

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway, STE 800
Denver, CO 80202

ATTN: Bruce Ard

Marcelline #1-9

9-17s-29w Lane, KS

Start Date: 2011.09.11 @ 02:14:00

End Date: 2011.09.11 @ 09:14:00

Job Ticket #: 43650 DST #: 1

Credo Petroleum Corporation
9-17s-29w Lane, KS
Marcelline #1-9
DST # 1
LKC C-F
2011.09.11

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

Printed: 2011.09.21 @ 09:02:26



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Credo Petroleum Corporation
1801 Broadway, STE 900
Denver, CO 80202
ATTN: Bruce Ard

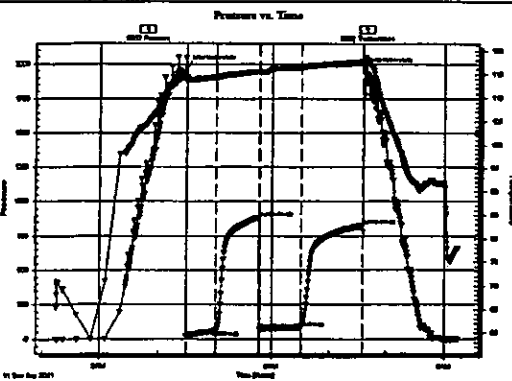
9-17e-29w Lane, KS
Marcelline #1-9
Job Ticket: 43650 DST#: 1
Test Start: 2011.09.11 @ 02:14:00

GENERAL INFORMATION:

Formation: LMC C-F
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 04:30:00
 Tester: Bradley Walter
 Time Test Ended: 09:14:00
 Unit No: 40
 Interval: 3988.00 ft (KB) To 4074.00 ft (KB) (TVD)
 Reference Elevations: 2820.00 ft (KB)
 Total Depth: 4074.00 ft (KB) (TVD)
 2815.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good
 KB to GRCP: 5.00 ft

Serial #: 8652 Inside
 Press@RunDepth: 83.27 psig @ 3989.00 ft (KB)
 Capacity: 8000.00 psig
 Start Date: 2011.09.11 End Date: 2011.09.11
 Last Calib.:
 Start Time: 02:14:05 End Time: 09:13:59
 Time On Btm: 2011.09.11 @ 04:29:45
 Time Off Btm: 2011.09.11 @ 07:36:30

TEST COMMENT: IF: 3 1/2" blow
 IS: No return.
 FF: 1 1/2 inches blow.
 FSI: No return.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1984.23	114.29	Initial Hydro-static
1	20.72	113.60	Open To Flow (1)
32	58.64	114.37	Shut-In(1)
77	886.00	115.63	End Shut-In(1)
77	69.08	115.38	Open To Flow (2)
121	83.27	116.52	Shut-In(2)
185	827.25	117.54	End Shut-In(2)
187	1965.08	118.59	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
150.00	gocm 10g 20o 70m	0.99

Gas Rates			
	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/D)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corporation

9-17s-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 43650

DST#: 1

ATTN: Bruce Ard

Test Start: 2011.09.11 @ 02:14:00

Tool Information

Drill Pipe:	Length: 3858.00 ft	Diameter: 3.80 inches	Volume: 54.12 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to P/L Loose: 77000.00 lb
			Total Volume: 54.72 bbl	Tool Chased: 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3988.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	86.00 ft			
Tool Length:	114.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3961.00	
Shut In Tool	5.00			3968.00	
Hydraulic tool	5.00			3971.00	
Jars	5.00			3976.00	
Safety Joint	2.00			3978.00	
Packer	5.00			3983.00	28.00 Bottom Of Top Packer
Packer	5.00			3988.00	
Stub	1.00			3989.00	
Recorder	0.00	8652	Inside	3989.00	
Recorder	0.00	8360	Outside	3989.00	
Perforations	17.00			4006.00	
Change Over Sub	1.00			4007.00	
Drill Pipe	63.00			4070.00	
Change Over Sub	1.00			4071.00	
Bullnose	3.00			4074.00	86.00 Bottom Packers & Anchor

Total Tool Length: 114.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation

9-17e-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 43650

DST#: 1

ATTN: Bruce Ard

Test Start: 2011.09.11 @ 02:14:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.17 in ²	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1100.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	gcsm 10g 20c 70m	0.993

Total Length: 150.00ft Total Volume: 0.993 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

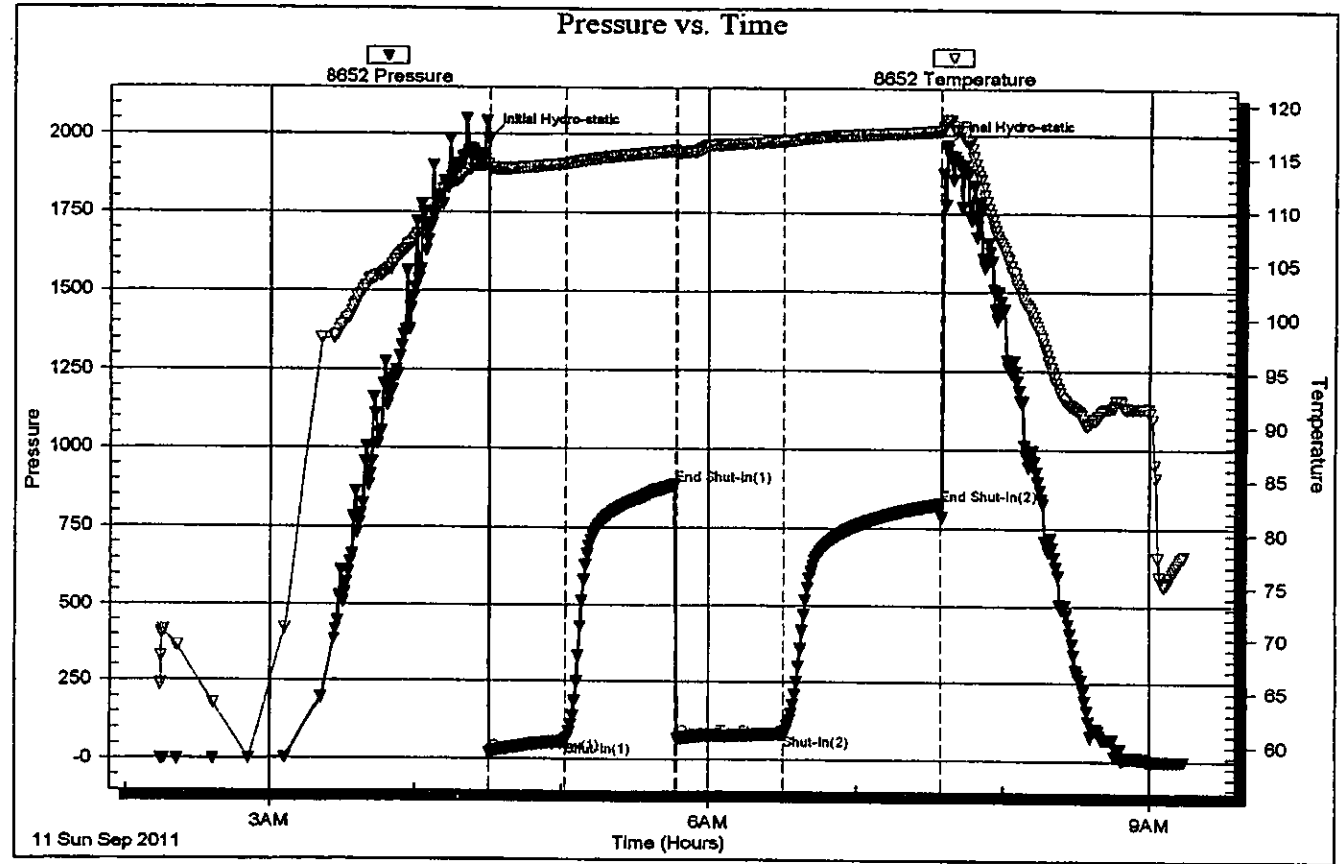
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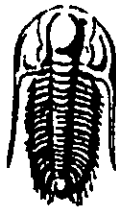
Serial #: 8652

Inside Credo Petroleum Corporation

Marcelline #1-9

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway, STE 900
Denver, CO 80202

ATTN: Bruce Ard

Marcelline #1-9

9-17s-29w Lane, KS

Start Date: 2011.09.11 @ 23:24:00

End Date: 2011.09.12 @ 06:39:00

Job Ticket #: 44476 DST #: 2

Credo Petroleum Corporation
9-17s-29w Lane, KS
Marcelline #1-9
DST # 2
LKC H&I
2011.09.11

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 Corporation
1801 Broadway, STE 900
Denver, CO 80202
ATTN: Bruce Ard

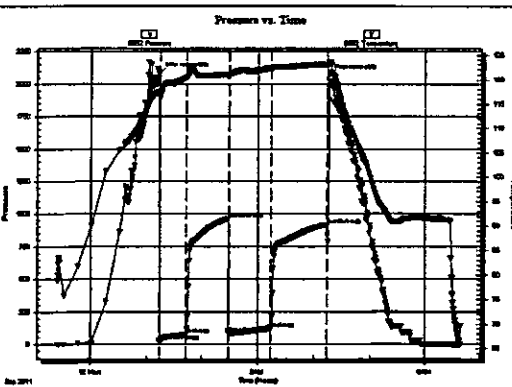
9-17s-29w Lane, KS
Marcelline #1-9
Job Ticket: 44476 DST#: 2
Test Start: 2011.09.11 @ 23:24:00

GENERAL INFORMATION:

Formation: LMC H&J
 Deviated: No Whipstock ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 01:14:15
 Tester: Bradley Walter
 Time Test Ended: 06:39:00
 Unit No: 40
 Interval: 4130.00 ft (KB) To 4190.00 ft (KB) (TVD)
 Reference Elevations: 2820.00 ft (KB)
 Total Depth: 4190.00 ft (KB) (TVD)
 2815.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GRCP: 5.00 ft

Serial #: 8652 Inside
 Press @ Run Depth: 119.88 psig @ 4131.00 ft (KB)
 Capacity: 8000.00 psig
 Start Date: 2011.09.11 End Date: 2011.09.12
 Last Calib.: 2011.09.12
 Start Time: 23:24:05 End Time: 06:38:59
 Time On Btm: 2011.09.12 @ 01:14:00
 Time Off Btm: 2011.09.12 @ 04:15:45

TEST COMMENT: IF: BOB @ 15 minutes.
 IS: No return.
 FF: BOB @ 15 minutes.
 FS: Return built to 2 1/2", died @ 47 minutes.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2082.19	117.66	Initial Hydro-static
1	22.63	116.43	Open To Flow (1)
29	74.76	120.36	Shut-In (1)
74	965.35	121.00	End Shut-In (1)
75	84.80	120.85	Open To Flow (2)
120	119.88	122.29	Shut-In (2)
180	920.16	123.06	End Shut-In (2)
182	2068.39	123.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bb)
160.00	gocm 20g 40m 40o	1.13
100.00	go 50g 50o	1.40
0.00	660' GP	0.00

* 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

9-17s-29w Lane, KS

1801 Broadway, STE 600
Denver, CO 80202

Marcelline #1-9

Job Ticket: 44476

DST#: 2

ATTN: Bruce Ard

Test Start: 2011.09.11 @ 23:24:00

Tool Information

Drill Pipe:	Length: 3985.00 ft	Diameter: 3.80 Inches	Volume: 55.90 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:	lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 Inches	Volume: 0.60 bbl	Weight to Pull Loose:	lb
			<u>Total Volume: 56.50 bbl</u>	Tool Chased:	ft
Drill Pipe Above KB:	5.00 ft			Spring Weight: Initial	lb
Depth to Top Packer:	4130.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	60.00 ft				
Tool Length:	88.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4103.00	
Shut In Tool	5.00			4108.00	
Hydraulic tool	5.00			4113.00	
Jars	5.00			4118.00	
Safety Joint	2.00			4120.00	
Packer	5.00			4125.00	28.00 Bottom Of Top Packer
Packer	5.00			4130.00	
Stubb	1.00			4131.00	
Recorder	0.00	8652	Inside	4131.00	
Recorder	0.00	8360	Outside	4131.00	
Perforations	22.00			4153.00	
Change Over Sub	1.00			4154.00	
Drill Pipe	32.00			4186.00	
Change Over Sub	1.00			4187.00	
Buttrose	3.00			4190.00	60.00 Bottom Packers & Anchor
Total Tool Length:	88.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation	9-17s-29w Lane, KS
1801 Broadway, STE 900 Denver, CO 80202	Marcelline #1-9
ATTN: Bruce Ard	Job Ticket: 44478 DST#: 2
	Test Start: 2011.09.11 @ 23:24:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Satfity:	0 ppm
Viscosity: 70.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in"	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1300.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table .

Length ft	Description	Volume bbl
160.00	gocm 20g 40m 40o	1.133
100.00	pp 50g 50o	1.403
0.00	550' GP	0.000

Total Length: 260.00ft Total Volume: 2.536 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

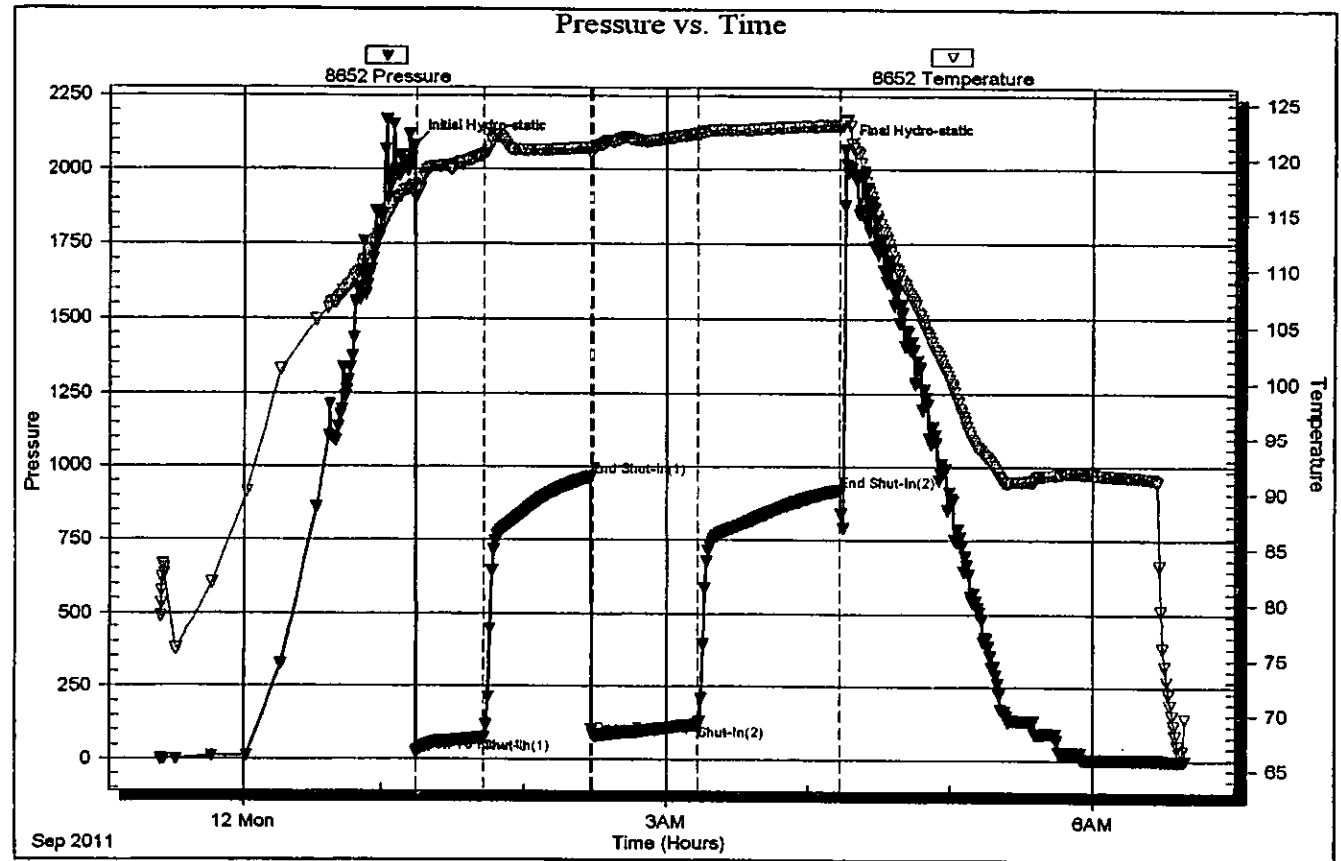
Recovery Comments: API Is 38@ 70 = 37

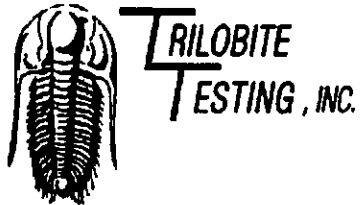
Serial #: 8652

Inside Oredo Petroleum Corporation

Marcelline #1-9

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway, STE 900
Denver, CO 80202

ATTN: Bruce Ard

Marcelline #1-9

9-17s-29w Lane, KS

Start Date: 2011.09.12 @ 16:13:00

End Date: 2011.09.12 @ 23:47:45

Job Ticket #: 44477 DST #: 3

Credo Petroleum Corporation
9-17s-29w Lane, KS
Marcelline #1-9
DST # 3
LKC J&K
2011.09.12

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

Printed: 2011.09.21 @ 09:03:03



**TRIOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Credo Petroleum Corporation
1801 Broadway, STE 900
Denver, CO 80202
ATTN: Bruce Ard

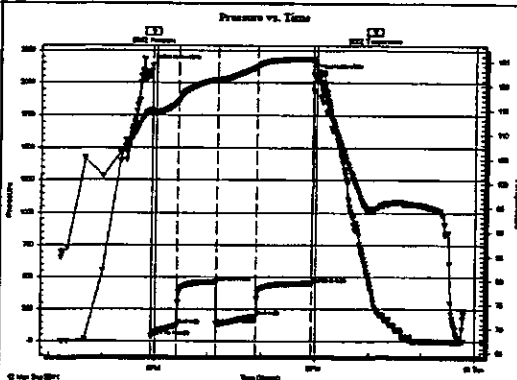
9-17s-29w Lane, KS
Marcelline #1-9
Job Ticket: 44477 DST#: 3
Test Start: 2011.09.12 @ 16:13:00

GENERAL INFORMATION:

Formation: LKC J&K
Deviated: No Whipstock ft (KB)
Time Tool Opened: 17:55:00
Time Test Ended: 23:47:45
Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 40
Interval: 4194.00 ft (KB) To 4244.00 ft (KB) (TVD)
Total Depth: 4244.00 ft (KB) (TVD)
Reference Elevations: 2820.00 ft (KB)
2815.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good
KB to GR/CF: 5.00 ft

Serial #: 8652 Inside
Press@RunDepth: 194.36 psig @ 4195.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.09.12 End Date: 2011.09.12 Last Calib.: 2011.09.12
Start Time: 16:13:05 End Time: 23:47:44 Time On Btm: 2011.09.12 @ 17:54:45
Time Off Btm: 2011.09.12 @ 20:57:00

TEST COMMENT: F: BOB @ 17 minutes.
IS: No return.
FF: BOB @ 22 minutes.
FS: 1/2 inch blow, died @ 30 minutes.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2129.03	114.94	Initial Hydro-static
1	34.27	114.23	Open To Flow (1)
31	124.77	116.69	Shut-In(1)
75	461.15	121.22	End Shut-In(1)
76	134.08	121.08	Open To Flow (2)
119	194.36	123.75	Shut-In(2)
181	448.05	125.43	End Shut-In(2)
183	2061.35	124.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	mcw 20m 80w (oil spots)	2.26
120.00	ow cm 10o 15w 75m	1.68
100.00	go 20g 80o	1.40
0.00	850' GP	0.00

* Recovery from multiple tests

Gas Rates

	Core (inches)	Pressure (psig)	Gas Rate (Mcfd)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Credo Petroleum Corporation

9-17s-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 44477

DST#: 3

ATTN: Bruce Ard

Test Start: 2011.09.12 @ 16:13:00

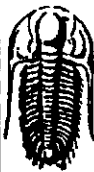
Tool Information

Drill Pipe:	Length: 4050.00 ft	Diameter: 3.80 inches	Volume: 56.81 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 73000.00 lb
			Total Volume: 57.41 bbl	Tool Chased: 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4194.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4167.00	
Shut In Tool	5.00			4172.00	
Hydraulic tool	5.00			4177.00	
Jars	5.00			4182.00	
Safety Joint	2.00			4184.00	
Packer	5.00			4189.00	28.00 Bottom Of Top Packer
Packer	5.00			4194.00	
Stubb	1.00			4195.00	
Recorder	0.00	8652	Inside	4195.00	
Recorder	0.00	8360	Outside	4195.00	
Perforations	12.00			4207.00	
Change Over Sub	1.00			4208.00	
Drill Pipe	32.00			4240.00	
Change Over Sub	1.00			4241.00	
Bullnose	3.00			4244.00	50.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRIOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation
1801 Broadway, STE 900
Denver, CO 80202
ATTN: Bruce Ard

9-17e-29w Lane, KS
Marcelline #1-9
Job Ticket: 44477 DST#: 3
Test Start: 2011.09.12 @ 18:13:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 70.00 sec/qt
Water Loss: 6.38 in*
Resistivity: ohm.m
Salinity: 1500.00 ppm
Filter Cake: 1.00 inches

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

Oil API: 36 deg API
Water Sat: 55000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	mcw 20m 80w (oil spots)	2.255
120.00	ow cm 10o 15w 75m	1.683
100.00	gp 20g 80o	1.403
0.00	850 GP	0.000

Total Length: 460.00ft Total Volume: 5.341 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

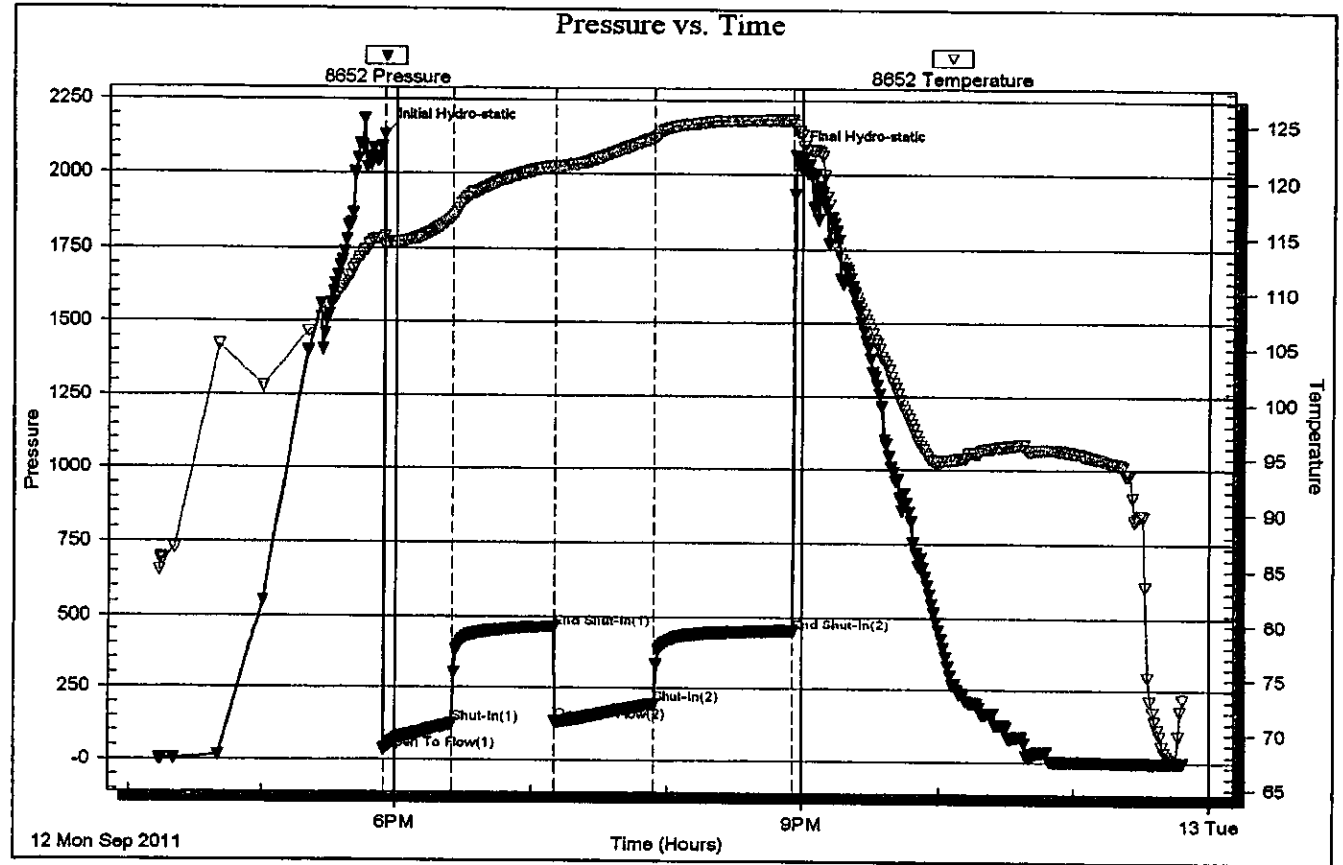
Recovery Comments: API is 37 @ 70 = 36
rw is .130 @ 73 = 55000 ppm

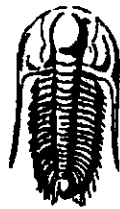
Serial #: 8652

Inside Credo Petroleum Corporation

Marcelline #1-9

DGT Test Number: 3





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway, STE 900
Denver, CO 80202

ATTN: Bruce Ard

Marcelline #1-9

9-17s-29w Lane, KS

Start Date: 2011.09.14 @ 03:25:00

End Date: 2011.09.14 @ 09:32:00

Job Ticket #: 44478 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67801

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

Credo Petroleum Corporation
9-17s-29w Lane, KS
Marcelline #1-9
DST # 4
Altamont - Ft Scott
2011.09.14



**TRIOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Credo Petroleum Corporation
1801 Broadway, STE 900
Denver, CO 80202
ATTN: Bruce Ard

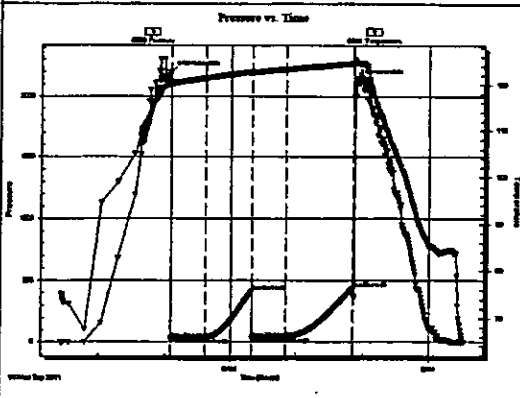
9-17a-29w Lane, KS
Marcelline #1-9
Job Ticket: 44478 DST#: 4
Test Start: 2011.09.14 @ 03:25:00

GENERAL INFORMATION:

Formation: Altamont - R Scott
 Deviated: No Whipstock ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 05:05:30 Tester: Bradley Walter
 Time Test Ended: 09:32:00 Unit No: 40
 Interval: 4372.00 ft (KB) To 4460.00 ft (KB) (TVD)
 Reference Elevations: 2820.00 ft (KB)
 Total Depth: 4460.00 ft (KB) (TVD) 2815.00 ft (CF)
 Hole Diameter: 7.88 inches-Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8360 Outside
 Press@RunDepth: 35.77 psig @ 4373.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.09.14 End Date: 2011.09.14 Last Calib.: 2011.09.14
 Start Time: 03:25:05 End Time: 09:31:59 Time On Btm: 2011.09.14 @ 05:05:15
 Time Off Btm: 2011.09.14 @ 07:52:15

TEST COMMENT: F: Surface blow, died @ 14 minutes.
 ES: No return.
 FF: No blow.
 FSI: No return.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2200.07	120.50	Initial Hydro-static
1	29.21	119.82	Open To Flow (1)
32	32.89	121.39	Shut-In(1)
75	414.95	122.74	End Shut-In(1)
75	32.47	122.49	Open To Flow (2)
105	35.77	123.30	Shut-In(2)
166	438.99	124.54	End Shut-In(2)
167	2135.51	124.94	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	mud 100m	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

9-17a-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 44478

DST#: 4

ATTN: Bruce Ard

Test Start: 2011.09.14 @ 03:25:00

Tool Information

Drill Pipe:	Length: 4240.00 ft	Diameter: 3.80 inches	Volume: 59.48 bbl	Tool Weight: 2500.00 lb
Heavy Wl. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 60.08 bbl</u>	Tool Chased: 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4372.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	88.00 ft			
Tool Length:	116.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4345.00	
Shut In Tool	5.00			4350.00	
Hydraulic tool	5.00			4355.00	
Jars	5.00			4360.00	
Safety Joint	2.00			4362.00	
Packer	5.00			4367.00	28.00 Bottom Of Top Packer
Packer	5.00			4372.00	
Stubb	1.00			4373.00	
Recorder	0.00	8652	Inside	4373.00	
Recorder	0.00	8360	Outside	4373.00	
Perforations	19.00			4392.00	
Change Over Sub	1.00			4393.00	
Drill Pipe	63.00			4456.00	
Change Over Sub	1.00			4457.00	
Bullnose	3.00			4460.00	88.00 Bottom Packers & Anchor
Total Tool Length:	116.00				



**TRIBOLITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Orco Petroleum Corporation

9-17^e-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 44478

DST#: 4

ATTN: Bruce Ard

Test Start: 2011.09.14 @ 03:25:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

CI AP:

0 deg AP

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.39 in²

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	mud 100m	0.025

Total Length: 5.00ft Total Volume: 0.025 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

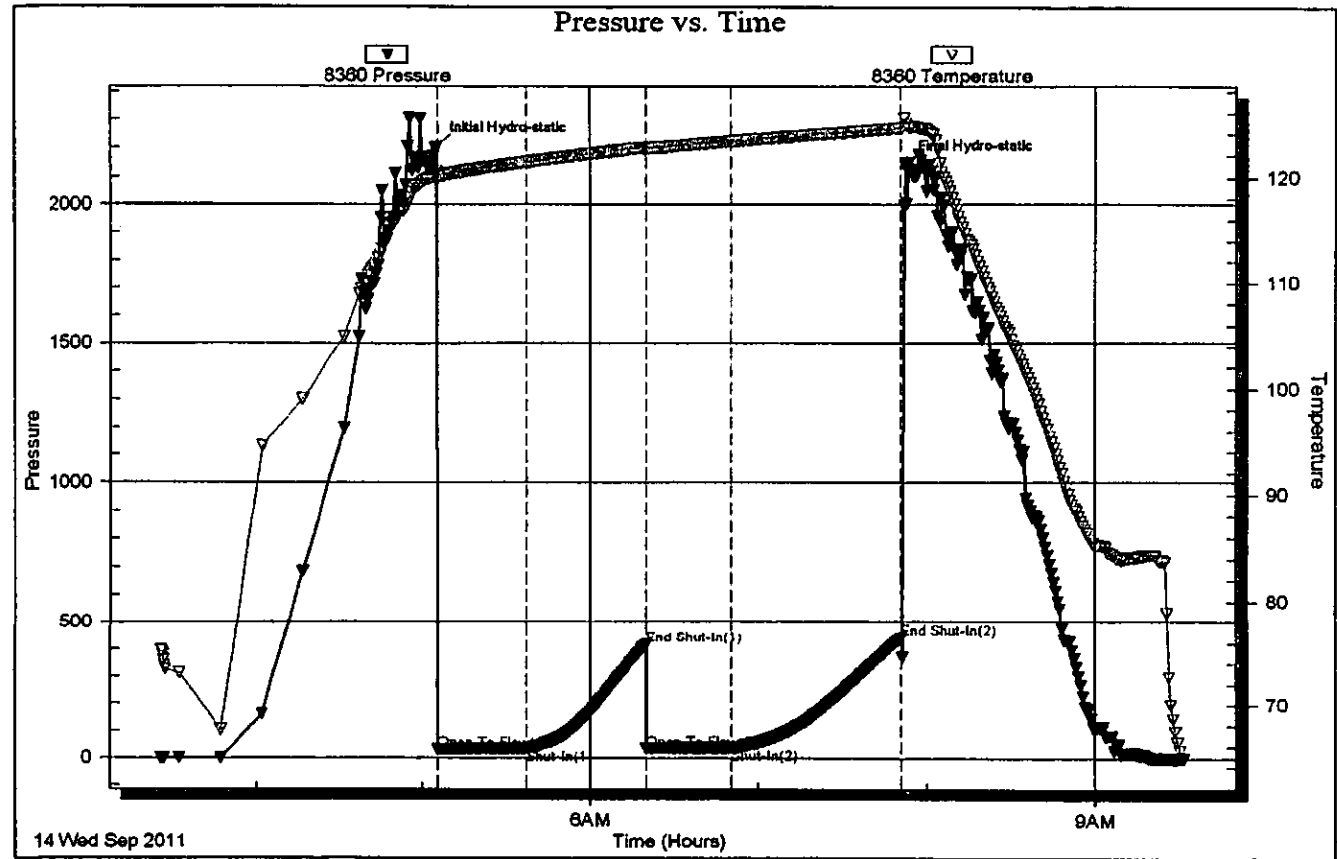
Recovery Comments:

Serial #: 8360

Outside Ordo Petroleum Corporation

Marcelline #1-9

DST Test Number: 4





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corporation**

1801 Broadway, STE 900
Denver, CO 80202

ATTN: Bruce Ard

Marcelline #1-9

9-17s-29w Lane, KS

Start Date: 2011.09.14 @ 23:09:00

End Date: 2011.09.15 @ 08:22:30

Job Ticket #: 44479 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Credo Petroleum Corporation

9-17s-29w Lane, KS

Marcelline #1-9

DST # 6

Cherokee - Johnson

2011.09.14



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Credo Petroleum Corporation

9-17s-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

ATTN: Bruce Ard

Job Ticket: 44479

DST#: 5

Test Start: 2011.09.14 @ 23:09:00

GENERAL INFORMATION:

Formation: Cherokee - Johnson

Deviated: No Whipstock ft (KB)

Time Tool Opened: 01:21:30

Time Test Ended: 06:22:30

Interval: 4460.00 ft (KB) To 4542.00 ft (KB) (TVD)

Total Depth: 4572.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 40

Reference Elevations: 2820.00 ft (KB)

2815.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8652

Inside

Press@RunDepth: 455.33 psig @ 4461.00 ft (KB)

Start Date: 2011.09.14

End Date:

2011.09.15

Capacity: 8000.00 psig

Last Calib.: 2011.09.15

Start Time:

23:09:05

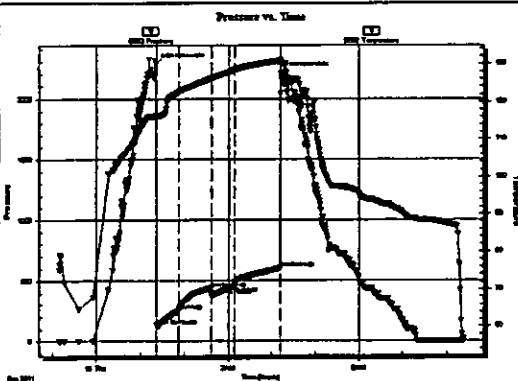
End Time:

08:22:30

Time On Btm: 2011.09.15 @ 01:21:00

Time Off Btm: 2011.09.15 @ 04:12:30

TEST COMMENT: IF: BOB 1 1/2 minutes.
IS: BOB 3 min after bleed off.
FF: BOB 1 1/2 minutes.
FS: BOB 2 min Gassy odor at end of shut in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2284.63	116.56	Initial Hydro-static
1	131.18	116.11	Open To Flow (1)
32	252.67	122.53	Shut-In(1)
76	440.45	126.14	End Shut-In(1)
77	378.16	126.18	Open To Flow (2)
107	455.33	128.26	Shut-In(2)
171	603.97	130.66	End Shut-In(2)
172	2207.88	130.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	gocm 30g 10o 60m	3.24
430.00	go 30g 70o	6.03
770.00	go 60g 40o	10.80
0.00	2950 GIP	0.00

* 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

9-17th-29th Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 44479

DST#: 5

ATTN: Bruce Ard

Test Start: 2011.09.14 @ 23:09:00

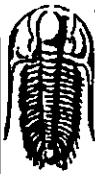
Tool Information

Drill Pipe:	Length: 4332.00 ft	Diameter: 3.80 inches	Volume: 60.77 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 61.37 bbl</u>	Tool Chased: 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4460.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	110.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4433.00	
Shut In Tool	5.00			4438.00	
Hydraulic tool	5.00			4443.00	
Jars	5.00			4448.00	
Safety Joint	2.00			4450.00	
Packer	5.00			4455.00	28.00 Bottom Of Top Packer
Packer	5.00			4460.00	
Stubb	1.00			4461.00	
Recorder	0.00	8652	Inside	4461.00	
Recorder	0.00	8360	Outside	4461.00	
Perforations	13.00			4474.00	
Change Over Sub	1.00			4475.00	
Drill Pipe	63.00			4538.00	
Change Over Sub	1.00			4539.00	
Bullnose	3.00			4542.00	82.00 Bottom Packers & Anchor

Total Tool Length: 110.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Credo Petroleum Corporation

9-17a-29w Lane, KS

1801 Broadway, STE 900
Denver, CO 80202

Marcelline #1-9

Job Ticket: 44479

DST#: 6

ATTN: Bruce Ard

Test Start: 2011.09.14 @ 23:09:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

CO₂ AIR

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 71.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: 3900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	geom 30g 10o 60m	3.237
430.00	ge 30g 70o	6.032
770.00	ge 60g 40o	10.801
0.00	2950 GP	0.000

Total Length: 1510.00ft Total Volume: 20.070 bbl

Num Fluid Samples: 0

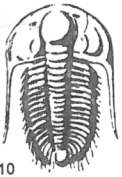
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API is 37 @ 50 = 38



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

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SEP 19 2011
BY: _____

Test Ticket

NO. 43650 16321

Well Name & No. Marcelline 1-9 Test No. 1 Date 9-11-11
 Company Credo Petroleum Cooperation Elevation 2920 KB 2815 GL
 Address 1801 Broadway, Suite 900, Denver, Co 80202
 Co. Rep / Geo. Bruce Ard Rig WW#10
 Location: Sec. 9 Twp. 17s Rge. 29w Co. Lane State Ks

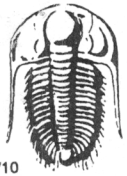
Interval Tested 3988 - 4074 Zone Tested LKC "C-F"
 Anchor Length 86 Drill Pipe Run 3858 Mud Wt. 9.2
 Top Packer Depth 3983 Drill Collars Run 122 Vis 50
 Bottom Packer Depth 3988 Wt. Pipe Run Ø WL 5.2
 Total Depth 4074 Chlorides 1100 ppm System LCM 4#
 Blow Description IF: 3 1/2 inches blow
IS: No return.
FF: 1 1/2 inches blow.
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>60cm</u>	<u>10</u>	<u>20</u>	<u>70</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 150 BHT UB Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1984 Test 1225' T-On Location Ø 100
 (B) First Initial Flow 21 Jars 250' T-Started 0214
 (C) First Final Flow 59 Safety Joint 75' T-Open 0430
 (D) Initial Shut-In 886 Circ Sub NC T-Pulled 0730
 (E) Second Initial Flow 69 Hourly Standby _____ T-Out 0914
 (F) Second Final Flow 83 Mileage 70 Hrs 98' Comments _____
 (G) Final Shut-In 827 Sampler _____
 (H) Final Hydrostatic 1965 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total Ø
 Initial Shut-In 45 Day Standby _____ Total 1648'
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1648'

Approved By Bruce Ard Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged or 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.

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SEP 19 2011
BY: _____

Test Ticket

NO. 44476

Well Name & No. Marcelline 1-9 Test No. 2 Date 9-12-12
 Company Credo Petroleum Corporation Elevation 2820 KB 2815 GL
 Address 1801 Broadway Suite 900 Denver, Co 80202
 Co. Rep / Geo. Bruce Arcl Rig WW #10
 Location: Sec. 9 Twp. 17s Rge. 29w Co. Lane State Ks

Interval Tested 3985 4130 - 4190 Zone Tested Lansing H#I
 Anchor Length 60' Drill Pipe Run 3985 Mud Wt. 9.2
 Top Packer Depth 4125 Drill Collars Run 122 Vis 70
 Bottom Packer Depth 4130 Wt. Pipe Run 0 WL 5.6
 Total Depth 4190 Chlorides 1300 ppm System LCM 3#
 Blow Description IF: BOB @ 15 minutes
ISF: No return.
FF: BOB @ 15 minutes
FSI: No Built to 2 1/2", Died @ 47 minutes

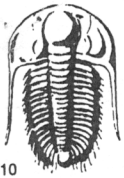
Rec	Feet of	%gas	%oil	%water	%mud
100	60	50	50		
160	6 MCO	20	40	40	
	660' GIP				

Rec Total 260 BHT 123 Gravity 37 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 2082 Test 1225' T-On Location 2300 9-11
 (B) First Initial Flow 23 Jars 250' T-Started 2324 9-11
 (C) First Final Flow 75 Safety Joint 75' T-Open 0143
 (D) Initial Shut-In 965 Circ Sub NC T-Pulled 0413
 (E) Second Initial Flow 85 Hourly Standby _____ T-Out 0639
 (F) Second Final Flow 120 Mileage 70 1/4 98' Comments _____
 (G) Final Shut-In 920 Sampler _____
 (H) Final Hydrostatic 2068 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1648
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1648

Approved By Lee Mack Our Representative [Signature]

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TRILOBITE TESTING INC.

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RECEIVED Test Ticket

SEP 19 2011

NO. 44477

4/10

BT.

Well Name & No. Marcelline 1-9 Test No. 3 Date 9-12-11
 Company Credo Petroleum Corporation Elevation 2820 KB 2815 GL
 Address 1801 Broad way Suite 900 Denver, Co 80202
 Co. Rep / Geo. Bruce Ard Rig WW #10
 Location: Sec. 9 Twp. 17w Rge. 29w Co. Lane State Ks

Interval Tested 4194-4244 Zone Tested Lancing J&K
 Anchor Length 50' Drill Pipe Run _____ Mud Wt. 9.3
 Top Packer Depth 4189 Drill Collars Run 122 Vis 70
 Bottom Packer Depth 4194 Wt. Pipe Run 0 WL 6.4
 Total Depth 4244 Chlorides 1500 ppm System LCM 4#
 Blow Description IF: BOB @ 17 minutes
ISI: No return
FF: BOB @ 22 minutes
FSI: 1/2 inch, died @ 30 minutes.

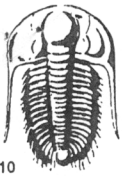
Rec	Feet of	%gas	%oil	%water	%mud
100	60	20	80		
120	0WCM		10	15	75
240	MCW			80	20
	850' GIP				

Rec Total 460 BHT 125 Gravity 36 API RW .130 @ 73 °F Chlorides 55000 ppm
 (A) Initial Hydrostatic 2129 Test 1225' T-On Location 1500
 (B) First Initial Flow 34 Jars 250' T-Started 16 13
 (C) First Final Flow 125 Safety Joint 78 T-Open 17 53
 (D) Initial Shut-In 461 Circ Sub N/C T-Pulled 20 53
 (E) Second Initial Flow 134 Hourly Standby _____ T-Out 23 47
 (F) Second Final Flow 194 Mileage 70 RT 98 Comments _____
 (G) Final Shut-In 448 Sampler _____
 (H) Final Hydrostatic 2061 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1648'
 Final Flow 48 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1648'

Approved By [Signature]

Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
SEP 19 2011

Test Ticket

NO. 44478

Well Name & No. Marcelline 1-9 Test No. 4 Date 9-14-11
 Company Credo Petroleum Corporation Elevation 2820 KB 2815 GL
 Address 1801 Broadway Suite 900 Denver, Co 80202
 Co. Rep / Geo. Bruce Ard Rig WW#10
 Location: Sec. 9 Twp. N7S Rge. 29W Co. lane State Ks

Interval Tested 4372-4460 ~~4144-4244~~ Zone Tested Altamont, Pawnee, Ft Scott
 Anchor Length 84 Drill Pipe Run 4040 Mud Wt. 9.3
 Top Packer Depth 4189 4367 Drill Collars Run 129 Vis 56
 Bottom Packer Depth 4144 4372 Wt. Pipe Run 0 WL 6.4
 Total Depth 4444 4460 Chlorides 2,000 ppm System LCM 3#

Blow Description IF: Surface blow, Died @ 14 minutes.
ISI: No return
FF: No blow
FST: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>S</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 S BHT 125 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2200</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>2130 9-13</u>
(B) First Initial Flow <u>29</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>0325</u>
(C) First Final Flow <u>33</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>0506</u>
(D) Initial Shut-In <u>415</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>0751</u>
(E) Second Initial Flow <u>32</u>	<input checked="" type="checkbox"/> Hourly Standby <u>2hrs 200'</u>	T-Out <u>0932</u>
(F) Second Final Flow <u>36</u>	<input checked="" type="checkbox"/> Mileage <u>RT 20 98'</u>	Comments _____
(G) Final Shut-In <u>439</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2136</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1848</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1848</u>	

Approved By [Signature] Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
SEP 19 2011
BY: _____

Test Ticket

NO. 44479

Well Name & No. Marcelline 1-9 Test No. 5 Date 9-15-11
 Company Credo Petroleum Corporation Elevation 2820 KB 2815 GL
 Address 1801 Broadway Suite 900 Denver, Co 80202
 Co. Rep / Geo. Bruce Ard Rig WW#10
 Location: Sec. 9 Twp. 17s Rge. 29w Co. Lane State Ks

Interval Tested ~~4194 - 4244~~
4460 - 4542 Zone Tested Cherokee - Johnson
 Anchor Length 82 Drill Pipe Run 4432 Mud Wt. 9.2
 Top Packer Depth 4455 Drill Collars Run 122 Vis 71
 Bottom Packer Depth 4460 Wt. Pipe Run Ø WL 7.2
 Total Depth 4542 Chlorides 3900 ppm System LCM 1#

Blow Description IF: BOB 1 1/2 minutes
ISI: BOB 3 minutes after bleed off.
FF: BOB 1 1/2 minutes

FSI: No return to BOB 2 minutes. Gassy ODER @ End.

Rec	Feet of	%gas	%oil	%water	%mud
770	60	60	40		
430	60	30	70		
310	60cm	30	10		60
	2950 GIP				

Rec Total 1510 BHT 131 Gravity 38 API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 2285 Test 1225' T-On Location 2200
 (B) First Initial Flow 131 Jars 250' T-Started 2309
 (C) First Final Flow 253 Safety Joint 75' T-Open 0121
 (D) Initial Shut-In 140 Circ Sub NC T-Pulled 0406
 (E) Second Initial Flow 374 Hourly Standby 1/4 25' T-Out 0822
 (F) Second Final Flow 455 Mileage RT 70 98' Comments _____
 (G) Final Shut-In 604 Sampler _____
 (H) Final Hydrostatic 2206 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____

Initial Open 30
 Initial Shut-In 45
 Final Flow 30
 Final Shut-In 60
 Sub Total 11673'
 Total 11673'
 MP/DST Disc't _____

Approved By [Signature] Our Representative [Signature]

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