

DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900
Denver CO 80202

ATTN: Bruce Ard

31-9s-25w Graham,KS

Werth 1-31

Start Date: 2010.12.06 @ 02:40:00

End Date: 2010.12.06 @ 09:02:30

Job Ticket #: 040114 DST #: 1

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Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Credo Petroleum Corp.

1801 Broadway #900
Denver CO 80202

ATTN: Bruce Ard

Werth 1-31

31-9s-25w Graham, KS

Job Ticket: 040114

DST#: 1

Test Start: 2010.12.06 @ 02:40:00

GENERAL INFORMATION:

Formation: **LKC B-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:44:30

Time Test Ended: 09:02:30

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 36

Interval: **3872.00 ft (KB) To 3906.00 ft (KB) (TVD)**

Total Depth: 3906.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2598.00 ft (KB)

2593.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 121.36 psig @ 3873.00 ft (KB)

Start Date: 2010.12.06

End Date:

2010.12.06

Start Time: 02:40:01

End Time:

09:02:30

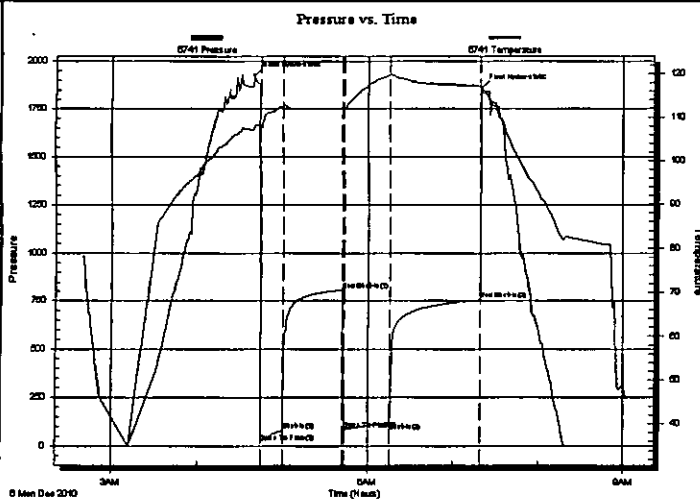
Capacity: 8000.00 psig

Last Calib.: 2010.12.06

Time On Btm: 2010.12.06 @ 04:39:30

Time Off Btm: 2010.12.06 @ 07:20:30

TEST COMMENT: IF: Weak blow, built to 6 in.
IS: No blow back
FF: Weak blow, built to 7 in.
IS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1926.42	107.20	Initial Hydro-static
5	22.25	107.58	Open To Flow (1)
20	78.44	112.22	Shut-In(1)
62	807.94	111.93	End Shut-In(1)
64	84.09	111.57	Open To Flow (2)
96	121.36	119.75	Shut-In(2)
160	755.27	117.28	End Shut-In(2)
161	1860.46	116.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	mcw-10% m90%w	0.61
124.00	w cm-40%w 60%m	1.74
38.00	vsocm-5%o25%w 70%m	0.53
2.00	oil	0.03

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corp.

Werth 1-31

1801 Broadway #900
Denver CO 80202

31-9s-25w Graham,KS

Job Ticket: 040114

DST#: 1

ATTN: Bruce Ard

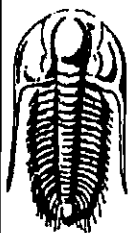
Test Start: 2010.12.06 @ 02:40:00

Tool Information

Drill Pipe:	Length: 3734.00 ft	Diameter: 3.80 inches	Volume: 52.38 bbl	Tool Weight: 2600.00 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume:	52.99 bbl	Tool Chased 2.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3872.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3849.00	
Hydraulic tool	5.00			3854.00	
Jars	5.00			3859.00	
Safety Joint	3.00			3862.00	
Packer	5.00			3867.00	28.00 Bottom Of Top Packer
Packer	5.00			3872.00	
Stubb	1.00			3873.00	
Recorder	0.00	6752	Inside	3873.00	
Recorder	0.00	6741	Inside	3873.00	
Jars	30.00			3903.00	
Bullnose	3.00			3906.00	34.00 Bottom Packers & Anchor

Total Tool Length: 62.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corp.

Werth 1-31

1801 Broadway #900
Denver CO 80202

31-9s-25w Graham,KS

Job Ticket: 040114

DST#: 1

ATTN: Bruce Ard

Test Start: 2010.12.06 @ 02:40:00

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:

40000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.26 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	mcw-10% m 90%w	0.610
124.00	w cm-40%w 60% m	1.739
38.00	vsocm-5% o 25%w 70% m	0.533
2.00	oil	0.028

Total Length: 288.00 ft

Total Volume: 2.910 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

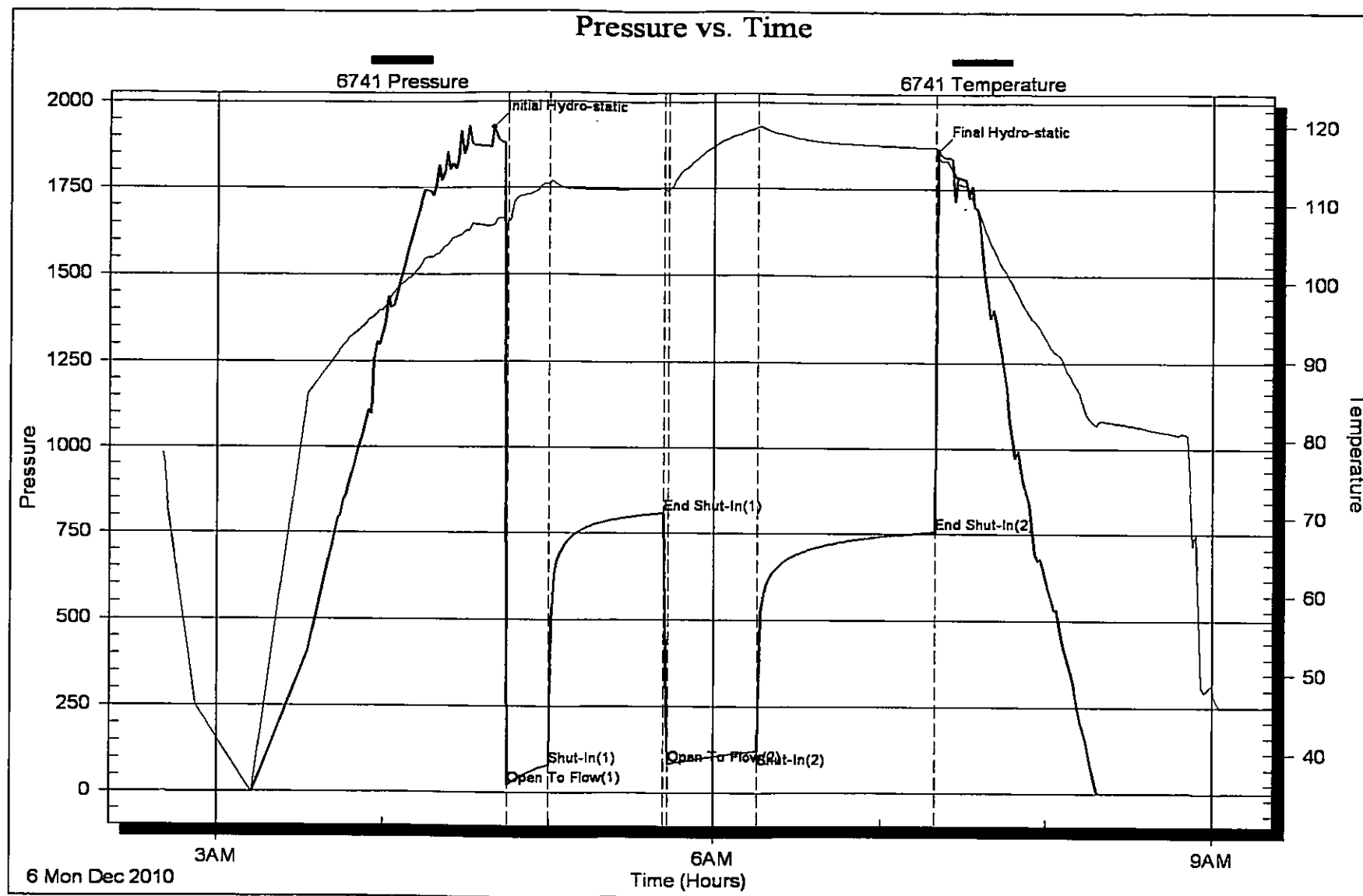
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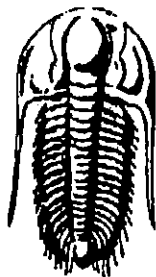
Serial #: 6741

Inside Credo Petroleum Corp.

31-9s-25w Graham, KS

DST Test Number: 1





TRILOBITE
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DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900
Denver CO 80202

ATTN: Bruce Ard

31-9s-25w Graham,KS

Werth 1-31

Start Date: 2010.12.06 @ 16:40:00

End Date: 2010.12.06 @ 22:59:30

Job Ticket #: 040115 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
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DRILL STEM TEST REPORT

Credo Petroleum Corp.

1801 Broadway #900
Denver CO 80202

ATTN: Bruce Ard

Werth 1-31

31-9s-25w Graham,KS

Job Ticket: 040115

DST#: 2

Test Start: 2010.12.06 @ 16:40:00

GENERAL INFORMATION:

Formation: **LKC EF**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:18:00

Time Test Ended: 22:59:30

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 36

Interval: 3908.00 ft (KB) To 3948.00 ft (KB) (TVD)

Total Depth: 3948.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2598.00 ft (KB)

2593.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 122.01 psig @ 3909.00 ft (KB)

Start Date: 2010.12.06

End Date:

2010.12.06

Start Time: 16:40:01

End Time:

22:59:30

Capacity: 8000.00 psig

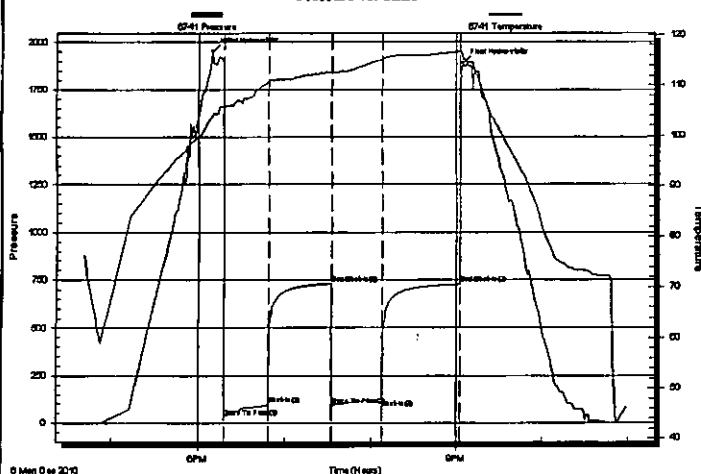
Last Calib.: 2010.12.06

Time On Btm: 2010.12.06 @ 18:09:30

Time Off Btm: 2010.12.06 @ 21:04:30

TEST COMMENT: IF: Weak blow, built to 6 in.
IS: No blow back
FF: Weak blow after 15 mins, built to 1 in.
FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

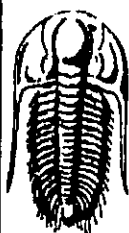
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1952.48	103.78	Initial Hydro-static
9	31.58	104.73	Open To Flow (1)
39	96.15	110.79	Shut-In(1)
83	732.94	112.79	End Shut-In(1)
84	93.34	112.58	Open To Flow (2)
118	122.01	115.20	Shut-In(2)
173	728.46	116.71	End Shut-In(2)
175	1891.87	115.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	w cm-50%w 50%m	0.61
62.00	w cm-20%w 80%m	0.87
30.00	w cm-10%w 90%m-w with oil specs	0.42

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corp.

Werth 1-31

1801 Broadway #900
Denver CO 80202

31-9s-25w Graham, KS

Job Ticket: 040115

DST#: 2

ATTN: Bruce Ard

Test Start: 2010.12.06 @ 16:40:00

Tool Information

Drill Pipe:	Length: 3776.00 ft	Diameter: 3.80 inches	Volume: 52.97 bbl	Tool Weight: 2600.00 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 53.58 bbl		Tool Chased 8.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3908.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	68.00 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			3885.00	
Hydraulic tool	5.00			3890.00	
Jars	5.00			3895.00	
Safety Joint	3.00			3898.00	
Packer	5.00			3903.00	28.00 Bottom Of Top Packer
Packer	5.00			3908.00	
Stubb	1.00			3909.00	
Recorder	0.00	6752	Inside	3909.00	
Recorder	0.00	6741	Inside	3909.00	
Jars	36.00			3945.00	
Bullnose	3.00			3948.00	40.00 Bottom Packers & Anchor

Total Tool Length: 68.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corp.

Werth 1-31

1801 Broadway #900
Denver CO 80202

31-9s-25w Graham, KS

Job Ticket: 040115

DST#: 2

ATTN: Bruce Ard

Test Start: 2010.12.06 @ 16:40:00

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:

44000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.39 in³

Gas Cushion Type:

Resistivity: 0.30 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	w cm-50%w 50%m	0.610
62.00	w cm-20%w 80%m	0.870
30.00	w cm-10%w 90%m-with oil specs	0.421

Total Length: 216.00 ft

Total Volume: 1.901 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

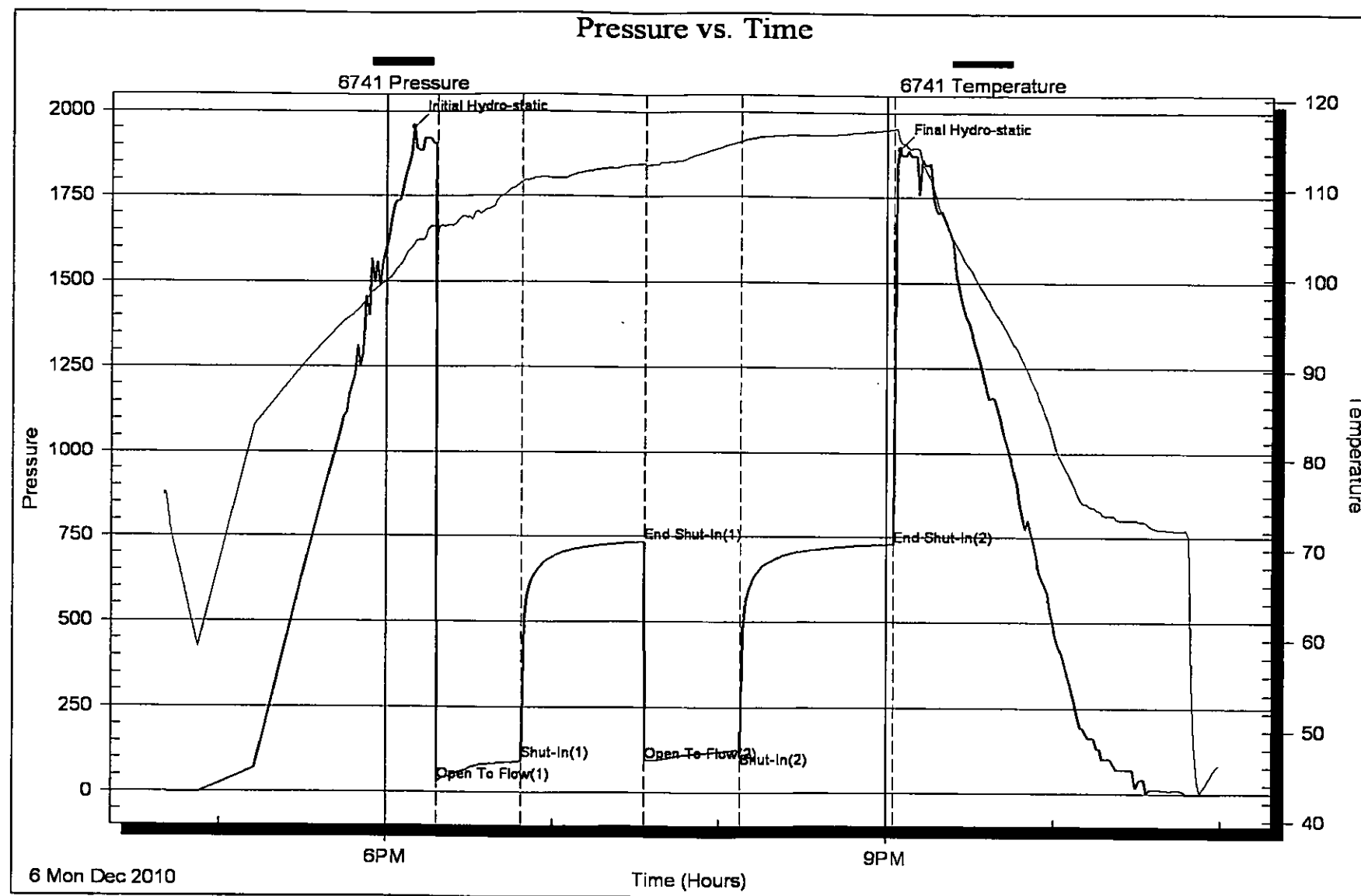
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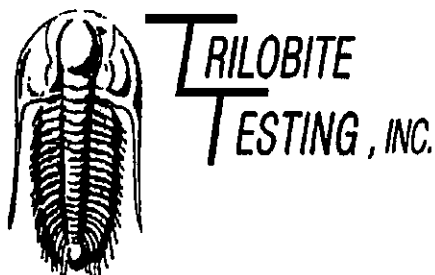
Serial #: 6741

Inside Credo Petroleum Corp.

31-9s-25w Graham,KS

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900
Denver CO 80202

ATTN: Bruce Ard

31-9s-25w Graham,KS

Werth 1-31

Start Date: 2010.12.07 @ 13:25:00

End Date: 2010.12.07 @ 20:08:30

Job Ticket #: 040116 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Credo Petroleum Corp.

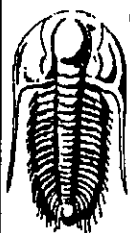
Werth 1-31

31-9s-25w Graham,KS

DST # 3

LKC H,K

2010.12.07



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corp.

1801 Broadway #900
Denver CO 80202

ATTN: Bruce Ard

Werth 1-31

31-9s-25w Graham, KS

Job Ticket: 040116

DST#: 3

Test Start: 2010.12.07 @ 13:25:00

GENERAL INFORMATION:

Formation: LKC H,K

Deviated: No Whipstock ft (KB)

Time Tool Opened: 15:14:00

Time Test Ended: 20:08:30

Interval: 3976.00 ft (KB) To 4079.00 ft (KB) (TVD)

Total Depth: 4079.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Chuck Kreutzer Jr.

Unit No: 36

Reference Elevations: 2598.00 ft (KB)

2593.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 632.70 psig @ 3980.00 ft (KB)

Start Date: 2010.12.07

End Date:

2010.12.07

Start Time: 13:25:01

End Time:

20:08:30

Capacity: 8000.00 psig

Last Calib.: 2010.12.07

Time On Btm: 2010.12.07 @ 15:00:00

Time Off Btm: 2010.12.07 @ 18:05:00

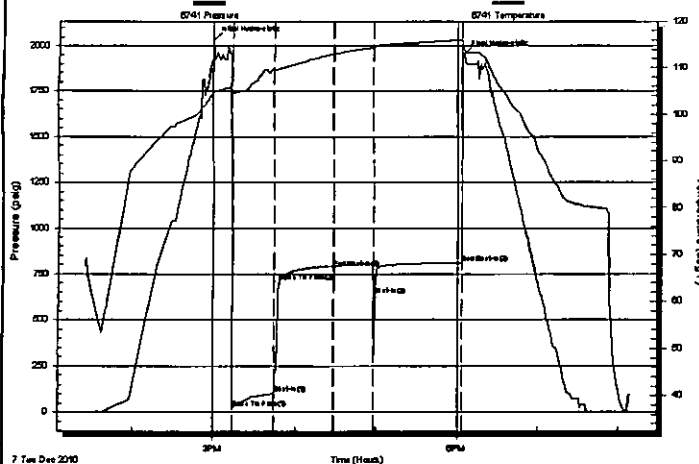
TEST COMMENT: IF: Weak blow, Built to B.O.B in 30 mins.

IS: No blow back

FF: No blow

FSI: No blow back

Pressure vs. Time



7 Dec 2010

PRESSURE SUMMARY

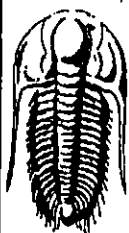
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2032.42	104.40	Initial Hydro-static
14	23.28	105.09	Open To Flow (1)
45	100.06	109.71	Shut-In(1)
88	778.76	112.98	End Shut-In(1)
89	757.54	112.99	Open To Flow (2)
118	632.70	114.29	Shut-In(2)
184	809.23	116.04	End Shut-In(2)
185	1953.27	114.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
154.00	mud-100%	1.03

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corp.

Werth 1-31

1801 Broadway #900
Denver CO 80202

31-9s-25w Graham,KS

Job Ticket: 040116

DST#: 3

ATTN: Bruce Ard

Test Start: 2010.12.07 @ 13:25:00

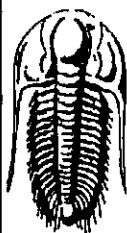
Tool Information

Drill Pipe:	Length: 3854.00 ft	Diameter: 3.80 inches	Volume: 54.06 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 49000.00 lb
		Total Volume: 54.67 bbl		Tool Chased 2.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3976.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	103.00 ft			
Tool Length:	131.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3953.00	
Hydraulic tool	5.00			3958.00	
Jars	5.00			3963.00	
Safety Joint	3.00			3966.00	
Packer	5.00			3971.00	28.00 Bottom Of Top Packer
Packer	5.00			3976.00	
Stubb	1.00			3977.00	
Perforations	2.00			3979.00	
Change Over Sub	1.00			3980.00	
Recorder	0.00	6752	Inside	3980.00	
Recorder	0.00	6741	Inside	3980.00	
Blank Spacing	61.00			4041.00	
Change Over Sub	1.00			4042.00	
Perforations	34.00			4076.00	
Bullnose	3.00			4079.00	103.00 Bottom Packers & Anchor

Total Tool Length: 131.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

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Werth 1-31

1801 Broadway #900
Denver CO 80202

31-9s-25w Graham,KS

Job Ticket: 040116

DST#: 3

ATTN: Bruce Ard

Test Start: 2010.12.07 @ 13:25:00

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: 5.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
154.00	mud-100%	1.031

Total Length: 154.00 ft

Total Volume: 1.031 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

Inside Credo Petroleum Corp.

31-9s-25w Graham,KS

DST Test Number: 3

