



DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway # 900
Denver CO 80202-3858

ATTN: Charles Sturdavant

K Clark #1-15

15-19s-29w Lane,KS

Start Date: 2012.10.22 @ 07:55:00

End Date: 2012.10.22 @ 15:31:00

Job Ticket #: 48910 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.26 @ 10:53:58



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48910

DST#: 1

ATTN: Charles Sturdavant

Test Start: 2012.10.22 @ 07:55:00

GENERAL INFORMATION:

Formation: **Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:13:30

Time Test Ended: 15:31:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 46

Interval: 4182.00 ft (KB) To 4370.00 ft (KB) (TVD)

Reference Elevations: 2838.00 ft (KB)

Total Depth: 4370.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8675

Inside

Press @ Run Depth: 520.27 psig @ 4183.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.22

End Date:

2012.10.22

Last Calib.:

2012.10.22

Start Time: 07:55:15

End Time:

15:31:00

Time On Btm:

2012.10.22 @ 10:12:15

Time Off Btm:

2012.10.22 @ 12:59:15

TEST COMMENT:

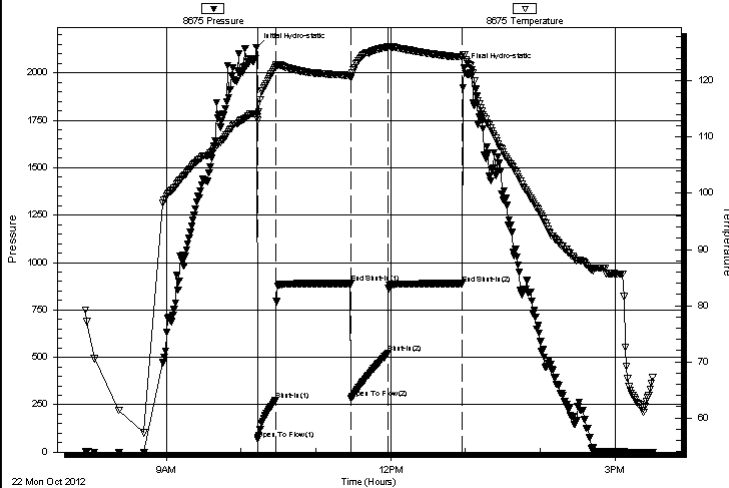
B.O.B. in 4 min.

Bled off for 5 min. No return blow

B.O.B. in 5 1/2 min.

Bled off for 5 min. No return blow

Pressure vs. Time



PRESSURE SUMMARY

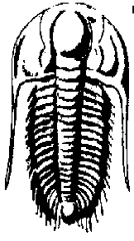
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2134.36	114.22	Initial Hydro-static
2	68.19	113.61	Open To Flow (1)
16	275.35	122.46	Shut-In(1)
76	889.27	120.96	End Shut-In(1)
76	285.95	120.54	Open To Flow (2)
106	520.27	126.05	Shut-In(2)
165	888.71	124.34	End Shut-In(2)
167	2027.88	124.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
234.00	ocmw 5%O 20%M 75%W	1.15
680.00	ocgmw 5%O 5%G 40%M 50%W	9.53
186.00	w cm 5% W 95%M	2.61

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

1801 Broadway # 900
Denver CO 80202-3858

ATTN: Charles Sturdavant

15-19s-29w Lane, KS

K Clark #1-15

Job Ticket: 48910

DST#: 1

Test Start: 2012.10.22 @ 07:55:00

GENERAL INFORMATION:

Formation: **Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:13:30

Time Test Ended: 15:31:00

Interval: **4182.00 ft (KB) To 4370.00 ft (KB) (TVD)**

Total Depth: 4370.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 46

Reference Elevations: 2838.00 ft (KB)

2827.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **8650**

Outside

Press@RunDepth: psig @ 4183.00 ft (KB)

Start Date: 2012.10.22

End Date:

2012.10.22

Capacity: 8000.00 psig

Last Calib.:

2012.10.22

Start Time: 07:55:15

End Time:

15:30:45

Time On Btm:

Time Off Btm:

TEST COMMENT:

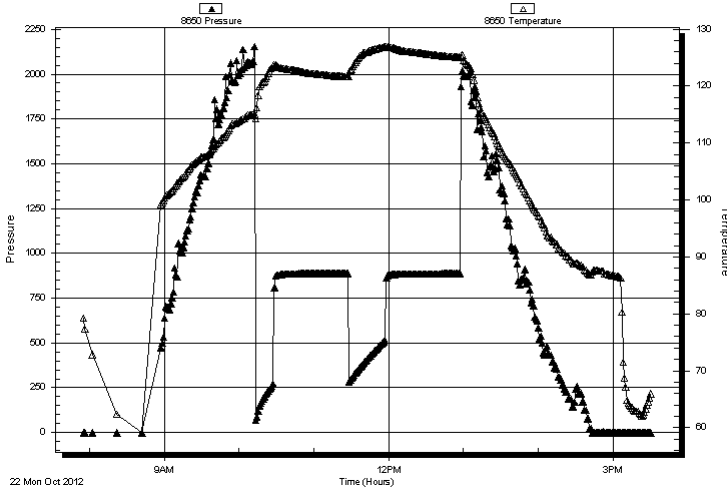
B.O.B. in 4 min.

Bled off for 5 min. No return blow

B.O.B. in 5 1/2 min.

Bled off for 5 min. No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
234.00	ocmw 5%O 20%M 75%W	1.15
680.00	ocgmw 5%O 5%G 40%M 50%W	9.53
186.00	w cm 5% W 95%M	2.61

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48910

DST#: 1

ATTN: Charles Sturdavant

Test Start: 2012.10.22 @ 07:55:00

Tool Information

Drill Pipe:	Length: 3945.04 ft	Diameter: 3.80 inches	Volume: 55.34 bbl	Tool Weight: 2500.00 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: 234.55 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 56.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.09 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4182.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	188.00 ft			
Tool Length:	215.50 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			4155.50	
Shut In Tool	5.00			4160.50	
Hydraulic tool	5.00			4165.50	
Jars	5.00			4170.50	
Safety Joint	2.50			4173.00	
Packer	5.00			4178.00	27.50 Bottom Of Top Packer
Packer	4.00			4182.00	
Stubb	1.00			4183.00	
Recorder	0.00	8675	Inside	4183.00	
Recorder	0.00	8650	Outside	4183.00	
Perforations	26.00			4209.00	
Change Over Sub	1.00			4210.00	
Drill Pipe	156.00			4366.00	
Change Over Sub	1.00			4367.00	
Bullnose	3.00			4370.00	188.00 Bottom Packers & Anchor

Total Tool Length: 215.50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation

15-19s-29w Lane,KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48910

DST#: 1

ATTN: Charles Sturdavant

Test Start: 2012.10.22 @ 07:55:00

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: 42.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 14.35 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 26000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
234.00	ocmw 5%O 20%M 75%W	1.151
680.00	ocgmw 5%O 5%G 40%M 50%W	9.534
186.00	wcm 5% W 95%M	2.609

Total Length: 1100.00 ft Total Volume: 13.294 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw . .20 @ 70 F = 35,000

Serial #: 8675

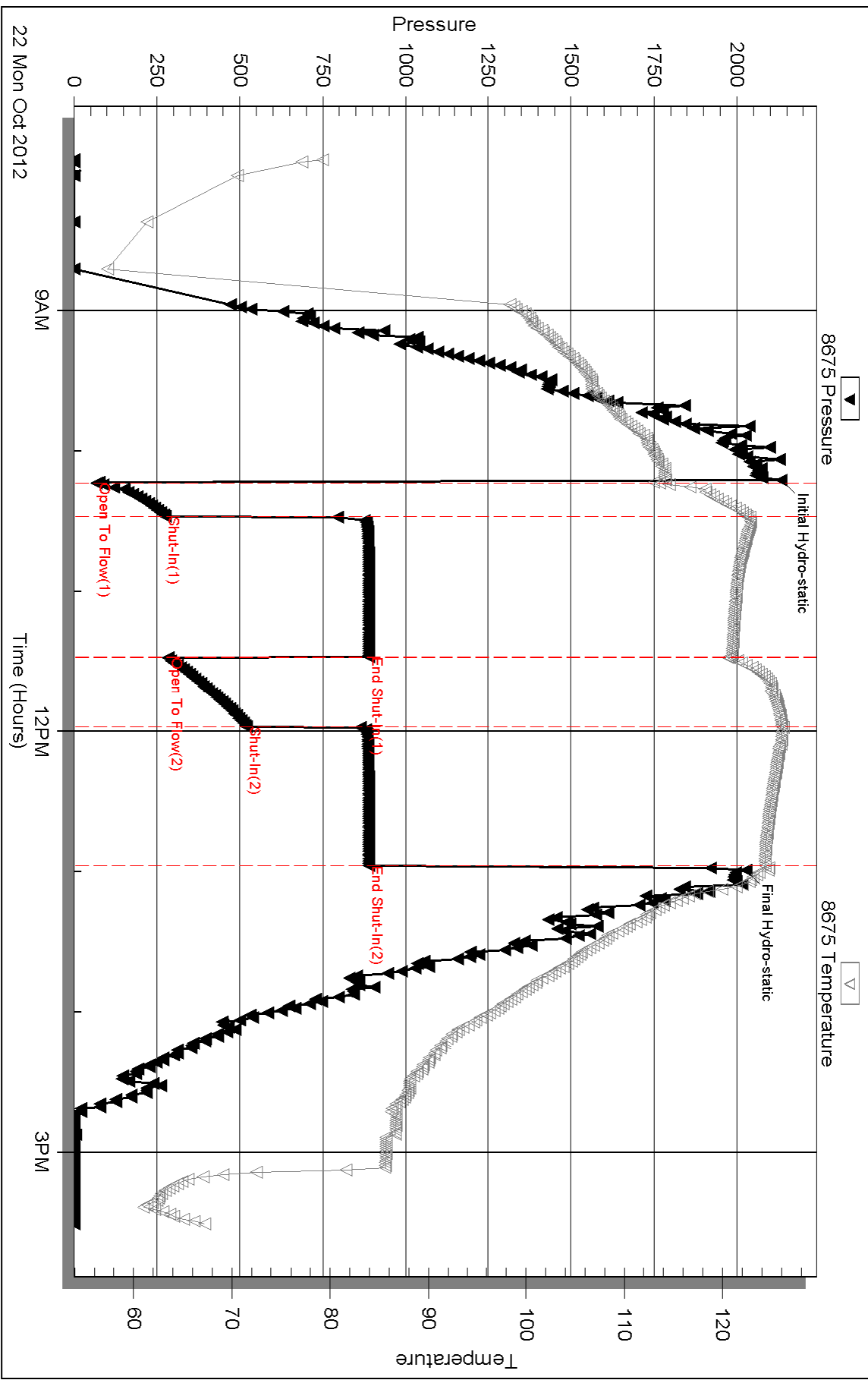
Inside

Credo Petroleum Corporation

K Clark #1-15

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 48910

Printed: 2012.10.26 @ 10:54:02

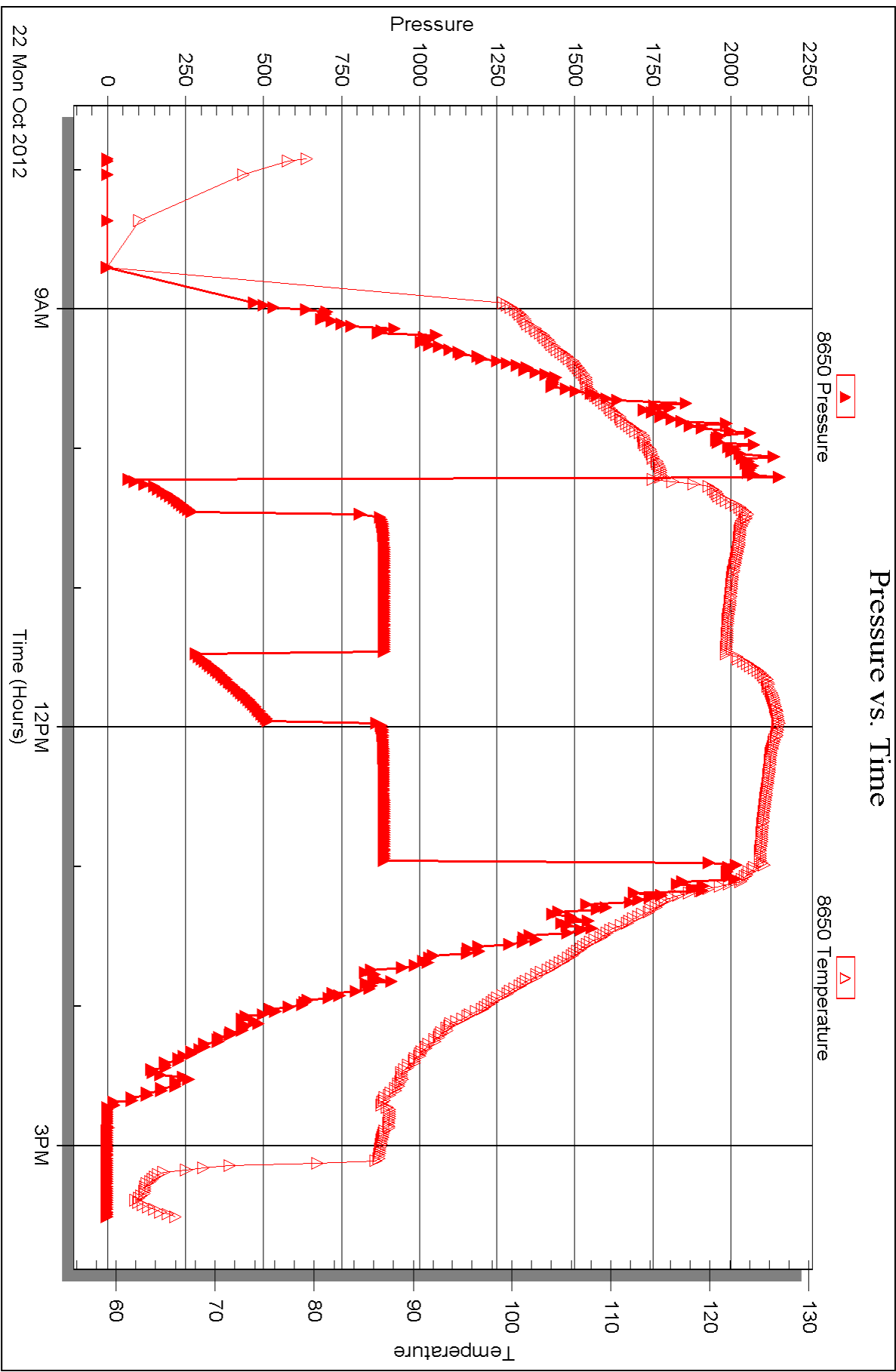
Serial #: 8650

Outside

Credo Petroleum Corporation

K Clark #1-15

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway # 900
Denver CO 80202-3858

ATTN: Charles Sturdavant

K Clark #1-15

15-19s-29w Lane,KS

Start Date: 2012.10.23 @ 04:20:00

End Date: 2012.10.23 @ 12:17:15

Job Ticket #: 48911 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.26 @ 10:52:45



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48911

DST#: 2

ATTN: Charles Sturdavant

Test Start: 2012.10.23 @ 04:20:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:53:45

Time Test Ended: 12:17:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4368.00 ft (KB) To 4480.00 ft (KB) (TVD)

Reference Elevations: 2838.00 ft (KB)

Total Depth: 4480.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8675

Inside

Press @ Run Depth: 546.99 psig @ 4369.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.23

End Date:

2012.10.23

Last Calib.: 2012.10.23

Start Time: 04:20:15

End Time:

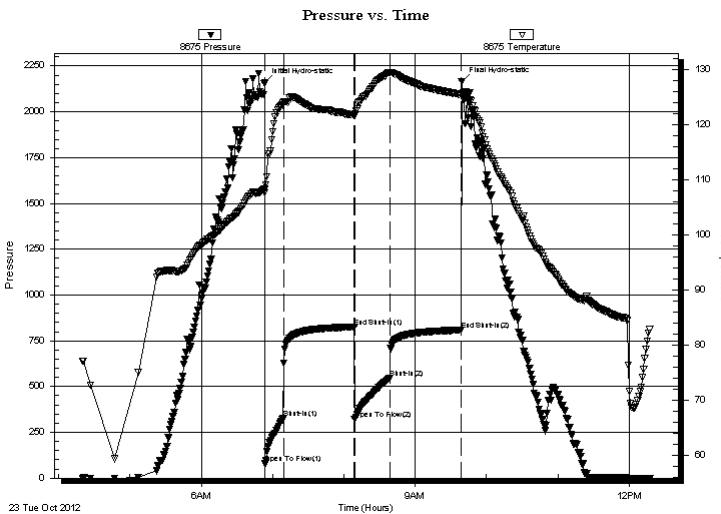
12:17:15

Time On Btm: 2012.10.23 @ 06:53:30

Time Off Btm: 2012.10.23 @ 09:39:15

TEST COMMENT: B.O.B. in 3 1/2 min.
Bled off for 5 min. No return blow
B.O.B. in 5 min.
Bled off for 5 min. No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.33	108.35	Initial Hydro-static
1	78.80	107.64	Open To Flow (1)
16	327.48	123.93	Shut-In(1)
76	825.85	121.83	End Shut-In(1)
76	321.96	121.63	Open To Flow (2)
106	546.99	129.48	Shut-In(2)
165	808.62	125.51	End Shut-In(2)
166	2164.29	125.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
544.00	mcw with oil scum 20%M 80%W	5.49
586.00	w cm with oil scum 30%W 70%M	8.22

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation
1801 Broadway # 900
Denver CO 80202-3858
ATTN: Charles Sturdavant

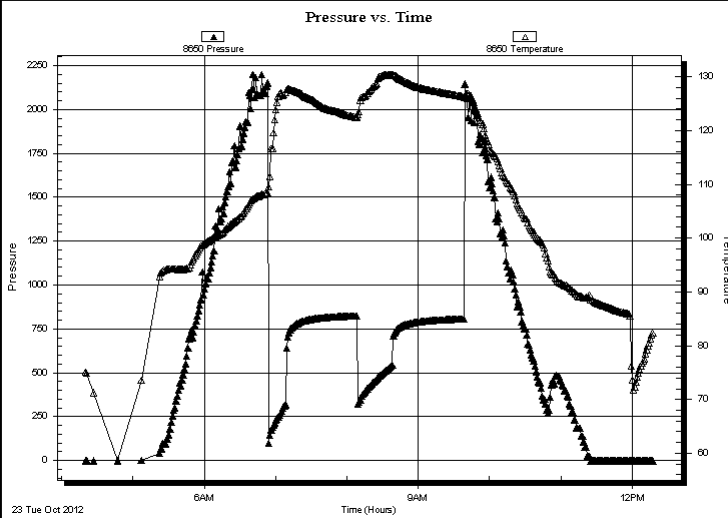
15-19s-29w Lane,KS
K Clark #1-15
Job Ticket: 48911 **DST#: 2**
Test Start: 2012.10.23 @ 04:20:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 06:53:45 Tester: Jace McKinney
Time Test Ended: 12:17:15 Unit No: 46
Interval: 4368.00 ft (KB) To 4480.00 ft (KB) (TVD) Reference Elevations: 2838.00 ft (KB)
Total Depth: 4480.00 ft (KB) (TVD) 2827.00 ft (CF)
Hole Diameter: 7.88 inchesHole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 8650 Outside
Press @ RunDepth: psig @ 4369.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.10.23 End Date: 2012.10.23 Last Calib.: 2012.10.23
Start Time: 04:20:15 End Time: 12:17:15 Time On Btm:
Time Off Btm:

TEST COMMENT: B.O.B. in 3 1/2 min.
Bled off for 5 min. No return blow
B.O.B. in 5 min.
Bled off for 5 min. No return blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
544.00	mcw with oil scum 20%M 80%W	5.49
586.00	w cm with oil scum 30%W 70%M	8.22

* Recovery from multiple tests

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corporation

15-19s-29w Lane,KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48911

DST#: 2

ATTN: Charles Sturdavant

Test Start: 2012.10.23 @ 04:20:00

Tool Information

Drill Pipe:	Length: 4131.91 ft	Diameter: 3.80 inches	Volume: 57.96 bbl	Tool Weight: 2500.00 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: 234.55 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 59.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.96 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4368.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	112.00 ft			
Tool Length:	139.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4341.50	
Shut In Tool	5.00			4346.50	
Hydraulic tool	5.00			4351.50	
Jars	5.00			4356.50	
Safety Joint	2.50			4359.00	
Packer	5.00			4364.00	27.50 Bottom Of Top Packer
Packer	4.00			4368.00	
Stubb	1.00			4369.00	
Recorder	0.00	8675	Inside	4369.00	
Recorder	0.00	8650	Outside	4369.00	
Perforations	13.00			4382.00	
Change Over Sub	1.00			4383.00	
Drill Pipe	93.00			4476.00	
Change Over Sub	1.00			4477.00	
Bullnose	3.00			4480.00	112.00 Bottom Packers & Anchor

Total Tool Length: 139.50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48911

DST#: 2

ATTN: Charles Sturdavant

Test Start: 2012.10.23 @ 04:20:00

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: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
544.00	mcw with oil scum 20%M 80%W	5.494
586.00	w cm with oil scum 30%W 70%M	8.220

Total Length: 1130.00 ft Total Volume: 13.714 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .15 @ 80 F = 40,000

Serial #: 8675

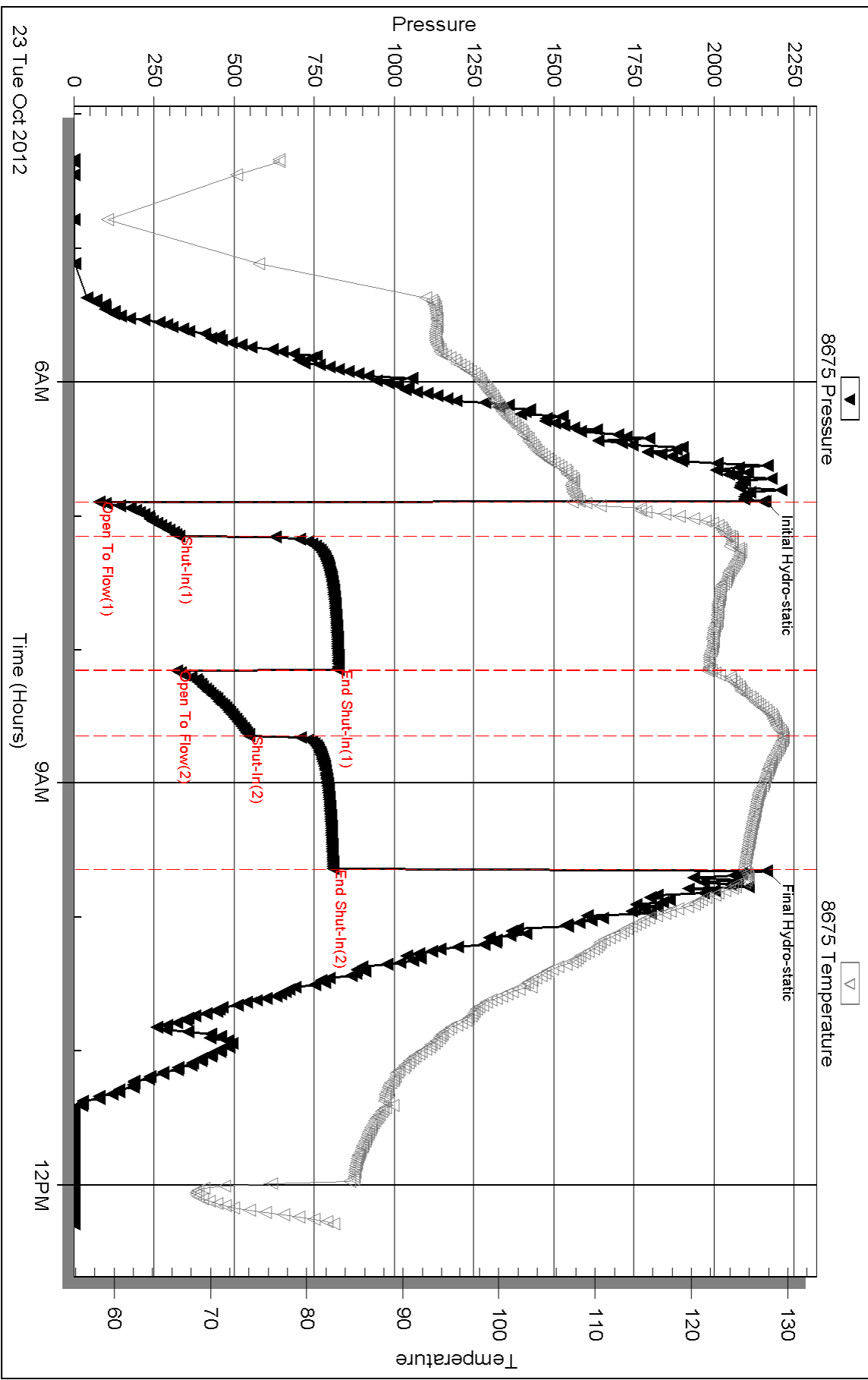
Inside

Crede Petroleum Corporation

K Clark #1-15

DST Test Number: 2

Pressure vs. Time

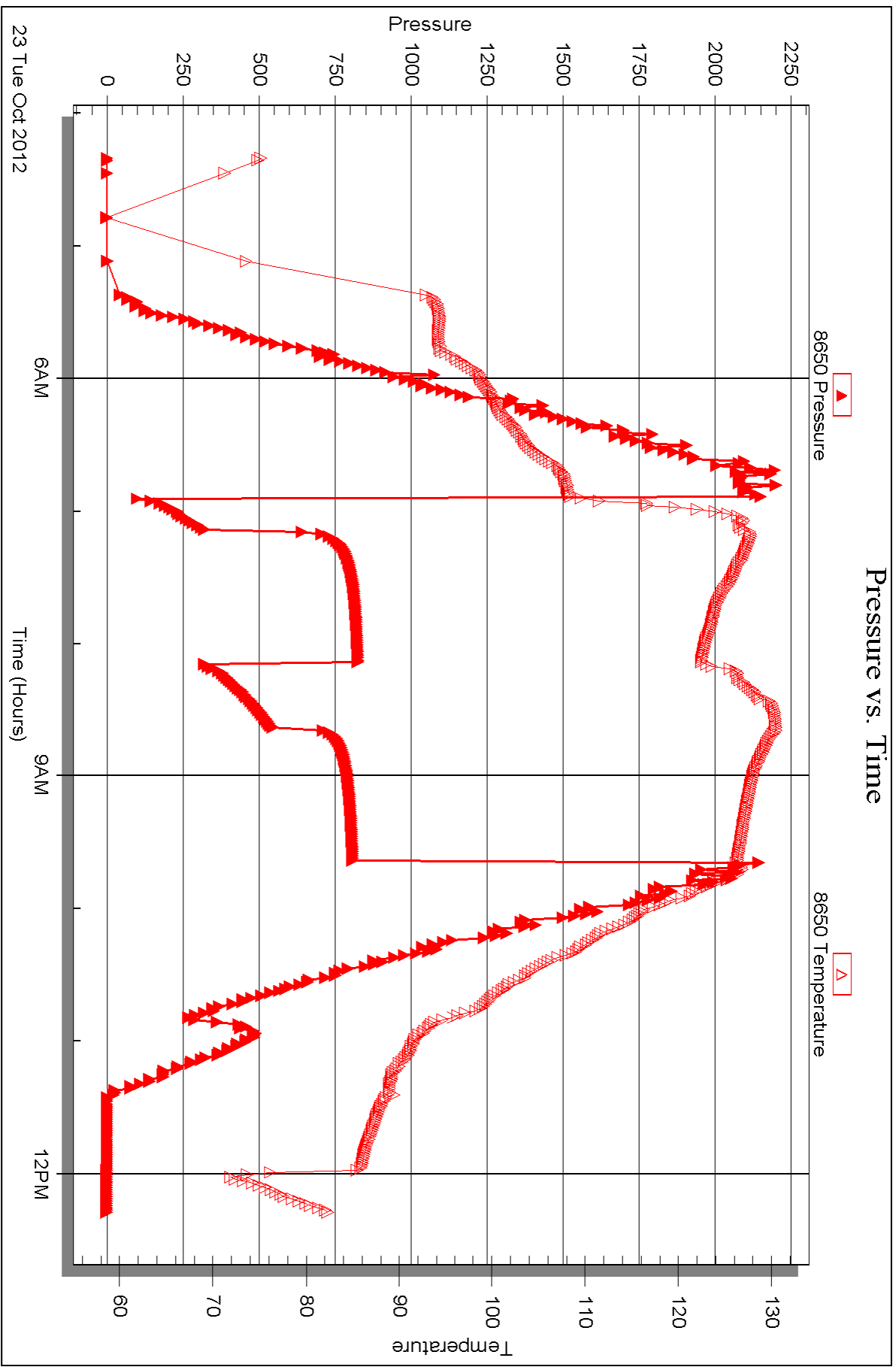


Serial #: 8650

Outside Credo Petroleum Corporation

K Clark #1-15

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway # 900
Denver CO 80202-3858

ATTN: Charles Sturdavant

K Clark #1-15

15-19s-29w Lane,KS

Start Date: 2012.10.24 @ 03:55:00

End Date: 2012.10.24 @ 11:13:15

Job Ticket #: 48912 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.26 @ 10:51:34



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48912

DST#: 3

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 03:55:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:41:45

Time Test Ended: 11:13:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4478.00 ft (KB) To 4620.00 ft (KB) (TVD)

Reference Elevations: 2838.00 ft (KB)

Total Depth: 4620.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press @ Run Depth: 90.48 psig @ 4479.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.24

End Date:

2012.10.24

Last Calib.: 2012.10.24

Start Time: 03:55:15

End Time:

11:13:15

Time On Btm: 2012.10.24 @ 05:41:30

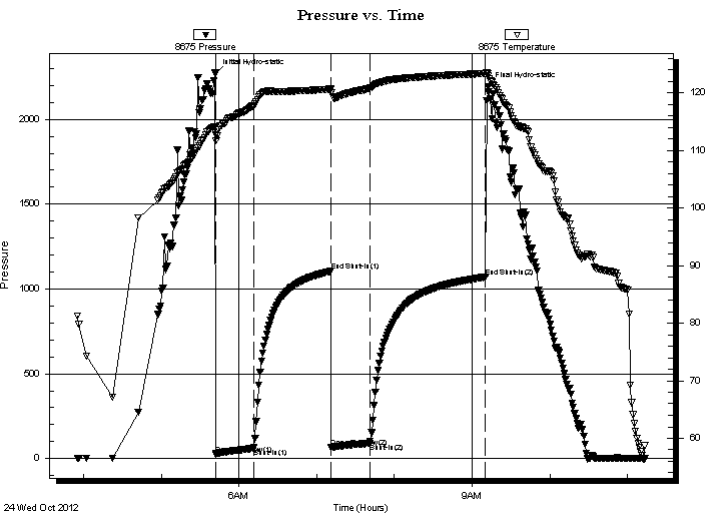
Time Off Btm: 2012.10.24 @ 09:12:30

TEST COMMENT: Built to 2 1/2" blow

No return blow

No blow

No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2271.31	114.14	Initial Hydro-static
1	26.21	112.74	Open To Flow (1)
30	60.55	117.77	Shut-In(1)
90	1104.65	120.66	End Shut-In(1)
90	64.50	119.94	Open To Flow (2)
120	90.48	120.80	Shut-In(2)
209	1070.56	123.37	End Shut-In(2)
211	2192.77	122.92	Final Hydro-static

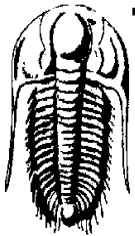
Recovery

Length (ft)	Description	Volume (bbl)
120.00	100% Mud	0.59

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

ATTN: Charles Sturdavant

Job Ticket: 48912

DST#: 3

Test Start: 2012.10.24 @ 03:55:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:41:45

Time Test Ended: 11:13:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: **4478.00 ft (KB) To 4620.00 ft (KB) (TVD)**

Reference Elevations: 2838.00 ft (KB)

Total Depth: 4620.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8650 Outside

Press @ Run Depth: psig @ 4479.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.24

End Date: 2012.10.24

Last Calib.: 2012.10.24

Start Time: 03:55:15

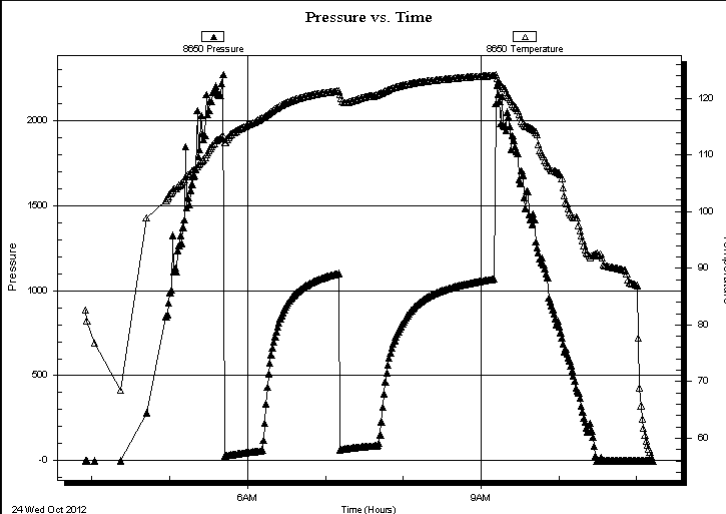
End Time: 11:13:00

Time On Btm:

Time Off Btm:

TEST COMMENT: Built to 2 1/2" blow
No return blow
No blow
No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
120.00	100% Mud	0.59

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corporation

15-19s-29w Lane,KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48912

DST#: 3

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 03:55:00

Tool Information

Drill Pipe:	Length: 4224.73 ft	Diameter: 3.80 inches	Volume: 59.26 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	300000.0 lb
Drill Collar:	Length: 234.55 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 60.41 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.78 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4478.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	142.00 ft				
Tool Length:	169.50 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			4451.50	
Shut In Tool	5.00			4456.50	
Hydraulic tool	5.00			4461.50	
Jars	5.00			4466.50	
Safety Joint	2.50			4469.00	
Packer	5.00			4474.00	27.50 Bottom Of Top Packer
Packer	4.00			4478.00	
Stubb	1.00			4479.00	
Recorder	0.00	8675	Inside	4479.00	
Recorder	0.00	8650	Outside	4479.00	
Perforations	11.00			4490.00	
Change Over Sub	1.00			4491.00	
Drill Pipe	125.00			4616.00	
Change Over Sub	1.00			4617.00	
Bullnose	3.00			4620.00	142.00 Bottom Packers & Anchor

Total Tool Length: 169.50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48912

DST#: 3

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 03:55:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	100% Mud	0.590

Total Length: 120.00 ft Total Volume: 0.590 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

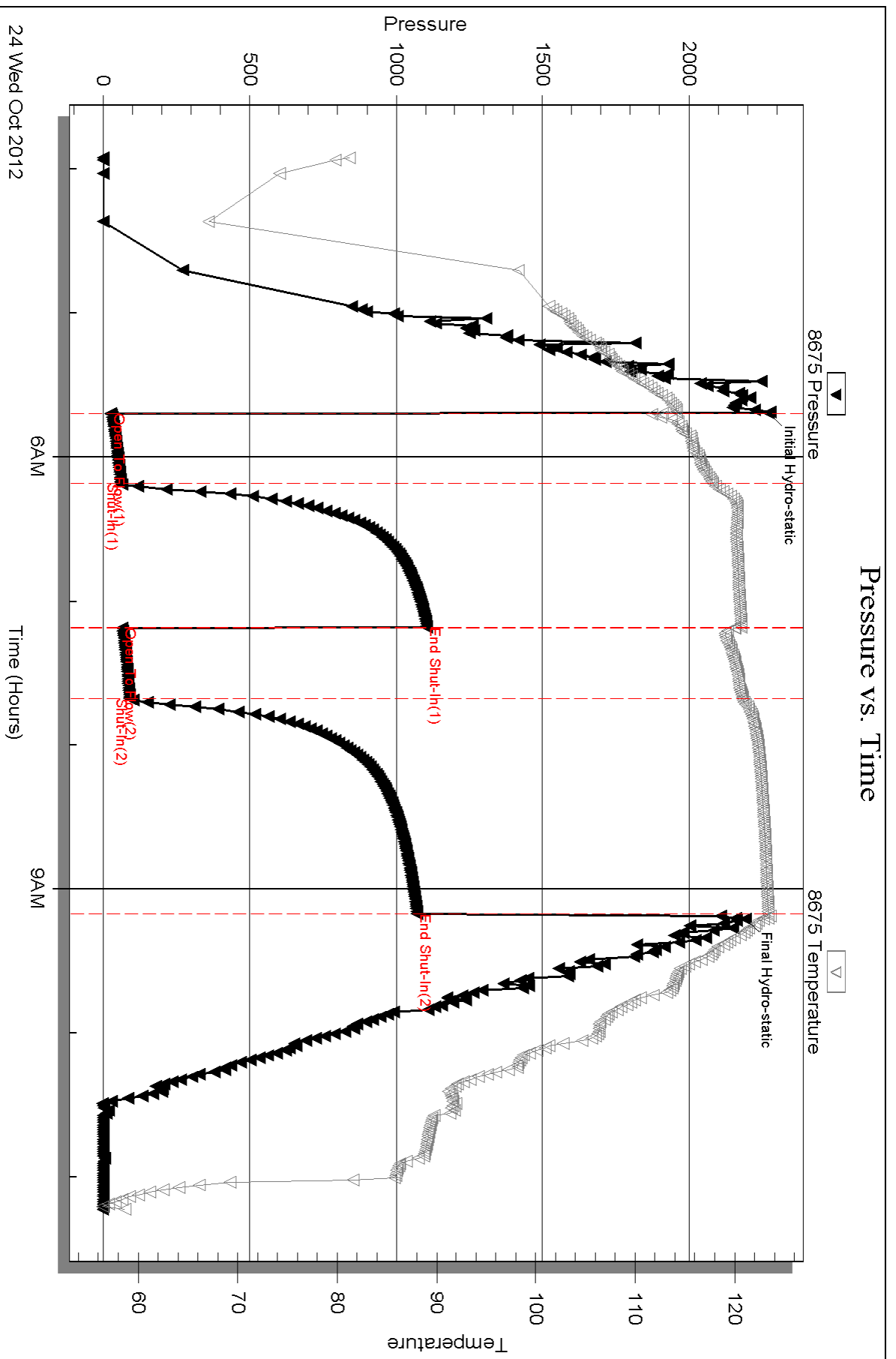
Serial #: 8675

Inside

Crede Petroleum Corporation

K Clark #1-15

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 48912

Printed: 2012.10.26 @ 10:51:38

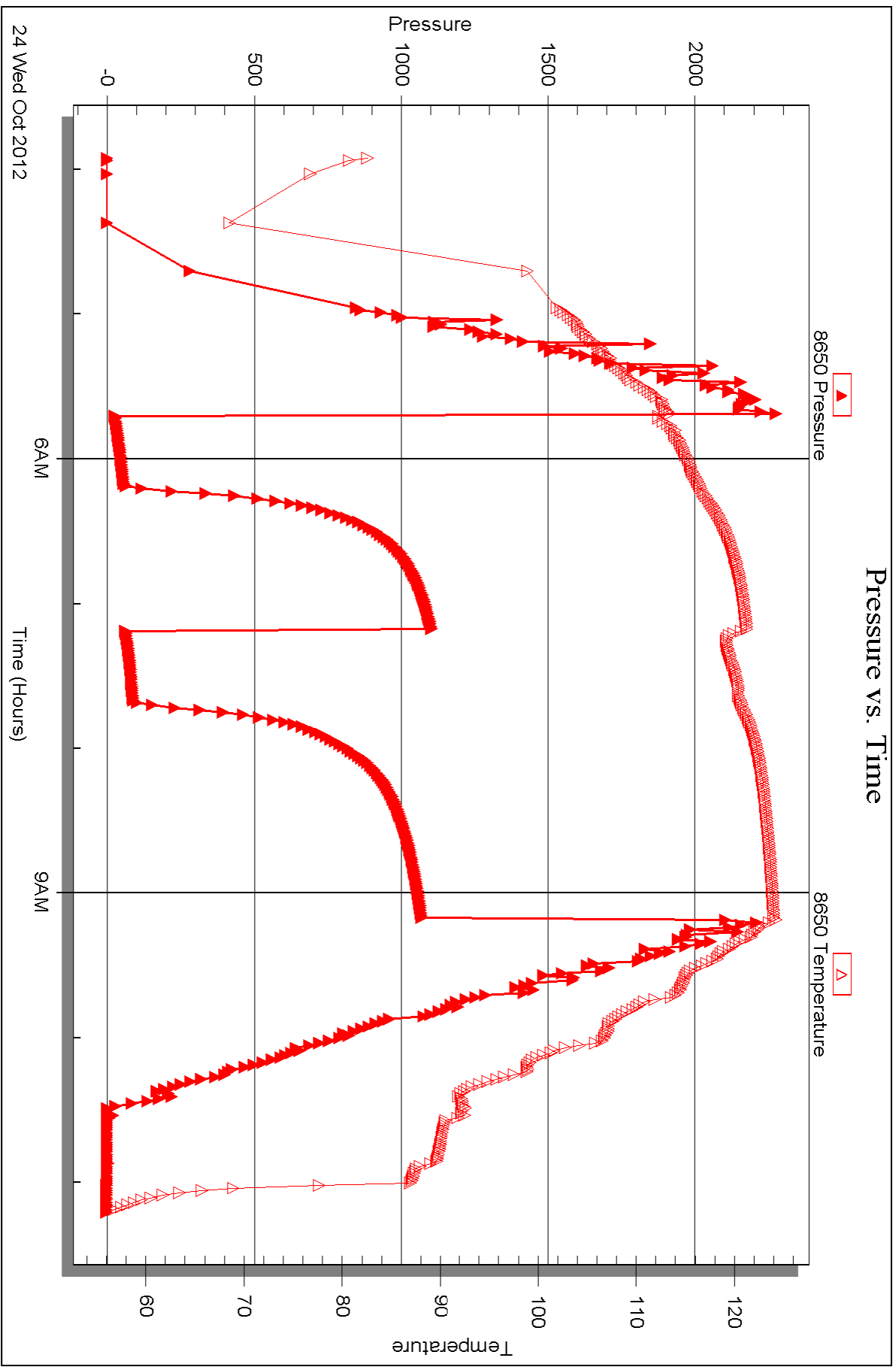
Serial #: 8650

Outside

Crede Petroleum Corporation

K Clark #1-15

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway # 900
Denver CO 80202-3858

ATTN: Charles Sturdavant

K Clark #1-15

15-19s-29w Lane,KS

Start Date: 2012.10.24 @ 20:30:00

End Date: 2012.10.25 @ 03:10:00

Job Ticket #: 48913 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.26 @ 10:50:39



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48913

DST#: 4

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 20:30:00

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:23:45

Time Test Ended: 03:10:00

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4651.00 ft (KB) To 4664.00 ft (KB) (TVD)

Reference Elevations: 2838.00 ft (KB)

Total Depth: 4680.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press @ Run Depth: 18.55 psig @ 4652.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.24

End Date:

2012.10.25

Last Calib.: 2012.10.25

Start Time: 20:30:15

End Time:

03:10:00

Time On Btm: 2012.10.24 @ 22:23:15

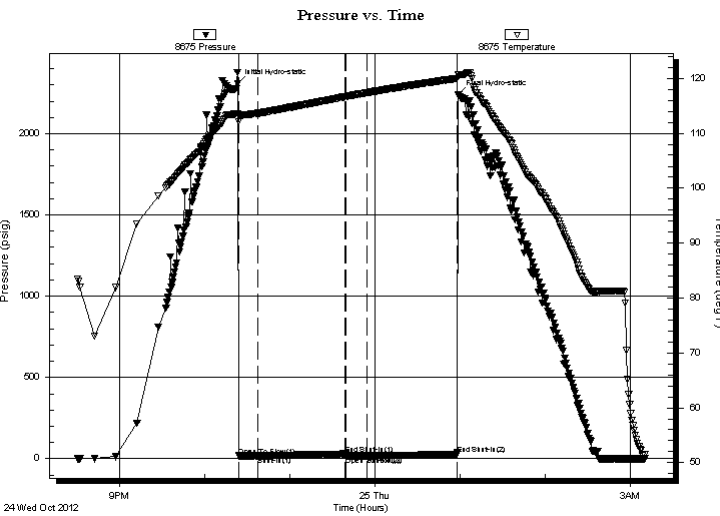
Time Off Btm: 2012.10.25 @ 00:58:45

TEST COMMENT: Weak surface blow, Died in 15 min.

No return blow

No blow

No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2308.60	113.59	Initial Hydro-static
1	17.74	112.16	Open To Flow (1)
14	18.18	113.64	Shut-In(1)
76	30.15	116.67	End Shut-In(1)
76	17.44	116.68	Open To Flow (2)
91	18.55	117.39	Shut-In(2)
155	27.03	119.99	End Shut-In(2)
156	2237.30	120.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.02

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48913

DST#: 4

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 20:30:00

GENERAL INFORMATION:

Formation: Miss					
Deviated: No Whipstock:		ft (KB)		Test Type: Conventional Straddle (Reset)	
Time Tool Opened: 22:23:45				Tester: Jace McKinney	
Time Test Ended: 03:10:00				Unit No: 46	
Interval: 4651.00 ft (KB) To 4664.00 ft (KB) (TVD)				Reference Elevations: 2838.00 ft (KB)	
Total Depth: 4680.00 ft (KB) (TVD)					2827.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair			KB to GR/CF:	11.00 ft

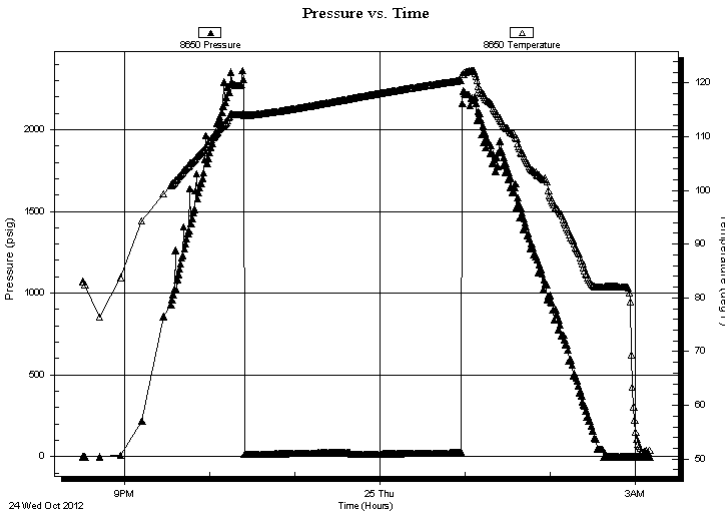
Serial #: 8650

Outside

Press @ Run Depth:	psig @ 4652.00 ft (KB)	Capacity:	8000.00 psig
Start Date:	2012.10.24	End Date:	2012.10.25
Start Time:	20:30:15	End Time:	03:10:00
		Time On Btm:	
		Time Off Btm:	

TEST COMMENT: Weak surface blow, Died in 15 min.
No return blow
No blow
No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

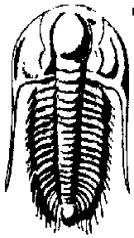
Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48913

DST#: 4

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 20:30:00

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:23:45

Time Test Ended: 03:10:00

Interval: 4651.00 ft (KB) To 4664.00 ft (KB) (TVD)

Total Depth: 4680.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

Reference Elevations: 2838.00 ft (KB)

2827.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6672 Below (Straddle)

Press @ Run Depth: psig @ 4670.00 ft (KB)

Start Date: 2012.10.24

End Date:

2012.10.25

Start Time: 20:30:01

End Time:

03:11:15

Capacity: 8000.00 psig

Last Calib.: 2012.10.25

Time On Btm:

Time Off Btm:

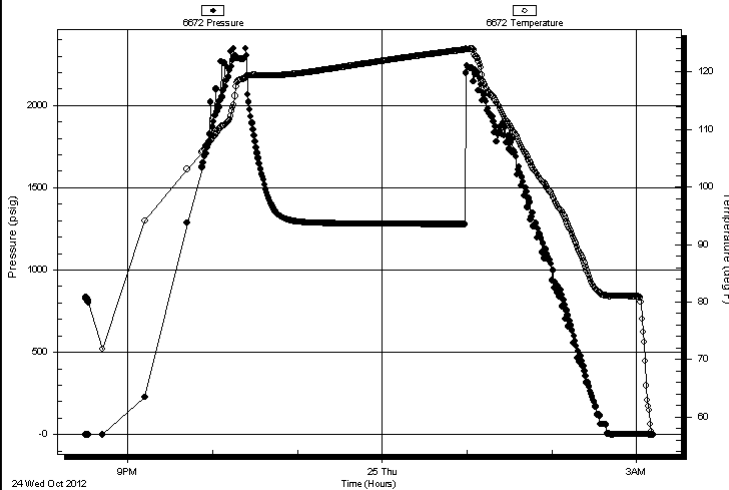
TEST COMMENT: Weak surface blow, Died in 15 min.

No return blow

No blow

No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.02

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corporation

15-19s-29w Lane,KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48913

DST#: 4

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 20:30:00

Tool Information

Drill Pipe:	Length: 4413.33 ft	Diameter: 3.80 inches	Volume: 61.91 bbl	Tool Weight: 2500.00 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: 234.55 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 70000.00 lb
			Total Volume: 63.06 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.38 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4651.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	4664.00 ft			
Interval between Packers:	13.00 ft			
Tool Length:	61.50 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Shut In Tool	5.00			4628.50		
Hydraulic tool	5.00			4633.50		
Jars	5.00			4638.50		
Safety Joint	2.50		Fluid	4641.00		
Packer	5.00			4646.00	27.50	Bottom Of Top Packer
Packer	5.00			4651.00		
Stubb	1.00			4652.00		
Recorder	0.00	8675	Inside	4652.00		
Recorder	0.00	8650	Outside	4652.00		
Perforations	11.00			4663.00		
Change Over Sub	0.00			4663.00		
drill Pipe	0.00			4663.00		
change Over Sub	0.00			4663.00		
Perforations	0.00			4663.00		
Blank Off Sub	1.00			4664.00	13.00	Tool Interval
Packer	5.00			4669.00		
Stubb	1.00			4670.00		
Change Over Sub	0.00			4670.00		
Recorder	0.00	6672	Below	4670.00		
Perforations	12.00			4682.00		
Drill Pipe	0.00			4682.00		
Change Over Sub	0.00			4682.00		
Bullnose	3.00			4685.00	21.00	Bottom Packers & Anchor
Total Tool Length:		61.50				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation

15-19s-29w Lane, KS

1801 Broadway # 900
Denver CO 80202-3858

K Clark #1-15

Job Ticket: 48913

DST#: 4

ATTN: Charles Sturdavant

Test Start: 2012.10.24 @ 20:30:00

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: 64.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100% Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

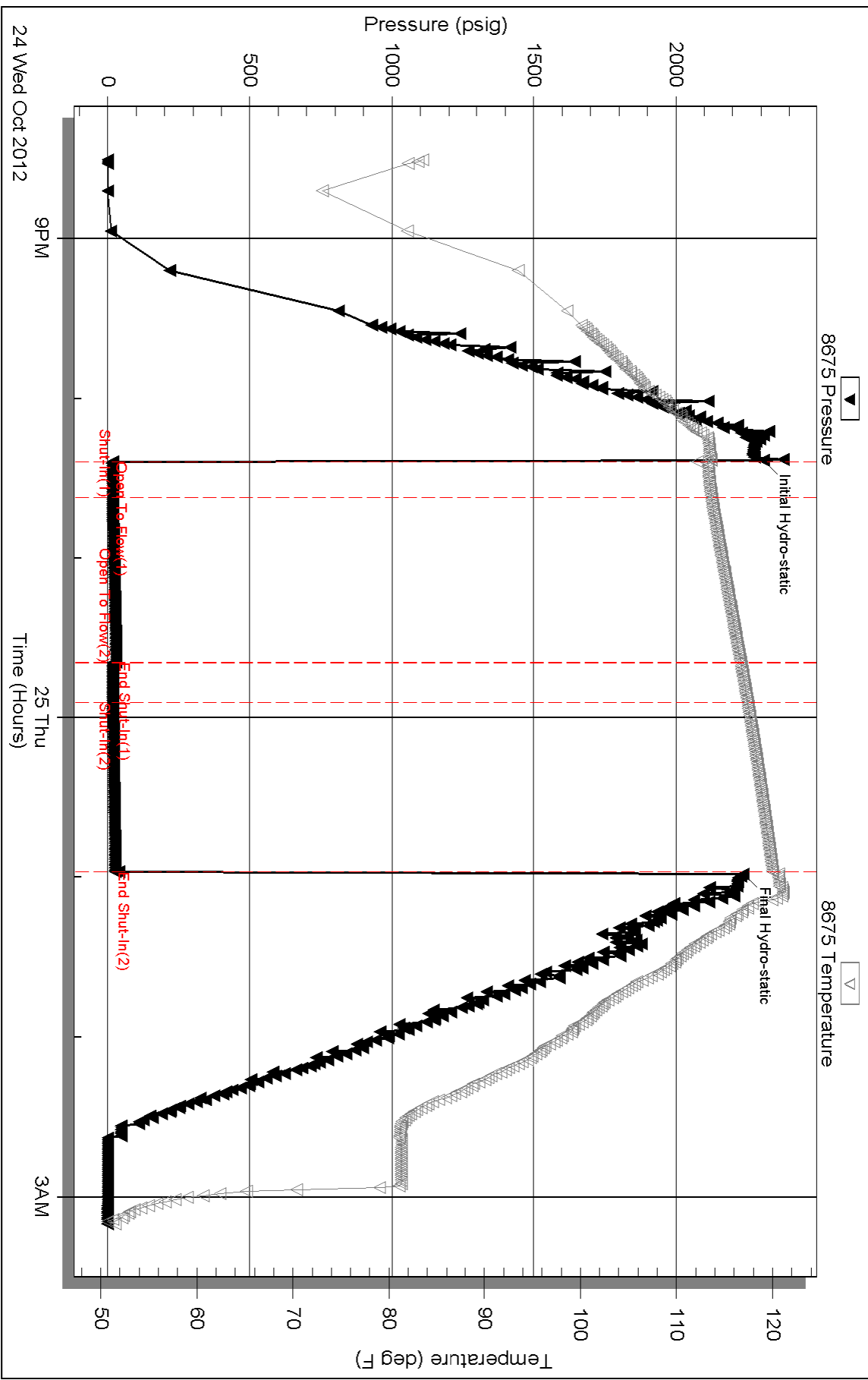
Inside

Crede Petroleum Corporation

K Clark #1-15

DST Test Number: 4

Pressure vs. Time

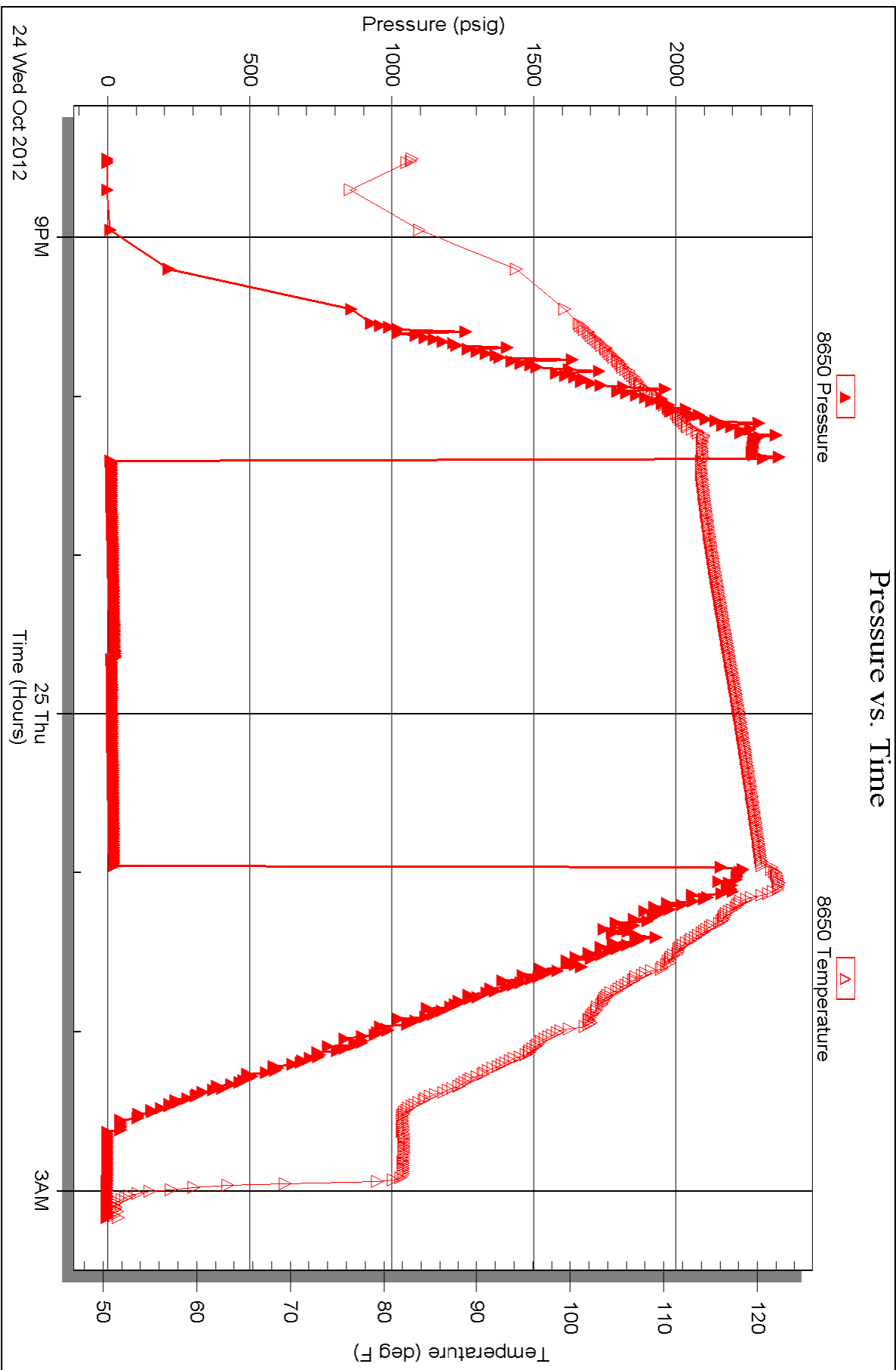


Serial #: 8650

Outside Credo Petroleum Corporation

K Clark #1-15

DST Test Number: 4

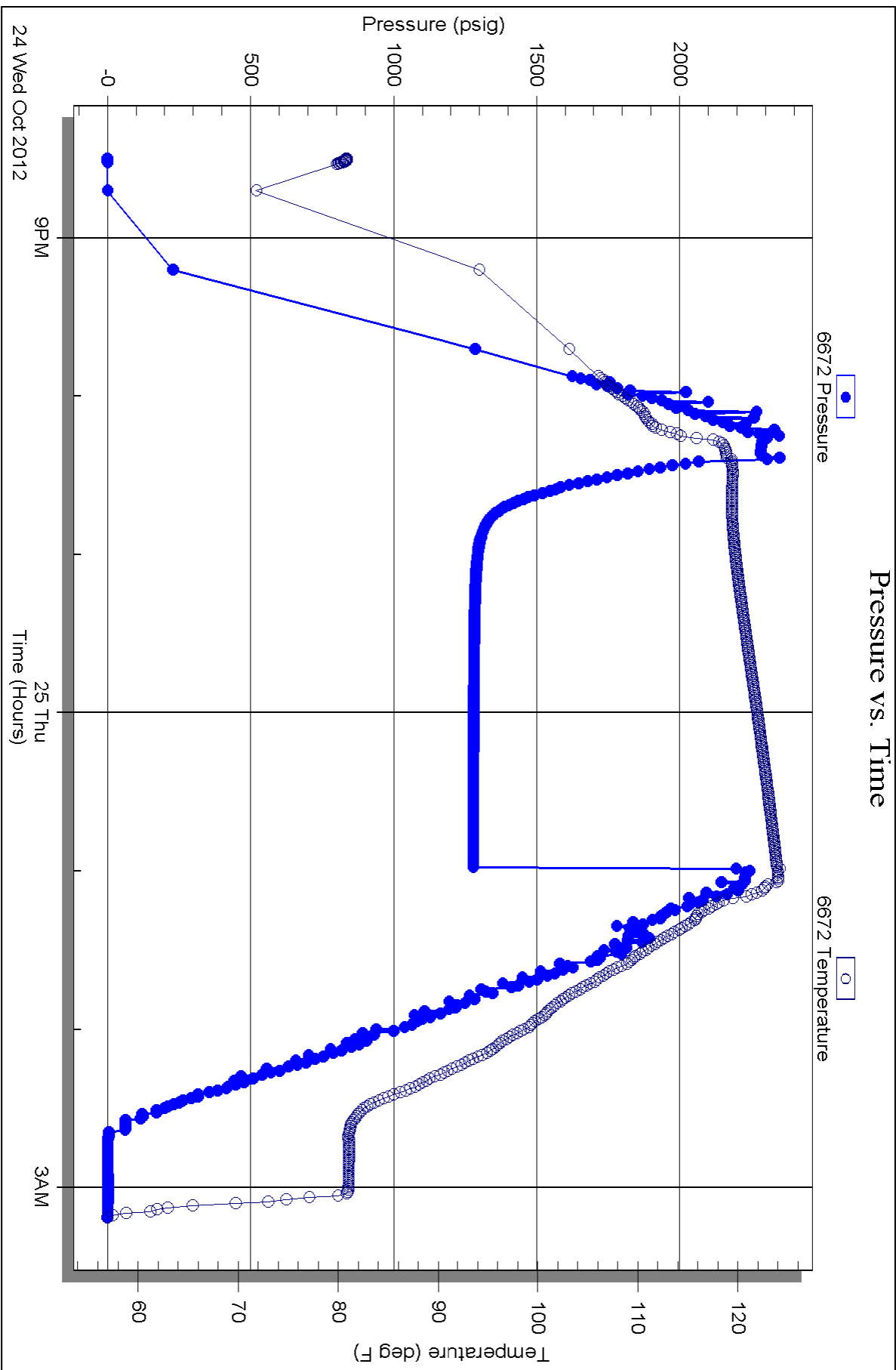


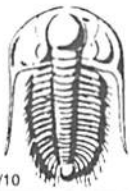
Serial #: 6672

Below (Stratfield) Petroleum Corporation

K Clark #1-15

DST Test Number: 4





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48910

Well Name & No. H Chark # 1-15 Test No. 1 Date 10/22/12
 Company Credo Petroleum Corporation Elevation 2838 KB 2827 GL
 Address 1801 Broadway # 900 Denver, CO. 80202-3858
 Co. Rep / Geo. Charles Sturdavant Rig Murkin 22
 Location: Sec. 15 Twp. 19S Rge. 29W Co. Lane State KS

Interval Tested 4182 - 4370 Zone Tested Kansas City
 Anchor Length 188 Drill Pipe Run 3945.04 Mud Wt. 9.5
 Top Packer Depth 4178 Drill Collars Run 234.55 Vis 42
 Bottom Packer Depth 4182 Wt. Pipe Run _____ WL 14.4
 Total Depth 4370 Chlorides 2,600 ppm System LCM 2#

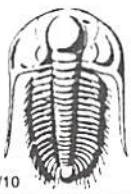
Blow Description B.O.B. in 4 min.
Bled off for 5 min. No return below
B.O.B. in 5 1/2 min.

Rec	Feet of	%gas	%oil	%water	%mud
<u>186</u>	<u>WCM</u>		<u>5</u>	<u>95</u>	
<u>480</u>	<u>OCMW</u>	<u>5</u>	<u>50</u>	<u>40</u>	
<u>234</u>	<u>OCMW</u>	<u>5</u>	<u>75</u>	<u>20</u>	
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 1100 BHT 126 Gravity _____ API RW 20 @ 70 °F Chlorides 35,000 ppm
 (A) Initial Hydrostatic 2,134 Test 1250 T-On Location 6:45
 (B) First Initial Flow 68 Jars 250 T-Started 7:55
 (C) First Final Flow 275 Safety Joint 75 T-Open 10:13
 (D) Initial Shut-In 889 Circ Sub W/C T-Pulled 12:58
 (E) Second Initial Flow 286 Hourly Standby _____ T-Out 15:31
 (F) Second Final Flow 520 Mileage 68 RT 105.40 Comments _____
 (G) Final Shut-In 889 Sampler _____
 (H) Final Hydrostatic 2,028 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____

Initial Open 15
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 60
 Sub Total 1680.40
 Total 1680.40
 MP/DST Disc't _____

Approved By Charles Sturdavant Our Representative [Signature]
 TriLOBITE 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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48911

Well Name & No. K Clark # 1-15 Test No. 2 Date 10/23/12
 Company Credo Petroleum Corporation Elevation 2838 KB 2827 GL
 Address 1801 Broadway # 900 Denver, CO. 80202-3858
 Co. Rep / Geo. Charles Sturdavant Rig Martin 22
 Location: Sec. 15 Twp. 19s Rge. 29w Co. Lane State KS

Interval Tested 4368 - 4480 Zone Tested Marmaton
 Anchor Length 112 Drill Pipe Run 4131.91 Mud Wt. 9.35
 Top Packer Depth 4364 Drill Collars Run 234.55 Vis 63
 Bottom Packer Depth 4368 Wt. Pipe Run _____ WL 7.6
 Total Depth 4480 Chlorides 2,900 ppm System LCM 4#

Blow Description B.O.B. in 3 1/2 min.
Bled off 5 min. No return below
B.O.B. in 5 min.

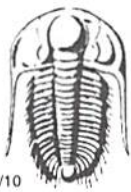
Bled off 5 min. No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>586</u>	<u>Feet of WCM with oil scum</u>		<u>30</u>	<u>70</u>	
<u>544</u>	<u>Feet of MCW with oil scum</u>		<u>80</u>	<u>20</u>	
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 1130 BHT 129 Gravity _____ API RW 15 @ 80 ° F Chlorides 40,000 ppm

(A) Initial Hydrostatic <u>2,160</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>2:30</u>
(B) First Initial Flow <u>79</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>4:20</u>
(C) First Final Flow <u>327</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>6:53</u>
(D) Initial Shut-In <u>826</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>9:38</u>
(E) Second Initial Flow <u>322</u>	<input type="checkbox"/> Hourly Standby <u>0.5</u>	T-Out <u>12:17</u>
(F) Second Final Flow <u>547</u>	<input checked="" type="checkbox"/> Mileage <u>68 BT</u> 105.40	Comments <u>over the 10</u>
(G) Final Shut-In <u>809</u>	<input type="checkbox"/> Sampler _____	<u>HS</u>
(H) Final Hydrostatic <u>2,164</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1680.40</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1680.40</u>	

Approved By Charlie Sturdavant Our Representative [Signature]
 TriLOBITE 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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48912

Well Name & No. K Clark # 1-15 Test No. 3 Date 10/24/12
 Company Codo Petroleum Corporation Elevation 2838 KB 2827 GL
 Address 1801 Broadway # 900 Denver, CO. 80202-3858
 Co. Rep / Geo. Charles Sturdavant Rig Martin 22
 Location: Sec. 15 Twp. 19s Rge. 29w Co. Lane State KS

Interval Tested 4478 - 4620 Zone Tested Cherokee
 Anchor Length 142 Drill Pipe Run 4224.73 Mud Wt. 9.3
 Top Packer Depth 4474 Drill Collars Run 234.55 Vis 56
 Bottom Packer Depth 4478 Wt. Pipe Run _____ WL 7.6
 Total Depth 4620 Chlorides 1,400 ppm System LCM 4#

Blow Description Built to 2 1/2" below
No return below
No below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>100% 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 120 BHT 123 Gravity _____ API RW _____ @ _____ F Chlorides _____ ppm

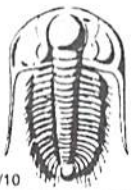
(A) Initial Hydrostatic 2,271 Test 1250 T-On Location 2:45
 (B) First Initial Flow 26 Jars 250 T-Started 3:55
 (C) First Final Flow 61 Safety Joint 75 T-Open 5:41
 (D) Initial Shut-In 1,105 Circ Sub N/C T-Pulled 9:11
 (E) Second Initial Flow 65 Hourly Standby _____ T-Out 11:13
 (F) Second Final Flow 90 Mileage 6.8 BT X 2 210.80 Comments Load tools 10/24/12
 (G) Final Shut-In 1,071 Sampler _____
 (H) Final Hydrostatic 2,193 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 90

Sub Total 1705.80

Sub Total 1705.80

Approved By Charlie Sturdavant Our Representative [Signature]
 TriLOBITE 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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48913

Well Name & No. K Clark # 1-15 Test No. 4 Date 10/24/12 10/25/12
 Company Credo Petroleum Corporation Elevation 2838 KB 2827 GL
 Address 1801 Broadway # 900 Denver CO. 80202-3858
 Co. Rep / Geo. Charles Sturdavant Rig Murkin 22
 Location: Sec. 15 Twp. 19S Rge. 29W Co. Lane State KS

Interval Tested 41651-41664 ^{TD} 41680 Zone Tested Miss
 Anchor Length 13" ^{16"} tail pipe Drill Pipe Run 4413.33 Mud Wt. 9.4
 Top Packer Depth 41647 Drill Collars Run 234.55 Vis 64
 Bottom Packer Depth 41651 Wt. Pipe Run _____ WL 8.8
 Total Depth 41664 41680 Chlorides 1400 ppm System LCM 5#

Blow Description Break surface below, Died in 15 min.
No return below
No below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</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 Total 5 BHT 119 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2,309</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>19:20</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>20:30</u>
(C) First Final Flow <u>18</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>22:23</u>
(D) Initial Shut-In <u>30</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>00:58</u>
(E) Second Initial Flow <u>17</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>3:10</u>
(F) Second Final Flow <u>19</u>	<input type="checkbox"/> Mileage <u>68 BT X2</u> 210.80	Comments <u>1 started 10/25</u>
(G) Final Shut-In <u>27</u>	<input type="checkbox"/> Sampler _____	<u>18:00</u>
(H) Final Hydrostatic <u>2,237</u>	<input checked="" type="checkbox"/> Straddle 600	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open 15
 Initial Shut-In LO
 Final Flow 15
 Final Shut-In LO

Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Sub Total 2385.80

Sub Total 2385.80

MP/DST Disc't _____

Approved By Charles Sturdavant Our Representative [Signature]
 Trilobite 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.