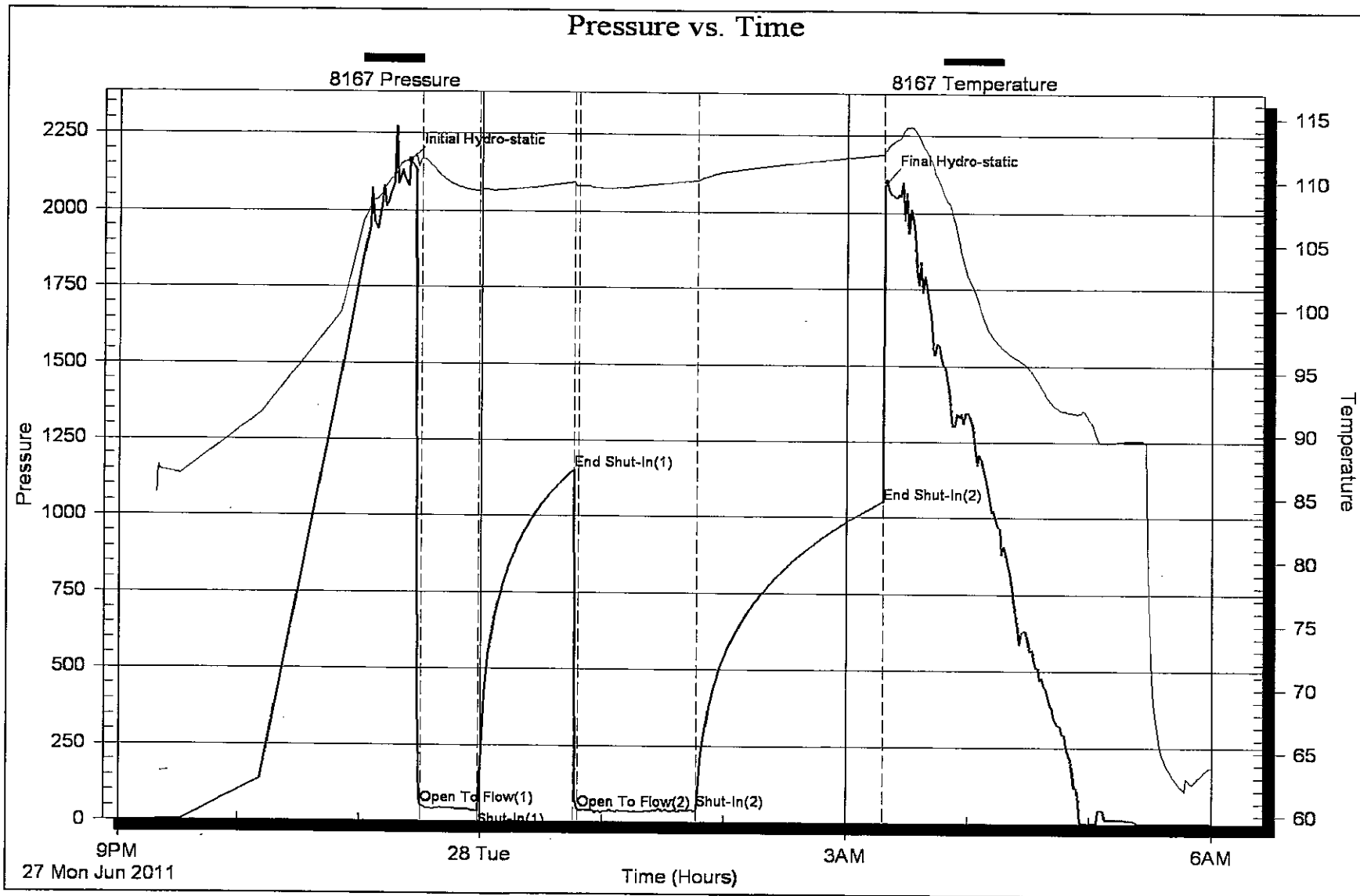
Test Start: 2011.06.27 @ 21:18:33

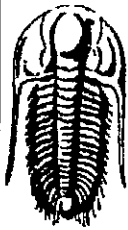
Gas Rates Information

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	10	0.38	8.00	82.06
1	10	0.38	8.00	82.06
1	20	0.38	7.00	78.39
1	30	0.38	4.00	67.40
2	5	0.38	13.00	100.37
2	10	0.38	8.00	82.06
2	20	0.25	6.00	32.36
2	30	0.25	5.50	31.57
2	40	0.25	5.00	30.78
2	50	0.25	5.00	30.78





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Chieftain Oil Co. Inc.
605 S.6th, P.O.Box 124
Kiowa, KS 67070
ATTN: Arden Ratzlaff

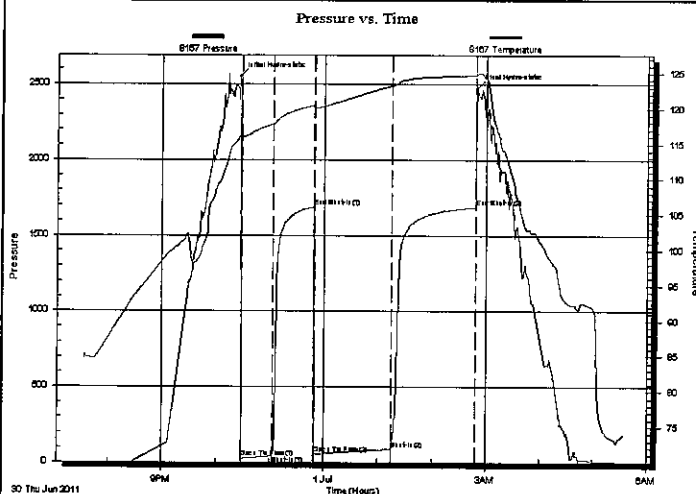
Combrink#1
9-33s-10w Barber KS
Job Ticket: 042508 **DST#: 2**
Test Start: 2011.06.30 @ 19:33:40

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 22:27:25
Time Test Ended: 05:35:40
Test Type: **Conventional Bottom Hole**
Tester: **Gary Fevoteaux**
Unit No: **56**
Interval: **4916.00 ft (KB) To 4950.00 ft (KB) (TVD)**
Reference Elevations: **1509.00 ft (KB)**
Total Depth: **4950.00 ft (KB) (TVD)**
1501.00 ft (CF)
Hole Diameter: **7.88 inches** Hole Condition: **Poor**
KB to GR/CF: **8.00 ft**

Serial #: 8167 **Inside**
Press@RunDepth: **87.14 psig @ 4917.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2011.06.30** End Date: **2011.07.01** Last Calib.: **2011.07.01**
Start Time: **19:33:45** End Time: **05:35:40** Time On Btm: **2011.06.30 @ 22:25:55**
Time Off Btm: **2011.07.01 @ 02:49:10**

TEST COMMENT: IF:Weak blow . 1/2 - 2".
IS:No blow .
FF:Weak blow . Slow increase to 1 3/4".
FS:No blow .



PRESSURE SUMMARY

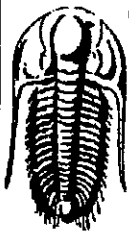
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2550.57	116.05	Initial Hydro-static
2	28.02	115.80	Open To Flow (1)
37	42.97	117.90	Shut-In(1)
83	1687.24	120.45	End Shut-In(1)
84	54.63	120.11	Open To Flow (2)
169	87.14	123.23	Shut-In(2)
262	1685.10	124.73	End Shut-In(2)
264	2475.98	124.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MW 19% m 81% w /Rw .085hms @84deg	0.62
50.00	MW w trace of oil 29% m 71% w	0.70

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Chieftain Oil Co. Inc.

Combrink#1

605 S.6th, P.O.Box 124
Kiowa, KS 67070

9-33s-10w Barber KS

Job Ticket: 042508

DST#: 2

ATTN: Arden Ratzlaff

Test Start: 2011.06.30 @ 19:33:40

Tool Information

Drill Pipe:	Length: 4795.00 ft	Diameter: 3.80 inches	Volume: 67.26 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 67.87 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 59500.00 lb
Depth to Top Packer:	4916.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 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
C.O. Sub	1.00			4894.00	
Shut in tool	5.00			4899.00	
HMV	5.00			4904.00	
Safety Joint	3.00			4907.00	
Packer	4.00			4911.00	23.00 Bottom Of Top Packer
Packer	5.00			4916.00	
Stubb	1.00			4917.00	
Recorder	0.00	8167	Inside	4917.00	
Recorder	0.00	8370	Outside	4917.00	
Perforations	28.00			4945.00	
Bullnose	5.00			4950.00	34.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Chieftain Oil Co. Inc.
605 S.6th, P.O.Box 124
Kiowa, KS 67070
ATTN: Arden Ratzlaff

Combrink#1
9-33s-10w Barber KS
Job Ticket: 042508 DST#: 2
Test Start: 2011.06.30 @ 19:33:40

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:	77000 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.59 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6800.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	M/W 19% m 81% w / R/w .085hms @ 84deg	0.624
50.00	M/W w trace of oil 29% m 71% w	0.701

Total Length: 175.00 ft Total Volume: 1.325 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none
 Laboratory Name: Laboratory Location:
 Recovery Comments:

