



**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



phone: 316-337-6200  
fax: 316-337-6211  
<http://kcc.ks.gov/>

Thomas E. Wright, Chairman  
Ward Loyd, Commissioner

Corporation Commission

Sam Brownback, Governor

February 23, 2011

JACK RENFRO  
Credo Petroleum Corporation  
1801 BROADWAY # 900  
DENVER, CO 80202-3858

Re: ACO1  
API 15-193-20780-00-00  
Hemmert 1-30  
SW/4 Sec.30-10S-31W  
Thomas County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
JACK RENFRO



KANSAS CORPORATION COMMISSION 1050310  
OIL & GAS CONSERVATION DIVISION

Form CDP-1  
May 2010  
Form must be Typed

**APPLICATION FOR SURFACE PIT**

*Submit in Duplicate*

Operator Name: _____		License Number: _____	
Operator Address: _____			
Contact Person: _____		Phone Number: _____	
Lease Name & Well No.: _____		Pit Location (QQQQ): _____-_____-_____-_____	
Type of Pit: <input type="checkbox"/> Emergency Pit <input type="checkbox"/> Burn Pit <input type="checkbox"/> Settling Pit <input type="checkbox"/> Drilling Pit <input type="checkbox"/> Workover Pit <input type="checkbox"/> Haul-Off Pit <i>(If WP Supply API No. or Year Drilled)</i>		Pit is: <input type="checkbox"/> Proposed <input type="checkbox"/> Existing If Existing, date constructed: _____ Pit capacity: _____ (bbls)	
Is the pit located in a Sensitive Ground Water Area? <input type="checkbox"/> Yes <input type="checkbox"/> No		Chloride concentration: _____ mg/l <i>(For Emergency Pits and Settling Pits only)</i>	
Is the bottom below ground level? <input type="checkbox"/> Yes <input type="checkbox"/> No		Artificial Liner? <input type="checkbox"/> Yes <input type="checkbox"/> No	
How is the pit lined if a plastic liner is not used?			
Pit dimensions (all but working pits):    _____ Length (feet)    _____ Width (feet) <input type="checkbox"/> N/A: Steel Pits Depth from ground level to deepest point: _____ (feet) <input type="checkbox"/> No Pit			
If the pit is lined give a brief description of the liner material, thickness and installation procedure.		Describe procedures for periodic maintenance and determining liner integrity, including any special monitoring.	
Distance to nearest water well within one-mile of pit: _____ feet    Depth of water well _____ feet		Depth to shallowest fresh water _____ feet. Source of information: <input type="checkbox"/> measured <input type="checkbox"/> well owner <input type="checkbox"/> electric log <input type="checkbox"/> KDWR	
<b>Emergency, Settling and Burn Pits ONLY:</b> Producing Formation: _____ Number of producing wells on lease: _____ Barrels of fluid produced daily: _____ Does the slope from the tank battery allow all spilled fluids to flow into the pit? <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>Drilling, Workover and Haul-Off Pits ONLY:</b> Type of material utilized in drilling/workover: _____ Number of working pits to be utilized: _____ Abandonment procedure: _____ Drill pits must be closed within 365 days of spud date.	
<p><b>Submitted Electronically</b></p>			

**KCC OFFICE USE ONLY**

Liner     Steel Pit     RFAC     RFAS

Date Received: \_\_\_\_\_ Permit Number: \_\_\_\_\_ Permit Date: \_\_\_\_\_ Lease Inspection:     Yes     No

# Kansas Corporation Commission Oil & Gas Conservation Division

## HAUL-OFF PIT APPLICATION FILING REQUIREMENTS

### 82-3-607. DISPOSAL OF DIKE AND PIT CONTENTS.

- (a) Each operator shall perform one of the following when disposing of dike or pit contents:
- (1) Remove the liquid contents to a disposal well or other oil and gas operation approved by the commission or to road maintenance or construction locations approved by the department;
  - (2) dispose of reserve pit waste down the annular space of a well completed according to the alternate I requirements of K.A.R. 82-3-106, if the waste to be disposed of was generated during the drilling and completion of the well; or
  - (3) dispose of the remaining solid contents in any manner required by the commission. The requirements may include any of the following:
    - (A) Burial in place, in accordance with the grading and restoration requirements in K.A.R. 82-3-602 (f);
    - (B) removal and placement of the contents in an on-site disposal area approved by the commission;
    - (C) removal and placement of the contents in an off-site disposal area on acreage owned by the same landowner or to another producing lease or unit operated by the same operator, if prior written permission from the landowner has been obtained; or
    - (D) removal of the contents to a permitted off-site disposal area approved by the department.
- (b) Each violation of this regulation shall be punishable by the following:
- (1) A \$1,000 penalty for the first violation;
  - (2) a \$2,500 penalty for the second violation; and
  - (3) a \$5,000 penalty and an operator license review for the third violation.

### **Complete and return with Haul-Off Pit Application, Form CDP1(2004)**

Haul-off pit will be located in an on-site disposal area:  Yes  No

Haul-off pit is located in an off-site disposal area on acreage owned by the same landowner:  
 Yes  No If yes, written permission from the land owner must be obtained. Attach written permission to haul-off pit application.

Haul-off pit is located in an off-site disposal area on another **producing** lease or unit operated by the same operator:  Yes  No If yes, written permission from the land owner must be obtained. Attach permission and a copy of the lease assignment that covers the acreage where the haul-off pit is to be located, to the haul-off pit application.



# CREDO PETROLEUM CORPORATION

## DISPOSAL AGREEMENT

Now on this 2 day of January, 2011, this Agreement is executed and delivered by Harold Werth, Trustee of the Harold Werth Living Trust dated 5-3-2007 and the Betty Werth Living Trust dated 5-3-2007, HC-2, Box 23, Quinter, Kansas, 67752 hereinafter called WERTH, and Credo Petroleum Corporation, 1801 Broadway, Suite 900, Denver, Colorado 80202 hereinafter called CREDO.

The parties agree as follows:

1. Werth and Credo have entered into an oil and gas lease dated August 5, 2009, and filed in Book 241 Page 661 of Records in the Graham County Register of Deeds Office covering:

The Southwest Quarter (SW/4) of Section Thirty-one (31), Township Nine (9) South, Range Twenty-five (25) West of the 6<sup>th</sup> P.M. Graham County, Kansas.

2. Credo has drilled an exploratory oil well and has established the drill site location including disposal pits on the above-referenced property.
3. Credo has an additional drill site location in the Southwest Quarter (SW/4) of Section Thirty (30), Range Ten (10) South, Township Thirty-one (31) West, Thomas County Kansas, and desires to haul off the products of this test well to the Werth location.
4. Credo will pay Werth One Thousand Dollars (\$1,000.00) for his allowing of this disposal on his property. The disposal will consist of twelve (12) to fifteen (15) loads of drilling mud and other solid and water waste.

This agreement shall be binding upon the heirs, administrators, executors, successors, and assigns of Werth and Credo.

In witness whereof, this instrument is signed on the date and year first above mentioned.

WERTH:

Harold Werth  
Harold Werth, Trustee of the Harold Werth Living Trust dated 5-3-2007 and the Betty Werth Living Trust dated 5-3-2007

CREDO:

John B. Parker  
John B. Parker, Landman  
Credo Petroleum Corporation

*Ard Consulting Services*  
*Bruce B. Ard*

Scale 1:240 (5"=100') Imperial

Well Name: Hemmert 1-30  
Location: Section 30- T10S - R31W Thomas County, Kansas  
Licence Number: API #15-193-20780-0000  
Spud Date: 01-03-2011  
Surface Coordinates: 410' FSL & 2000' FWL  
Region: Wildcat  
Drilling Completed: 01-13-2011

Bottom Hole  
Coordinates: 2966' K.B. Elevation (ft): 2971'  
Ground Elevation (ft): 3700 To: RTD Total Depth (ft): 4650  
Logged Interval (ft): 3700  
Formation: Mississippian  
Type of Drilling Fluid: Chemical Gel/Polymer Fresh Water -Based

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: Credo Petroleum Corporation  
Address: 1801 Broadway, Suite 900  
Denver, Co. 80202

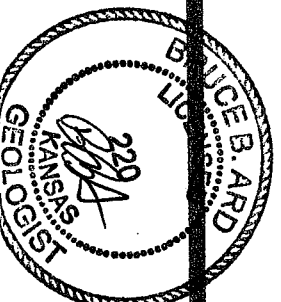
**GEOLOGIST**

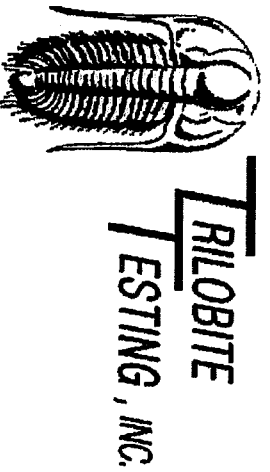
Name: Bruce B. Ard, KLG #220  
Company: Ard Consulting Services - A.C.S.  
Address: 6000 10th Street  
Great Bend, Ks. 67530

**REMARKS**

After review of the Open Hole Logs, DST results & Geological Log; it was recommended to and agreed upon by all interested parties to plug and abandon the Hemmert 1-30 test as a dry hole  
The samples will be delivered, processed and available for review at the KGS Sample Library located in Wichita, Kansas.

Respectfully Submitted, Bruce B. Ard  
Consulting Geologist - KLG #220





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.09 @ 03:43:00

End Date: 2011.01.09 @ 11:20:30

Job Ticket #: 040629      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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





**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

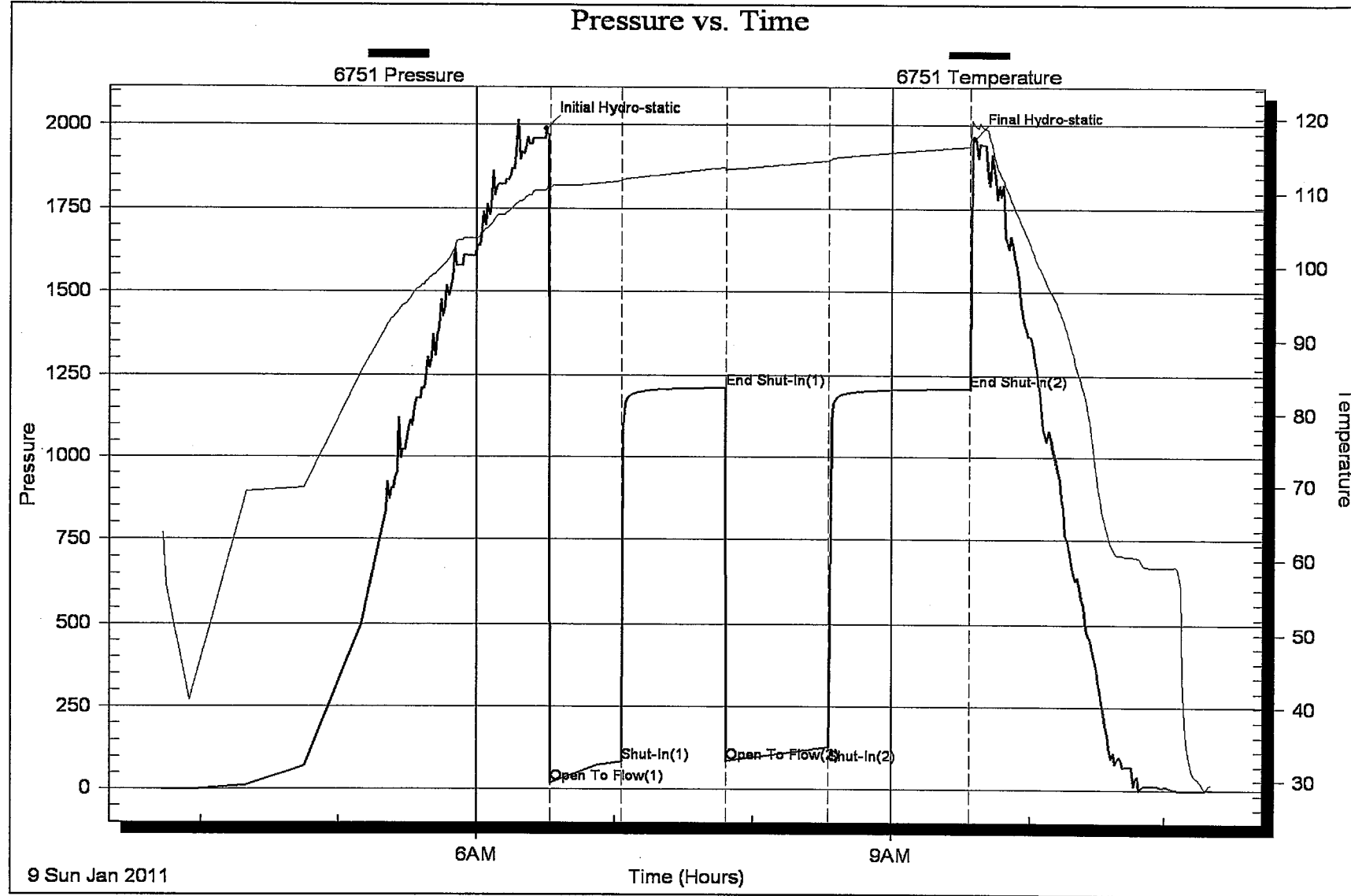
Crede Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

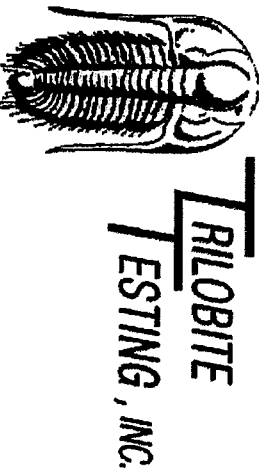
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040629 DST#: 1  
Test Start: 2011.01.09 @ 03:43:00

**Tool Information**

Drill Pipe: Length: 3906.00 ft Diameter: 3.80 inches Volume: 54.79 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: 124.00 ft Diameter: 2.25 inches Volume: 0.61 bbl Weight to Pull Loose: 58000.00 lb  
 Drill Pipe Above KB: 6.50 ft Total Volume: 55.40 bbl Tool Chased 0.00 ft  
 Depth to Top Packer: 4051.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 48000.00 lb  
 Interval between Packers: 31.00 ft  
 Tool Length: 58.50 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			4024.50	
Shut In Tool	5.00			4029.50	
Hydraulic tool	5.00			4034.50	
Jars	5.00			4039.50	
Safety Joint	2.50			4042.00	
Packer	5.00			4047.00	27.50
Packer	4.00			4051.00	Bottom Of Top Packer
Stubb	1.00			4052.00	
Perforations	2.00			4054.00	
Recorder	0.00	8018	Inside	4054.00	
Recorder	0.00	6751	Outside	4054.00	
Perforations	25.00			4079.00	
Bullnose	3.00			4082.00	31.00
<b>Total Tool Length:</b>					<b>58.50</b>
					Bottom Packers & Anchor





## DRILL STEM TEST REPORT

Prepared For: **Crede Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.10 @ 04:59:00

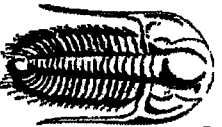
End Date: 2011.01.10 @ 13:36:30

Job Ticket #: 040630      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

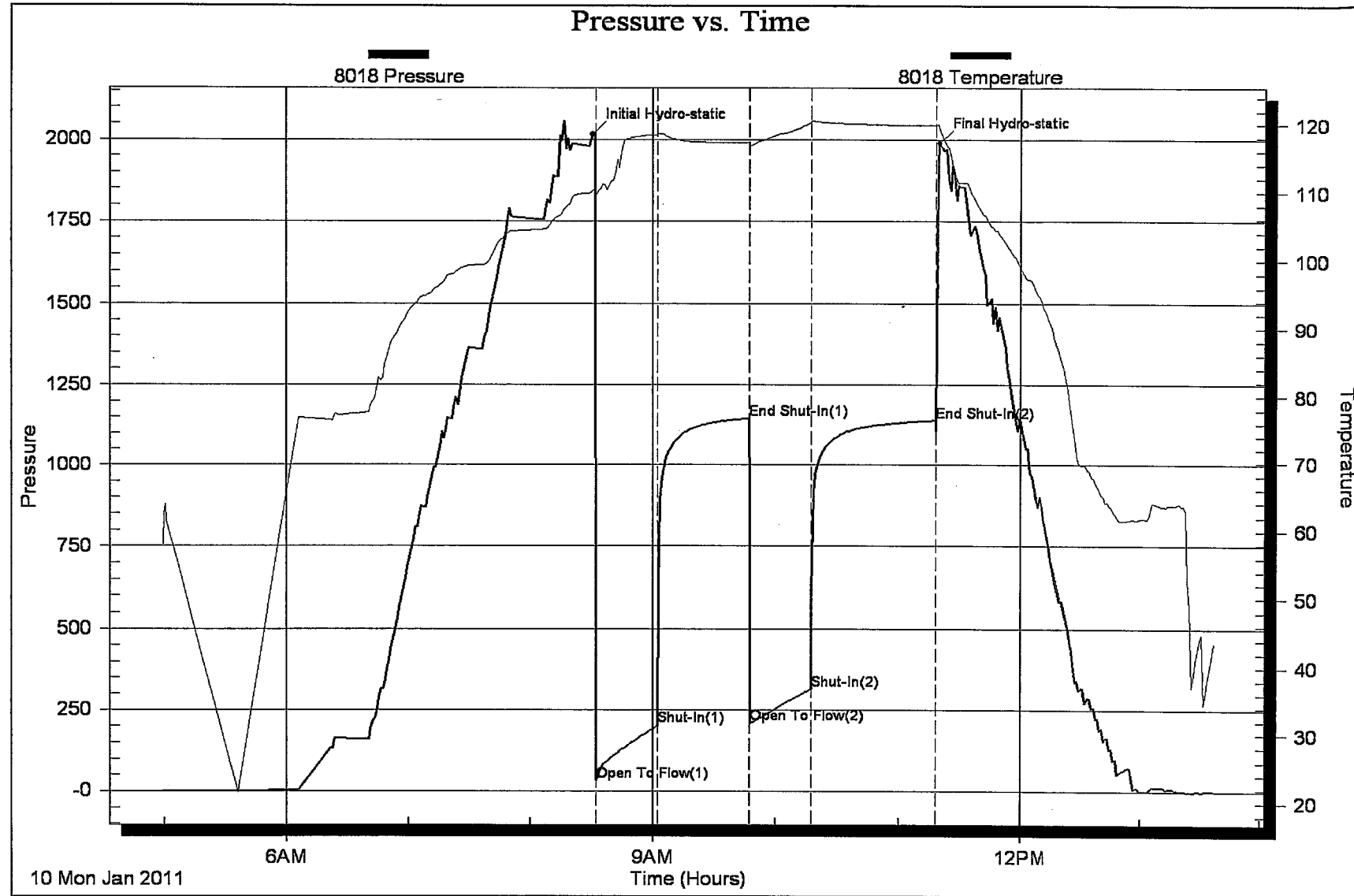
Crede Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

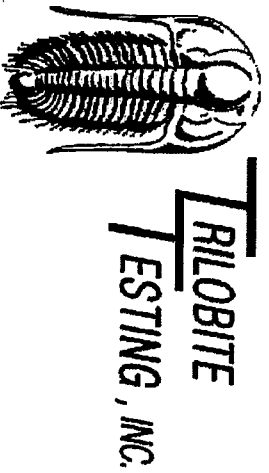
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040630 DST#: 2  
Test Start: 2011.01.10 @ 04:59:00

**Tool Information**

Drill Pipe: Length: 3969.00 ft Diameter: 3.80 inches Volume: 55.67 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: 124.00 ft Diameter: 2.25 inches Volume: 0.61 bbl Weight to Pull Loose: 60000.00 lb  
 Drill Pipe Above KB: 5.50 ft Total Volume: 56.28 bbl Tool Chased 0.00 ft  
 Depth to Top Packer: 4115.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 52000.00 lb  
 Interval between Packers: 131.00 ft  
 Tool Length: 158.50 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			4088.50	
Shut In Tool	5.00			4093.50	
Hydraulic tool	5.00			4098.50	
Jars	5.00			4103.50	
Safety Joint	2.50			4106.00	
Packer	5.00			4111.00	27.50
					Bottom Of Top Packer
Packer	4.00			4115.00	
Stubb	1.00			4116.00	
Perforations	3.00			4119.00	
Recorder	0.00	8018	Inside	4119.00	
Recorder	0.00	6751	Outside	4119.00	
Perforations	28.00			4147.00	
Change Over Sub	1.00			4148.00	
Drill Pipe	94.00			4242.00	
Change Over Sub	1.00			4243.00	
Bullnose	3.00			4246.00	131.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>158.50</b>				





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Aird

**30-10-31 Thomas, KS**

**Hemmert #1-30**

Start Date: 2011.01.11 @ 13:28:00

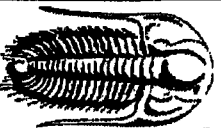
End Date: 2011.01.11 @ 22:28:00

Job Ticket #: 040631      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

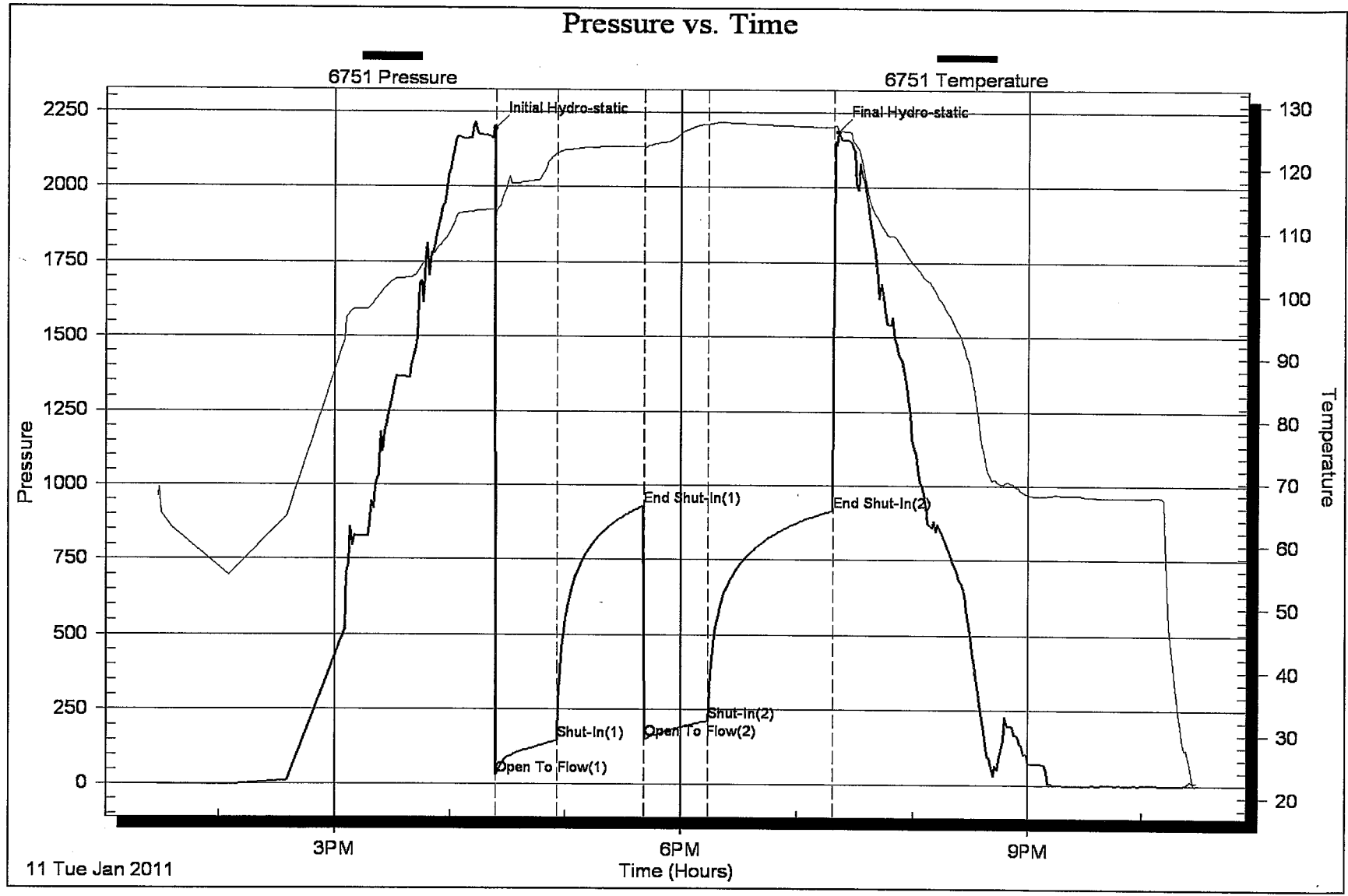
Credo Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040631      DST#: 3  
Test Start: 2011.01.11 @ 13:28:00

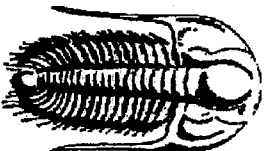
**Tool Information**

Drill Pipe: Length: 4252.00 ft Diameter: 3.80 inches Volume: 59.64 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: 120.00 ft Diameter: 2.25 inches Volume: 0.59 bbl Weight to Pull Loose: 56000.00 lb  
 Drill Pipe Above KB: 15.50 ft Total Volume: 60.23 bbl Tool Chased ft  
 Depth to Top Packer: 4384.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 50000.00 lb  
 Interval between Packers: 64.00 ft  
 Tool Length: 91.50 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			4357.50	
Shut In Tool	5.00			4362.50	
Hydraulic tool	5.00			4367.50	
Jars	5.00			4372.50	
Safety Joint	2.50			4375.00	
Packer	5.00			4380.00	27.50
Packer	4.00			4384.00	Bottom Of Top Packer
Stubb	1.00			4385.00	
Perforations	2.00			4387.00	
Recorder	0.00	8018	Inside	4387.00	
Recorder	0.00	6751	Outside	4387.00	
Perforations	24.00			4411.00	
Change Over Sub	1.00			4412.00	
Drill Pipe	32.00			4444.00	
Change Over Sub	1.00			4445.00	
Bullnose	3.00			4448.00	64.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>91.50</b>				







**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.12 @ 13:25:00

End Date: 2011.01.12 @ 21:06:00

Job Ticket #: 040632      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

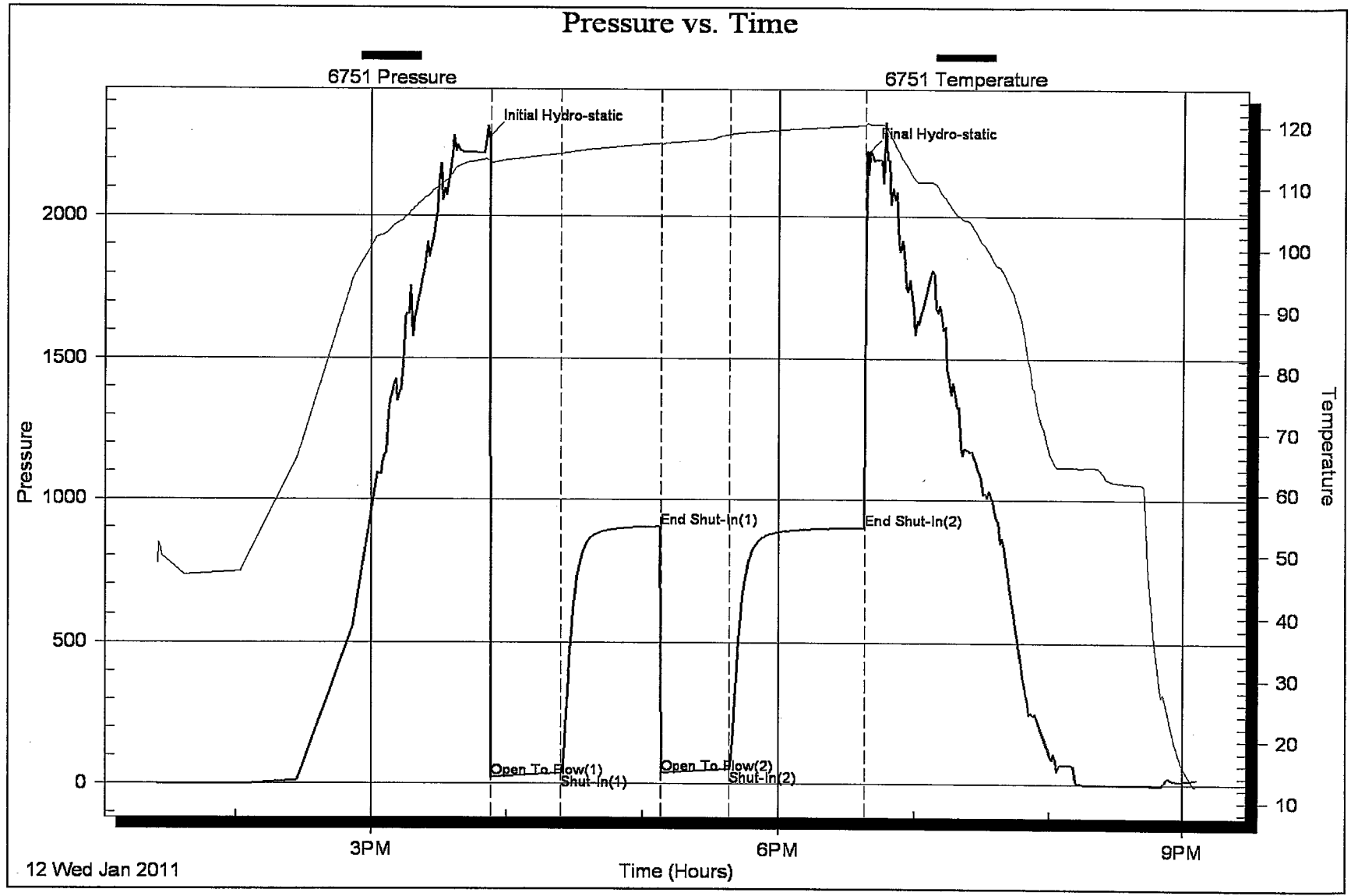
Crede Petroleum Corp.  
1801 Broadw ay # 900  
Denver, CO 80202  
ATTN: Bruce Ard

Hemmerl #1-30  
**30-10-31 Thomas, KS**  
Job Ticket: 040632      DST#: 4  
Test Start: 2011.01.12 @ 13:25:00

**Tool Information**

Drill Pipe:	Length: 4319.00 ft	Diameter: 3.80 inches	Volume: 60.58 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
Drill Pipe Above KB:	15.50 ft	Total Volume: 61.17 bbl		Tool Chased      ft
Depth to Top Packer:	4451.00 ft	String Weight: Initial 52000.00 lb		
Depth to Bottom Packer:	ft	Final 52000.00 lb		
Interval between Packers:	99.00 ft			
Tool Length:	126.50 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			4424.50	
Shut In Tool	5.00			4429.50	
Hydraulic tool	5.00			4434.50	
Jars	5.00			4439.50	
Safety Joint	2.50			4442.00	
Packer	5.00			4447.00	27.50
					Bottom Of Top Packer
Packer	4.00			4451.00	
Stubb	1.00			4452.00	
Perforations	1.00			4453.00	
Recorder	0.00	8018	Inside	4453.00	
Recorder	0.00	6751	Outside	4453.00	
Perforations	30.00			4483.00	
Change Over Sub	1.00			4484.00	
Drill Pipe	62.00			4546.00	
Change Over Sub	1.00			4547.00	
Bullnose	3.00			4550.00	99.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>126.50</b>				



12 Wed Jan 2011

**JAMES C. MUSGROVE**

Petroleum Geologist  
P. O. Box 215  
212 Main St.  
Clatfin, KS 67525

FEB - 3 2011

Office (620) 588-4250

Res. Clatfin (620) 587-3444

Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 1

**Dry and Abandoned**

**Contractor:** WW Drilling Company (Rig #4)

**Commenced:** January 3, 2011

**Completed:** January 13, 2011

**Elevation:** 2971' K.B.; 2969' D.F.; 2966' G.L.

**Casing Program:** Surface; 8 5/8" @ 247'  
Production; none.

**Samples:** Samples saved and examined 3700' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 3700' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Drill Stem Tests:** There were four (4) Drill Stem Tests ran by Trilobite Testing Company.

**Electric Log:** By Log Tech; Dual Induction, Dual Compensated Porosity Log,  
Micro Log and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	2506	+465
Base Anhydrite	2534	+437
Topoka	3734	-763
Heebner	3955	-984
Toronto	3981	-1010
Lansing	3997	-1026
Stark Shale	4211	-1240
Base Kansas City	4273	-1302
Marmaton	4303	-1332
Pawnee	4398	-1427
Ft Scott	4434	-1463
Cherokee Shale	4459	-1488
Johnson Zone	4536	-1565
Mississippian	4588	-1627
Rotary Total Depth	4650	-1679
Log Total Depth	4655	-1684

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

There were several zones of well-developed porosity encountered in the drilling of the Topoka Section but no shows of oil and/or gas was noted

**TORONTO SECTION**

3982-3990' Limestone; white, fine and medium crystalline, chalky, few fossiliferous, black stain, no show of free oil and no odor in fresh samples.

**LANSING SECTION**

3997-4004' Limestone; white/cream, fine to medium crystalline, fossiliferous in part, scattered porosity, trace poor questionable stain, no show of free oil and no odor in fresh samples.

4008-4014' Limestone; gray, medium crystalline, fossiliferous, chalky, poor stain, one (1) piece trace of free oil and no odor in fresh samples.

4030-4036' Limestone; white, finely crystalline, fossiliferous in part, chalky, no shows.

4041-4050' Limestone; gray, chalky, no shows.

4065-4076' Limestone; tan, fine to medium crystalline, oolitic in part, chalky, scattered porosity, brown and dark brown stain, show of free oil and no odor in fresh samples.

**Drill Stem Test #1 4051-4082'**

**Times: 30-45-45-60**

**Blow: Weak to fair (7 ½ inches)**

**Recovery: 235' muddy water, spots of oil in tool**

<b>Pressures:</b>	<b>ISIP</b>	<b>1211</b>	<b>psi</b>
	<b>FSIP</b>	<b>1208</b>	<b>psi</b>
	<b>IFP</b>	<b>17-82</b>	<b>psi</b>
	<b>FFP</b>	<b>82-127</b>	<b>psi</b>
	<b>HSH</b>	<b>1988-1958</b>	<b>psi</b>

4095-4110' Limestone; white, chalky, poor visible porosity, no shows.

4110-4120' Limestone; as above.

4133-4139' Limestone; gray, chalky, few fossiliferous, poor visible porosity, plus gray and white cherty, questionable dead stain.

4146-4160' Limestone; cream, finely crystalline, slightly fossiliferous, poor porosity, questionable brown edge staining, no show of free oil and no odor in fresh samples.

4197-4204' Limestone; white, chalky, few oomoldic, scattered porosity, brown and black stain, trace of free oil and odor sample broken.

4223-4236' Limestone; white, finely crystalline, fossiliferous, chalky, pin point porosity, few scattered vuggy type porosity, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #2 4115-4246'

Times: 30-45-45-60

Blow: Strong

Recovery: 78' mud  
565' muddy water

Pressures: ISIP 1145 psi  
FSIP 1139 psi  
IFP 31-201 psi  
FFP 208-314 psi  
HSH 2015-1987 psi

4257-4264' Limestone; gray, chalky, fossiliferous in part, poor visible porosity, trace poor stain, and faint odor in fresh samples.

MARMATON SECTION

4303-4310' Limestone; gray, finely crystalline, chalky, slightly fossiliferous, few with scattered pin point porosity, trace stain, trace of free oil and no odor in fresh samples.

4336-4346' Limestone; cream, gray, yellow, granular, few fossiliferous, poor visible porosity, no show.

4350-4364' Limestone; gray, chalky, fossiliferous, dense plus white chalk.

4370-4390' Limestone; gray, chalky, dense, trace dark tarry stain, no show of free oil and no odor in fresh samples.

PAWNEE SECTION

4400-4410' Limestone; white, cream, finely crystalline, fossiliferous, poor scattered pin point porosity, scattered light stain, trace of free oil, and gassy odor in fresh samples.

4420-4426' Limestone; gray, chalky, fossiliferous, poor porosity, no shows.

FT SCOTT SECTION

4443-4450' Limestone; white, gray, finely crystalline, fossiliferous, poor visible porosity, brown stain, trace of free oil and good odor in fresh samples.

Drill Stem Test #3 4384-4448'

Times: 30-45-30-60

Blow: Strong

Recovery: 310' oil specked mud  
120' muddy water

Pressures: ISIP 931 psi  
FSIP 916 psi  
IFP 31-147 psi  
FFP 153-212 psi  
HSH 2193-2184 psi

CHEROKEE SECTION

4470-4482' Limestone; gray, slightly dolomitic, fossiliferous in part, poor visible porosity, questionable fractured porosity, trace brown stain, trace of free oil and gas and faint odor in fresh samples.

4497-4510' Limestone; gray, chalky, fossiliferous, slightly cherty, few with scattered brown and black stain, no free oil and no odor in fresh samples.

4520-4530' Limestone; gray, chalky, no shows.

JOHNSON SECTION

4537-4550' Limestone; white, gray, cream, chalky, slightly fossiliferous, poor pin point and fine vuggy type porosity, brown stain, show of free oil and odor in fresh samples.

Drill Stem Test #4 4451-4550'

Times: 30-45-30-60

Blow: Weak

Recovery: 60' mud

Pressures: ISIP 902 psi  
FSIP 899 psi  
IFP 20-35 psi  
FFP 38-51 psi  
HSH 2281-2221 psi

MISSISSIPPIAN SECTION

4588-4596' Limestone; gray, white, yellow, granular, chalky, no shows.

4596-4620' Dolomite; brown, finely crystalline, sucrosic, slightly cherty, no shows.

4620-4640' Dolomite; white, opaque, plus abundant translucent, opaque chert.

4640-4650' Dolomite; gray, white, cherty and chert as above, no shows.


Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 5

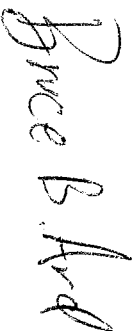
Rotary Total Depth	4650 (-1679)
Log Total Depth	4655 (-1684)

**Recommendations**

The Hemmet #1-30 was plugged and abandoned at the Rotary Total depth 4650 (-1679).

Respectfully submitted;

  
James C. Musgrove and  
Bruce B. Ard,  
Petroleum Geologists





# ALLIED CEMENTING CO., LLC.

Federal Tax I.D. # 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
0 Adelaide S

DATE <u>1-13-14</u>	SEC <u>30</u>	TWP. <u>10 S</u>	RANGE <u>31 W</u>	CALLED OUT	ON LOCATION <u>9:00pm</u>	JOB START <u>2:30</u>	JOB FINISH <u>7:00</u>
LEASE <u>1 Leannwest</u>	WELL # <u>1-30</u>	LOCATION <u>OWLEY 16.2 N. 1 W.</u>		COUNTY <u>THOMAS</u>	STATE <u>KS</u>		
OLD OR NEW (Circle one) <u>NEW</u>				LOCATION <u>1125 6th</u>			

CONTRACTOR U-CO #4 OWNER \_\_\_\_\_

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. \_\_\_\_\_

CASING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 4 1/2 DEPTH 2510'

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

DISPLACEMENT \_\_\_\_\_

EQUIPMENT

PUMP TRUCK CEMENTER FEZZY

# 421 HELPER DANNON

BULK TRUCK \_\_\_\_\_

# 396 DRIVER JERRY

BULK TRUCK \_\_\_\_\_

# \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS: 2510' @ 2510'

100 SKS @ 1670'

40 SKS @ 290'

10 SKS @ 40' w/ plug

50 SKS @ PH

Sold complete @ 415 AM

THANKS & 222

CHARGE TO: Credo Petroleum

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To Allied Cementing Co., LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME PON GUY

SIGNATURE Pon Guy

CEMENT

AMOUNT ORDERED 205 SKS 60/40

490 gal 114# 51# asc

COMMON	<u>123</u>	@ <u>15</u>	<u>45</u>	<u>1900</u>	<u>35</u>
POZMIX	<u>82</u>	@ <u>8.00</u>	<u>656.00</u>		
GEL	<u>7</u>	@ <u>20.80</u>	<u>145.60</u>		
CHLORIDE		@			
ASC		@			
<u>51# asc</u>		@ <u>2.50</u>	<u>127.50</u>		

HANDLING	<u>214</u>	@ <u>2.40</u>	<u>513.60</u>
MILEAGE	<u>210 SKY mile</u>	@ <u>3.12</u>	<u>655.20</u>
TOTAL			<u>3655.00</u>

SERVICE

DEPTH OF JOB	<u>2510</u>		
PUMP TRUCK CHARGE		@	<u>1017.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>5</u>	@ <u>7.00</u>	<u>35.00</u>
MANIFOLD		@	
FEES		@	
TOTAL			<u>1052.00</u>

PLUG & FLOAT EQUIPMENT

<u>1-8 5/8 plug</u>	@	<u>40.00</u>
	@	
	@	
	@	
TOTAL		<u>40.00</u>

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS



**JAMES C. MUSGROVE**

Petroleum Geologist  
P.O. Box 215  
212 Main St.  
Clatfin, KS 67525

Office (620) 588-4250

Res. Clatfin (620) 587-3444

Credo Petroleum Corporation  
Hemmett #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 1

**Dry and Abandoned**

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**Commenced:** January 3, 2011

**Completed:** January 13, 2011

**Elevation:** 2971' K.B.; 2969' D.F.; 2966' G.L.

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**Samples:** Samples saved and examined 3700' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 3700' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Drill Stem Tests:** There were four (4) Drill Stem Tests ran by Trilobite Testing Company.

**Electric Log:** By Log Tech; Dual Induction, Dual Compensated Porosity Log, Micro Log and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	2506	+465
Base Anhydrite	2534	+437
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Heebner	3955	-984
Toronto	3981	-1010
Lansing	3997	-1026
Stark Shale	4211	-1240
Base Kansas City	4273	-1302
Marmaton	4303	-1332
Pawnee	4398	-1427
Ft Scott	4434	-1463
Cherokee Shale	4459	-1488
Johnson Zone	4536	-1565
Mississippian	4588	-1627
Rotary Total Depth	4650	-1679
Log Total Depth	4655	-1684

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

There were several zones of well-developed porosity encountered in the drilling of the Topeka Section but no shows of oil and/or gas was noted

**TORONTO SECTION**

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4041-4050' Limestone; gray, chalky, no shows.

4065-4076' Limestone; tan, fine to medium crystalline, oolitic in part, chalky, scattered porosity, brown and dark brown stain, show of free oil and no odor in fresh samples.

**Drill Stem Test #1** **4051-4082'**

**Times:** 30-45-45-60

**Blow:** Weak to fair (7 ½ inches)

**Recovery:** 235' muddy water, spots of oil in tool

<b>Pressures:</b>	<b>ISIP</b>	<b>1211</b>	<b>psi</b>
	<b>FSIP</b>	<b>1208</b>	<b>psi</b>
	<b>IFP</b>	<b>17-82</b>	<b>psi</b>
	<b>FFP</b>	<b>82-127</b>	<b>psi</b>
	<b>HSH</b>	<b>1988-1958</b>	<b>psi</b>

4095-4110' Limestone; white, chalky, poor visible porosity, no shows.

4110-4120' Limestone; as above.

4133-4139' Limestone; gray, chalky, few fossiliferous, poor visible porosity, plus gray and white cherty, questionable dead stain.

4146-4160' Limestone; cream, finely crystalline, slightly fossiliferous, poor porosity, questionable brown edge staining, no show of free oil and no odor in fresh samples.

4197-4204' Limestone; white, chalky, few oomoldic, scattered porosity, brown and black stain, trace of free oil and odor sample broken.

4223-4236' Limestone; white, finely crystalline, fossiliferous, chalky, pin point porosity, few scattered vuggy type porosity, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #2 4115-4246'

Times: 30-45-45-60

Blow: Strong

Recovery: 78' mud  
565' muddy water

Pressures: ISIP 1145 psi  
FSIP 1139 psi  
IFP 31-201 psi  
FFP 208-314 psi  
HSH 2015-1987 psi

4257-4264' Limestone; gray, chalky, fossiliferous in part, poor visible porosity, trace poor stain, and faint odor in fresh samples.

MARMATON SECTION

4303-4310' Limestone; gray, finely crystalline, chalky, slightly fossiliferous, few with scattered pin point porosity, trace stain, trace of free oil and no odor in fresh samples.

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FT SCOTT SECTION

4443-4450' Limestone; white, gray, finely crystalline, fossiliferous, poor visible porosity, brown stain, trace of free oil and good odor in fresh samples.

Drill Stem Test #3 4384-4448'

Times: 30-45-30-60

Blow: Strong

Recovery: 310' oil specked mud  
120' muddy water

Pressures: ISIP 931 psi  
FSIP 916 psi  
IFP 31-147 psi  
FFP 153-212 psi  
HSH 2193-2184 psi

CHEROKEE SECTION

4470-4482' Limestone; gray, slightly dolomitic, fossiliferous in part, poor visible porosity, questionable fractured porosity, trace brown stain, trace of free oil and gas and faint odor in fresh samples.

4497-4510' Limestone; gray, chalky, fossiliferous, slightly cherty, few with scattered brown and black stain, no free oil and no odor in fresh samples.

4520-4530' Limestone; gray, chalky, no shows.

JOHNSON SECTION

4537-4550' Limestone; white, gray, cream, chalky, slightly fossiliferous, poor pin point and fine vuggy type porosity, brown stain, show of free oil and odor in fresh samples.

Drill Stem Test #4 4451-4550'

Times: 30-45-30-60

Blow: Weak

Recovery: 60' mud

Pressures: ISIP 902 psi  
FSIP 899 psi  
IFP 20-35 psi  
FFP 38-51 psi  
HSH 2281-2221 psi

MISSISSIPPIAN SECTION

4588-4596' Limestone; gray, white, yellow, granular, chalky, no shows.

4596-4620' Dolomite; brown, finely crystalline, sucrosic, slightly cherty, no shows.

4620-4640' Dolomite; white, opaque, plus abundant translucent, opaque chert.

4640-4650' Dolomite; gray, white, cherty and chert as above, no shows.

Credo Petroleum Corporation  
Hemmett #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 5

Rotary Total Depth	4650 (-1679)
Log Total Depth	4655 (-1684)

**Recommendations**

The Hemmett #1-30 was plugged and abandoned at the Rotary Total depth 4650 (-1679).

Respectfully submitted;

*James C. Musgrove*  
James C. Musgrove and  
Bruce B. Ard,  
Petroleum Geologists

*Bruce B. Ard*

*Ard Consulting Services*  
*Bruce B. Ard*

Scale 1:240 (5"=100') Imperial

Well Name: Hemmert 1-30  
Location: Section 30- T10S - R31W Thomas County, Kansas  
Licence Number: API #15-193-20780-0000  
Spud Date: 01-03-2011  
Surface Coordinates: 410' FSL & 2000' FWL  
Region: Wildcat  
Drilling Completed: 01-13-2011

Bottom Hole  
Coordinates: 2966' K.B. Elevation (ft): 2971'  
Ground Elevation (ft): 3700 To: RTD Total Depth (ft): 4650  
Logged Interval (ft): 3700  
Formation: Mississippian  
Type of Drilling Fluid: Chemical Gel/Polymer Fresh Water -Based

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: Credo Petroleum Corporation  
Address: 1801 Broadway, Suite 900  
Denver, Co. 80202

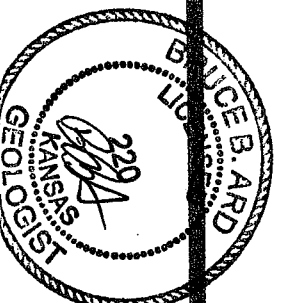
**GEOLOGIST**

Name: Bruce B. Ard, KLG #220  
Company: Ard Consulting Services - A.C.S.  
Address: 6000 10th Street  
Great Bend, Ks. 67530

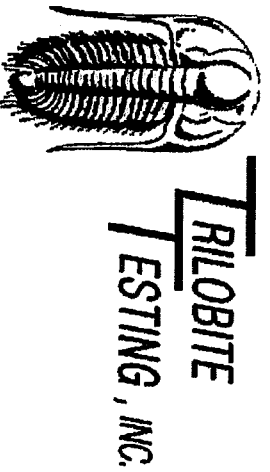
**REMARKS**

After review of the Open Hole Logs, DST results & Geological Log; it was recommended to and agreed upon by all interested parties to plug and abandon the Hemmert 1-30 test as a dry hole  
The samples will be delivered, processed and available for review at the KGS Sample Library located in Wichita, Kansas.

Respectfully Submitted, Bruce B. Ard  
Consulting Geologist - KLG #220







## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.09 @ 03:43:00

End Date: 2011.01.09 @ 11:20:30

Job Ticket #: 040629      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

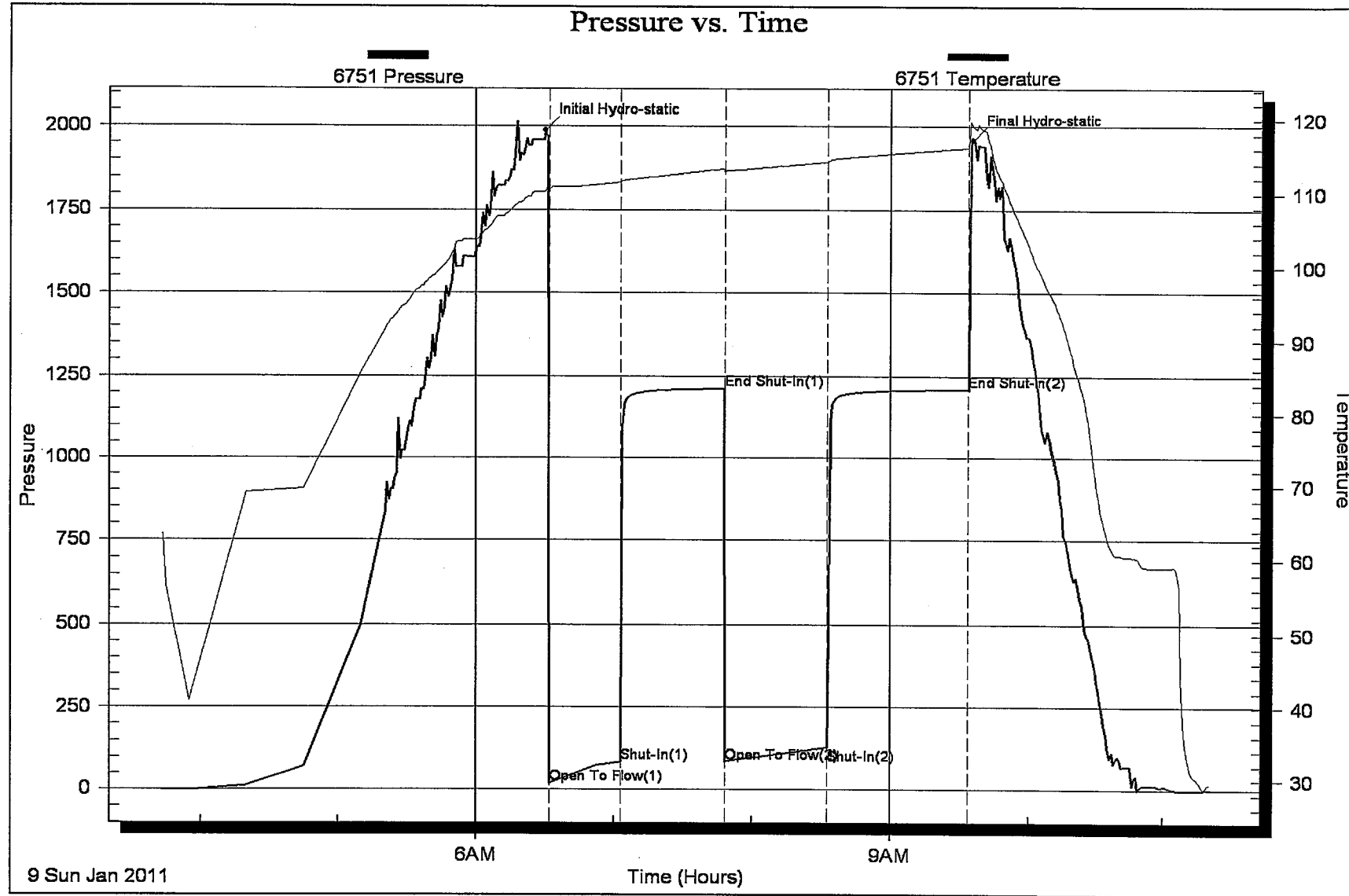
Crede Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

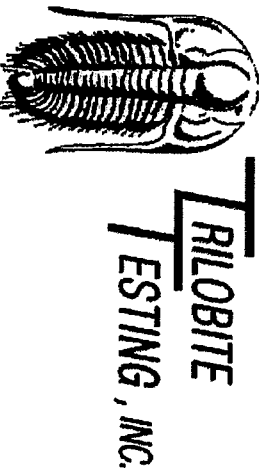
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040629 DST#: 1  
Test Start: 2011.01.09 @ 03:43:00

**Tool Information**

Drill Pipe: Length: 3906.00 ft Diameter: 3.80 inches Volume: 54.79 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: 124.00 ft Diameter: 2.25 inches Volume: 0.61 bbl Weight to Pull Loose: 58000.00 lb  
 Drill Pipe Above KB: 6.50 ft Total Volume: 55.40 bbl Tool Chased 0.00 ft  
 Depth to Top Packer: 4051.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 48000.00 lb  
 Interval between Packers: 31.00 ft  
 Tool Length: 58.50 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			4024.50	
Shut In Tool	5.00			4029.50	
Hydraulic tool	5.00			4034.50	
Jars	5.00			4039.50	
Safety Joint	2.50			4042.00	
Packer	5.00			4047.00	27.50
Packer	4.00			4051.00	Bottom Of Top Packer
Stubb	1.00			4052.00	
Perforations	2.00			4054.00	
Recorder	0.00	8018	Inside	4054.00	
Recorder	0.00	6751	Outside	4054.00	
Perforations	25.00			4079.00	
Bullnose	3.00			4082.00	31.00
<b>Total Tool Length:</b>				<b>58.50</b>	<b>Bottom Packers &amp; Anchor</b>





## DRILL STEM TEST REPORT

Prepared For: **Crede Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.10 @ 04:59:00

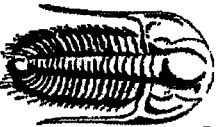
End Date: 2011.01.10 @ 13:36:30

Job Ticket #: 040630      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

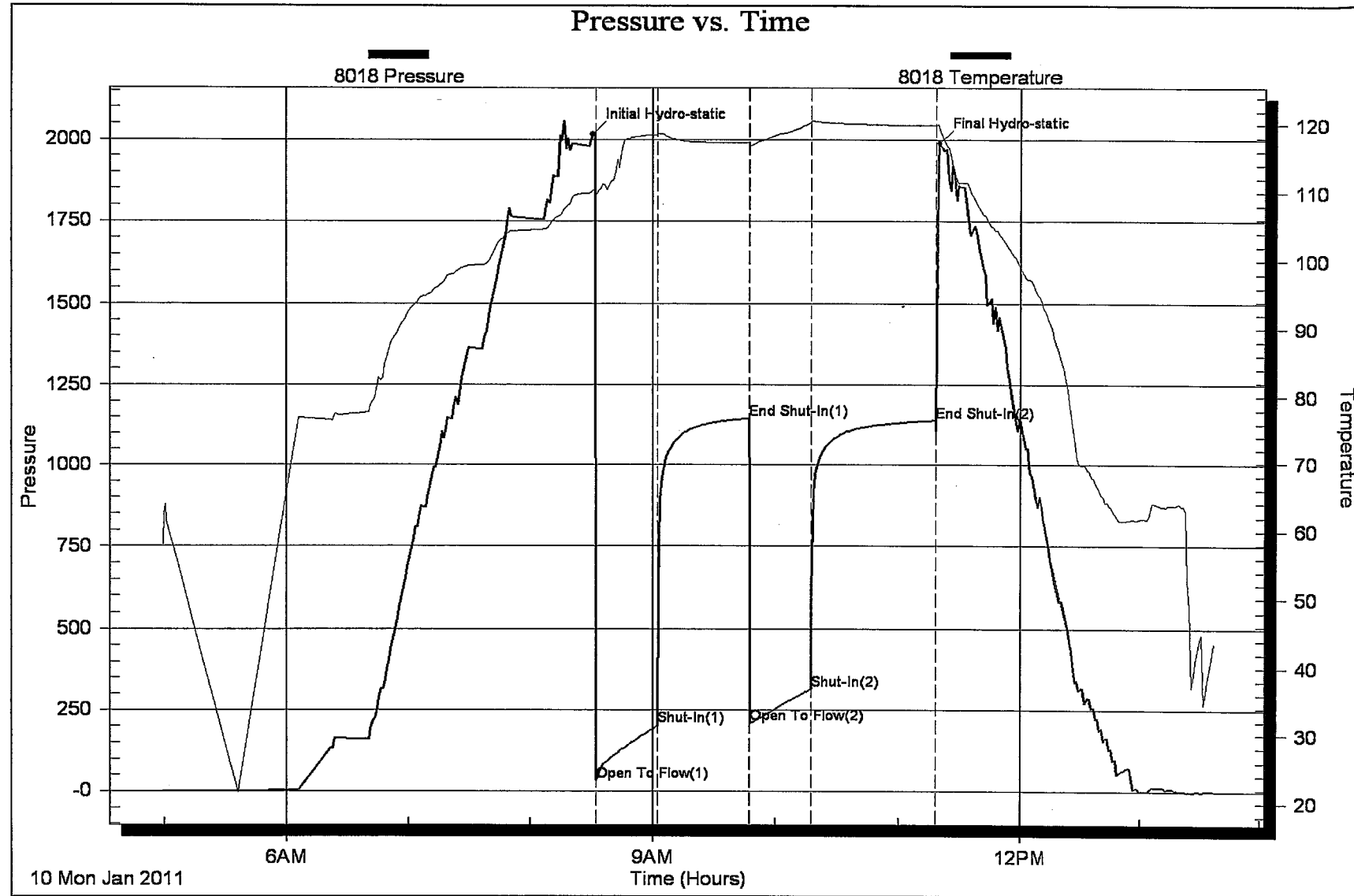
Crede Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

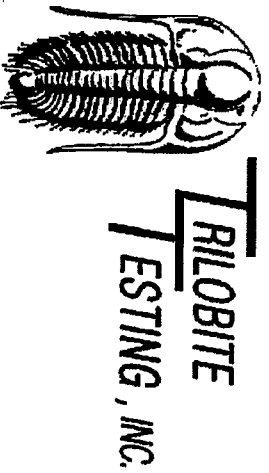
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040630 DST#: 2  
Test Start: 2011.01.10 @ 04:59:00

**Tool Information**

Drill Pipe: Length: 3969.00 ft Diameter: 3.80 inches Volume: 55.67 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: 124.00 ft Diameter: 2.25 inches Volume: 0.61 bbl Weight to Pull Loose: 60000.00 lb  
 Drill Pipe Above KB: 5.50 ft Total Volume: 56.28 bbl Tool Chased 0.00 ft  
 Depth to Top Packer: 4115.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 52000.00 lb  
 Interval between Packers: 131.00 ft  
 Tool Length: 158.50 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			4088.50	
Shut In Tool	5.00			4093.50	
Hydraulic tool	5.00			4098.50	
Jars	5.00			4103.50	
Safety Joint	2.50			4106.00	
Packer	5.00			4111.00	27.50
					Bottom Of Top Packer
Packer	4.00			4115.00	
Stubb	1.00			4116.00	
Perforations	3.00			4119.00	
Recorder	0.00	8018	Inside	4119.00	
Recorder	0.00	6751	Outside	4119.00	
Perforations	28.00			4147.00	
Change Over Sub	1.00			4148.00	
Drill Pipe	94.00			4242.00	
Change Over Sub	1.00			4243.00	
Bullnose	3.00			4246.00	131.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>158.50</b>				





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Aird

**30-10-31 Thomas, KS**

**Hemmert #1-30**

Start Date: 2011.01.11 @ 13:28:00

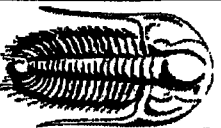
End Date: 2011.01.11 @ 22:28:00

Job Ticket #: 040631      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Credo Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

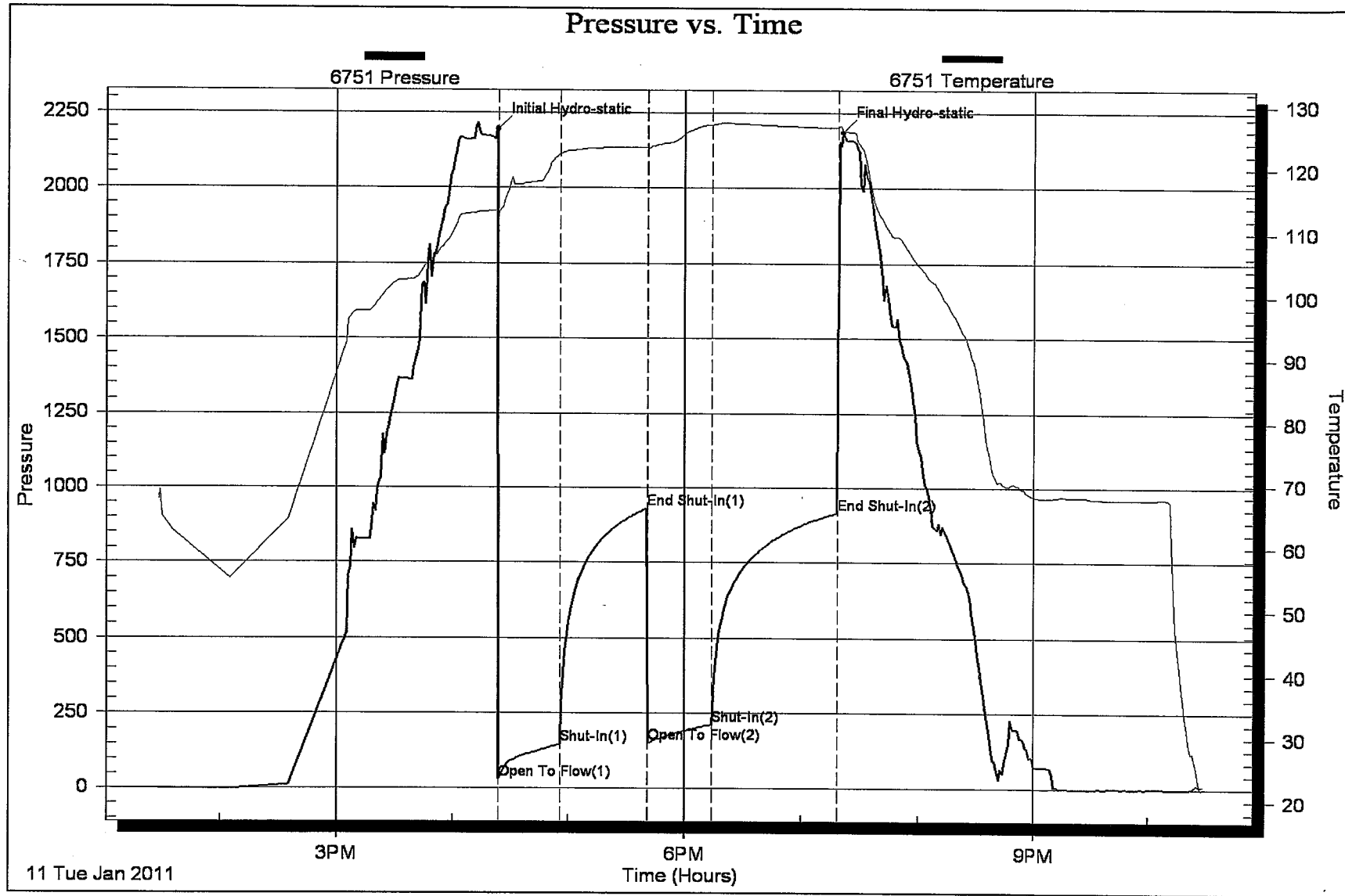
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040631      DST#: 3  
Test Start: 2011.01.11 @ 13:28:00

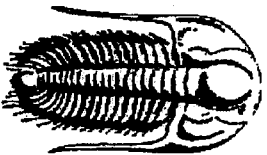
**Tool Information**

Drill Pipe: Length: 4252.00 ft Diameter: 3.80 inches Volume: 59.64 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: 120.00 ft Diameter: 2.25 inches Volume: 0.59 bbl Weight to Pull Loose: 56000.00 lb  
 Drill Pipe Above KB: 15.50 ft Total Volume: 60.23 bbl Tool Chased ft  
 Depth to Top Packer: 4384.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 50000.00 lb  
 Interval between Packers: 64.00 ft  
 Tool Length: 91.50 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			4357.50	
Shut In Tool	5.00			4362.50	
Hydraulic tool	5.00			4367.50	
Jars	5.00			4372.50	
Safety Joint	2.50			4375.00	
Packer	5.00			4380.00	27.50
Packer	4.00			4384.00	Bottom Of Top Packer
Stubb	1.00			4385.00	
Perforations	2.00			4387.00	
Recorder	0.00	8018	Inside	4387.00	
Recorder	0.00	6751	Outside	4387.00	
Perforations	24.00			4411.00	
Change Over Sub	1.00			4412.00	
Drill Pipe	32.00			4444.00	
Change Over Sub	1.00			4445.00	
Bullnose	3.00			4448.00	64.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>91.50</b>				







**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.12 @ 13:25:00

End Date: 2011.01.12 @ 21:06:00

Job Ticket #: 040632      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

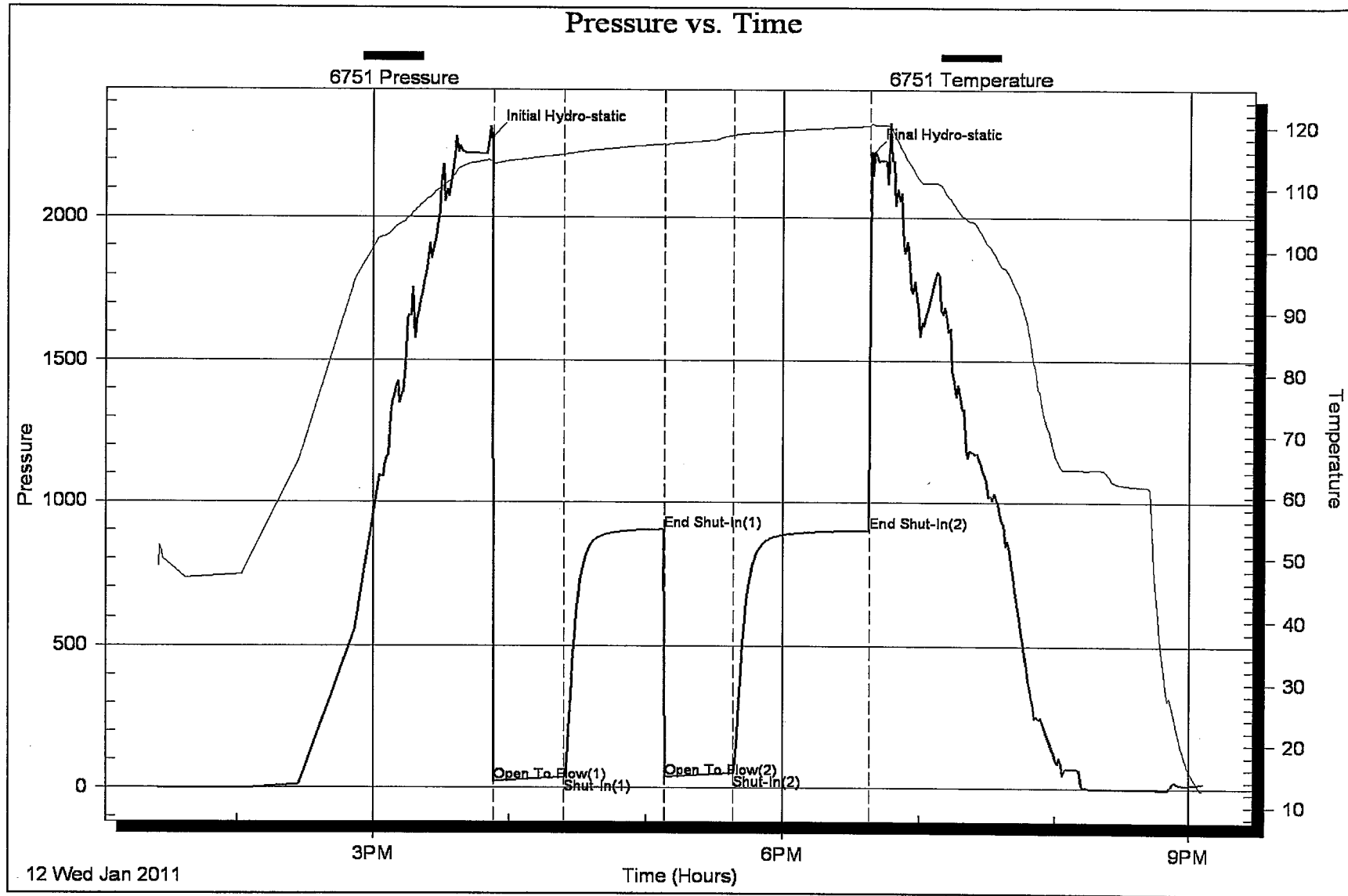
Crede Petroleum Corp.  
1801 Broadw ay # 900  
Denver, CO 80202  
ATTN: Bruce Avd

Hemmerl #1-30  
**30-10-31 Thomas, KS**  
Job Ticket: 040632      DST#: 4  
Test Start: 2011.01.12 @ 13:25:00

**Tool Information**

Drill Pipe: Length: 4319.00 ft Diameter: 3.80 inches Volume: 60.58 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: 120.00 ft Diameter: 2.25 inches Volume: 0.59 bbl Weight to Pull Loose: 60000.00 lb  
 Drill Pipe Above KB: 15.50 ft Total Volume: 61.17 bbl Tool Chased ft  
 Depth to Top Packer: 4451.00 ft String Weight: Initial 52000.00 lb  
 Depth to Bottom Packer: ft Final 52000.00 lb  
 Interval between Packers: 99.00 ft  
 Tool Length: 126.50 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			4424.50	
Shut In Tool	5.00			4429.50	
Hydraulic tool	5.00			4434.50	
Jars	5.00			4439.50	
Safety Joint	2.50			4442.00	
Packer	5.00			4447.00	27.50 Bottom Of Top Packer
Packer	4.00			4451.00	
Stubb	1.00			4452.00	
Perforations	1.00			4453.00	
Recorder	0.00	8018	Inside	4453.00	
Recorder	0.00	6751	Outside	4453.00	
Perforations	30.00			4483.00	
Change Over Sub	1.00			4484.00	
Drill Pipe	62.00			4546.00	
Change Over Sub	1.00			4547.00	
Bullnose	3.00			4550.00	99.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>126.50</b>				



**JAMES C. MUSGROVE**

Petroleum Geologist  
P. O. Box 215  
212 Main St.  
Clatfin, KS 67525

FEB - 3 2011

Office (620) 588-4250

Res. Clatfin (620) 587-3444

Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 1

**Dry and Abandoned**

**Contractor:** WW Drilling Company (Rig #4)

**Commenced:** January 3, 2011

**Completed:** January 13, 2011

**Elevation:** 2971' K.B.; 2969' D.F.; 2966' G.L.

**Casing Program:** Surface; 8 5/8" @ 247'  
Production; none.

**Samples:** Samples saved and examined 3700' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 3700' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Drill Stem Tests:** There were four (4) Drill Stem Tests ran by Trilobite Testing Company.

**Electric Log:** By Log Tech; Dual Induction, Dual Compensated Porosity Log,  
Micro Log and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	2506	+465
Base Anhydrite	2534	+437
Topoka	3734	-763
Heebner	3955	-984
Toronto	3981	-1010
Lansing	3997	-1026
Stark Shale	4211	-1240
Base Kansas City	4273	-1302
Marmaton	4303	-1332
Pawnee	4398	-1427
Ft Scott	4434	-1463
Cherokee Shale	4459	-1488
Johnson Zone	4536	-1565
Mississippian	4588	-1627
Rotary Total Depth	4650	-1679
Log Total Depth	4655	-1684

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

There were several zones of well-developed porosity encountered in the drilling of the Topoka Section but no shows of oil and/or gas was noted

**TORONTO SECTION**

3982-3990' Limestone; white, fine and medium crystalline, chalky, few fossiliferous, black stain, no show of free oil and no odor in fresh samples.

**LANSING SECTION**

3997-4004' Limestone; white/cream, fine to medium crystalline, fossiliferous in part, scattered porosity, trace poor questionable stain, no show of free oil and no odor in fresh samples.

4008-4014' Limestone; gray, medium crystalline, fossiliferous, chalky, poor stain, one (1) piece trace of free oil and no odor in fresh samples.

4030-4036' Limestone; white, finely crystalline, fossiliferous in part, chalky, no shows.

4041-4050' Limestone; gray, chalky, no shows.

4065-4076' Limestone; tan, fine to medium crystalline, oolitic in part, chalky, scattered porosity, brown and dark brown stain, show of free oil and no odor in fresh samples.

**Drill Stem Test #1 4051-4082'**

**Times: 30-45-45-60**

**Blow: Weak to fair (7 ½ inches)**

**Recovery: 235' muddy water, spots of oil in tool**

<b>Pressures:</b>	<b>ISIP</b>	<b>1211</b>	<b>psi</b>
	<b>FSIP</b>	<b>1208</b>	<b>psi</b>
	<b>IFP</b>	<b>17-82</b>	<b>psi</b>
	<b>FFP</b>	<b>82-127</b>	<b>psi</b>
	<b>HSH</b>	<b>1988-1958</b>	<b>psi</b>

4095-4110' Limestone; white, chalky, poor visible porosity, no shows.

4110-4120' Limestone; as above.

4133-4139' Limestone; gray, chalky, few fossiliferous, poor visible porosity, plus gray and white cherty, questionable dead stain.

4146-4160' Limestone; cream, finely crystalline, slightly fossiliferous, poor porosity, questionable brown edge staining, no show of free oil and no odor in fresh samples.

4197-4204' Limestone; white, chalky, few oomoldic, scattered porosity, brown and black stain, trace of free oil and odor sample broken.

4223-4236' Limestone; white, finely crystalline, fossiliferous, chalky, pin point porosity, few scattered vuggy type porosity, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #2 4115-4246'

Times: 30-45-45-60

Blow: Strong

Recovery: 78' mud  
565' muddy water

Pressures: ISIP 1145 psi  
FSIP 1139 psi  
IFP 31-201 psi  
FFP 208-314 psi  
HSH 2015-1987 psi

4257-4264' Limestone; gray, chalky, fossiliferous in part, poor visible porosity, trace poor stain, and faint odor in fresh samples.

MARMATON SECTION

4303-4310' Limestone; gray, finely crystalline, chalky, slightly fossiliferous, few with scattered pin point porosity, trace stain, trace of free oil and no odor in fresh samples.

4336-4346' Limestone; cream, gray, yellow, granular, few fossiliferous, poor visible porosity, no show.

4350-4364' Limestone; gray, chalky, fossiliferous, dense plus white chalk.

4370-4390' Limestone; gray, chalky, dense, trace dark tarry stain, no show of free oil and no odor in fresh samples.

PAWNEE SECTION

4400-4410' Limestone; white, cream, finely crystalline, fossiliferous, poor scattered pin point porosity, scattered light stain, trace of free oil, and gassy odor in fresh samples.

4420-4426' Limestone; gray, chalky, fossiliferous, poor porosity, no shows.

FT SCOTT SECTION

4443-4450' Limestone; white, gray, finely crystalline, fossiliferous, poor visible porosity, brown stain, trace of free oil and good odor in fresh samples.

Drill Stem Test #3 4384-4448'

Times: 30-45-30-60

Blow: Strong

Recovery: 310' oil specked mud  
120' muddy water

Pressures: ISIP 931 psi  
FSIP 916 psi  
IFP 31-147 psi  
FFP 153-212 psi  
HSH 2193-2184 psi

CHEROKEE SECTION

4470-4482' Limestone; gray, slightly dolomitic, fossiliferous in part, poor visible porosity, questionable fractured porosity, trace brown stain, trace of free oil and gas and faint odor in fresh samples.

4497-4510' Limestone; gray, chalky, fossiliferous, slightly cherty, few with scattered brown and black stain, no free oil and no odor in fresh samples.

4520-4530' Limestone; gray, chalky, no shows.

JOHNSON SECTION

4537-4550' Limestone; white, gray, cream, chalky, slightly fossiliferous, poor pin point and fine vuggy type porosity, brown stain, show of free oil and odor in fresh samples.

Drill Stem Test #4 4451-4550'

Times: 30-45-30-60

Blow: Weak

Recovery: 60' mud

Pressures: ISIP 902 psi  
FSIP 899 psi  
IFP 20-35 psi  
FFP 38-51 psi  
HSH 2281-2221 psi

MISSISSIPPIAN SECTION

4588-4596' Limestone; gray, white, yellow, granular, chalky, no shows.

4596-4620' Dolomite; brown, finely crystalline, sucrosic, slightly cherty, no shows.

4620-4640' Dolomite; white, opaque, plus abundant translucent, opaque chert.

4640-4650' Dolomite; gray, white, cherty and chert as above, no shows.



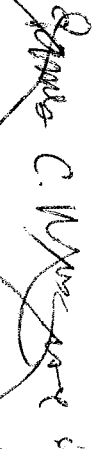
Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 5

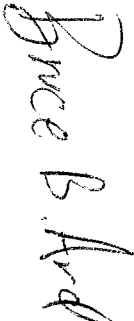
Rotary Total Depth	4650 (-1679)
Log Total Depth	4655 (-1684)

**Recommendations**

The Hemmet #1-30 was plugged and abandoned at the Rotary Total depth 4650 (-1679).

Respectfully submitted;

  
James C. Musgrove and  
Bruce B. Ard,  
Petroleum Geologists



# ALLIED CEMENTING CO., LLC.

040809

Federal Tax I.D. # 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
0 Adelaide S

DATE <u>1-13-14</u>	SEC <u>30</u>	TWP. <u>10 S</u>	RANGE <u>31 W</u>	CALLED OUT	ON LOCATION <u>9:00pm</u>	JOB START <u>2:30</u>	JOB FINISH <u>7:00</u>
LEASE <u>1 Leannward</u>	WELL # <u>1-30</u>	LOCATION <u>OWLEY 16.2 N. 1 W.</u>				COUNTY <u>THOMAS</u>	STATE <u>KS</u>
OLD OR NEW (Circle one) <u>NEW</u>				LOCATION <u>1125 6th</u>			

CONTRACTOR U-CO #4 OWNER \_\_\_\_\_

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. \_\_\_\_\_

CASING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 4 1/2 DEPTH 2510'

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

DISPLACEMENT \_\_\_\_\_

EQUIPMENT

PUMP TRUCK CEMENTER FEZZY

# 421 HELPER DANNON

BULK TRUCK \_\_\_\_\_

# 396 DRIVER JERRY

BULK TRUCK \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS: 2510' @ 2510'

100 SKS @ 1670'

40 SKS @ 290'

10 SKS @ 40' w/ plug

50 SKS @ PH

Sold complete @ 415 AM

THANKS TO YOU

CHARGE TO: Credo Petroleum

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PLUG & FLOAT EQUIPMENT

1-8 5/8 plug @ _____	40 00
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL	40 00

To Allied Cementing Co., LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME PON GUY

SIGNATURE Pon Guy

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

# ALLIED CEMENTING CO., LLC.

Federal Tax I.D.# 20-5975804      035169A

REMIT TO P.O. BOX 31  
 RUSSELL, KANSAS 67665

SERVICE POINT:  
OKLEY

DATE <u>1-3-11</u>	SEC <u>30</u>	TWP <u>10S</u>	RANGE <u>31W</u>	CALLED OUT	ON LOCATION <u>3:00 PM</u>	JOB START <u>5:30 PM</u>	JOB FINISH <u>6:00 PM</u>
LEASE <u>HENNINGER</u>	WELL # <u>1-30</u>	LOCATION <u>OKLEY 2 1/2 N-1 1/2 E-34 S</u>			COUNTY <u>Thomas</u>	STATE <u>Ks</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)							

CONTRACTOR W242 DRUG Rtg # 4 OWNER SRMS  
 TYPE OF JOB SURFACE  
 HOLE SIZE 12 1/4" T.D. 249'  
 CASING SIZE 8 7/8" DEPTH 249'  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX MINIMUM  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 15'  
 PERFS.  
 DISPLACEMENT 15 bbls, EQUIPMENT

CEMENT AMOUNT ORDERED  
225 SKS COM 38cc 289E1  
 COMMON 225 SKS @ 15 1/2 3476 25  
 POZMIX @  
 GEL 4 SKS @ 20 80 83 28  
 CHLORIDE 8 SKS @ 58 20 465 60  
 ASC @  
 @  
 @  
 @  
 @  
 @

PUMP TRUCK CEMENTER TERRY  
 # 431 HELPER DAVID  
 BULK TRUCK DRIVER TERRY  
 # 396 DRIVER  
 BULK TRUCK DRIVER

HANDLING 233 SKS @ 2 48 559 20  
 MILEAGE Minimum Charge @ 3 12 1/2 312 1/2  
 TOTAL 1896 35

REMARKS:  
Cement dead CIRK.

SERVICE

DEPTH OF JOB 249'  
 PUMP TRUCK CHARGE 1018 00  
 EXTRA FOOTAGE @  
 MILEAGE 5 ME @ 7 00 35 00  
 MANIFOLD @  
 @  
 @

TOTAL 1053 00

CHARGE TO: CRADO Petroleum  
 STREET  
 CITY STATE ZIP

PLUG & FLOAT EQUIPMENT  
1-8 7/8" SURFACE Plug 68 00  
 @  
 @  
 @  
 @

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cement and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL 68 00

PRINTED NAME D&N Guy Roland David  
 SIGNATURE Dan Guy

TOTAL CHARGES \_\_\_\_\_ IF PAID IN 30 DAYS

**JAMES C. MUSGROVE**

Petroleum Geologist  
P.O. Box 215  
212 Main St.  
Clatfin, KS 67525

Office (620) 588-4250

Res. Clatfin (620) 587-3444

Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 1

**Dry and Abandoned**

**Contractor:** WW Drilling Company (Rig #4)

**Commenced:** January 3, 2011

**Completed:** January 13, 2011

**Elevation:** 2971' K.B.; 2969' D.F.; 2966' G.L.

**Casing Program:** Surface; 8 5/8" @ 247'  
Production; none.

**Samples:** Samples saved and examined 3700' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 3700' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Drill Stem Tests:** There were four (4) Drill Stem Tests ran by Trilobite Testing Company.

**Electric Log:** By Log Tech; Dual Induction, Dual Compensated Porosity Log, Micro Log and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	2506	+465
Base Anhydrite	2534	+437
Topeka	3734	-763
Heebner	3955	-984
Toronto	3981	-1010
Lansing	3997	-1026
Stark Shale	4211	-1240
Base Kansas City	4273	-1302
Marmaton	4303	-1332
Pawnee	4398	-1427
Ft Scott	4434	-1463
Cherokee Shale	4459	-1488
Johnson Zone	4536	-1565
Mississippian	4588	-1627
Rotary Total Depth	4650	-1679
Log Total Depth	4655	-1684

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

There were several zones of well-developed porosity encountered in the drilling of the Topeka Section but no shows of oil and/or gas was noted

**TORONTO SECTION**

3982-3990' Limestone; white, fine and medium crystalline, chalky, few fossiliferous, black stain, no show of free oil and no odor in fresh samples.

**LANSING SECTION**

3997-4004' Limestone; white/cream, fine to medium crystalline, fossiliferous in part, scattered porosity, trace poor questionable stain, no show of free oil and no odor in fresh samples.

4008-4014' Limestone; gray, medium crystalline, fossiliferous, chalky, poor stain, one (1) piece trace of free oil and no odor in fresh samples.

4030-4036' Limestone; white, finely crystalline, fossiliferous in part, chalky, no shows.

4041-4050' Limestone; gray, chalky, no shows.

4065-4076' Limestone; tan, fine to medium crystalline, oolitic in part, chalky, scattered porosity, brown and dark brown stain, show of free oil and no odor in fresh samples.

**Drill Stem Test #1** **4051-4082'**

**Times:** 30-45-45-60

**Blow:** Weak to fair (7 ½ inches)

**Recovery:** 235' muddy water, spots of oil in tool

<b>Pressures:</b>	<b>ISIP</b>	<b>1211</b>	<b>psi</b>
	<b>FSIP</b>	<b>1208</b>	<b>psi</b>
	<b>IFP</b>	<b>17-82</b>	<b>psi</b>
	<b>FFP</b>	<b>82-127</b>	<b>psi</b>
	<b>HSH</b>	<b>1988-1958</b>	<b>psi</b>

4095-4110' Limestone; white, chalky, poor visible porosity, no shows.

4110-4120' Limestone; as above.

4133-4139' Limestone; gray, chalky, few fossiliferous, poor visible porosity, plus gray and white cherty, questionable dead stain.

4146-4160' Limestone; cream, finely crystalline, slightly fossiliferous, poor porosity, questionable brown edge staining, no show of free oil and no odor in fresh samples.

4197-4204' Limestone; white, chalky, few oomoldic, scattered porosity, brown and black stain, trace of free oil and odor sample broken.

4223-4236' Limestone; white, finely crystalline, fossiliferous, chalky, pin point porosity, few scattered vuggy type porosity, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #2 4115-4246'

Times: 30-45-45-60

Blow: Strong

Recovery: 78' mud  
565' muddy water

Pressures: ISIP 1145 psi  
FSIP 1139 psi  
IFP 31-201 psi  
FFP 208-314 psi  
HSH 2015-1987 psi

4257-4264' Limestone; gray, chalky, fossiliferous in part, poor visible porosity, trace poor stain, and faint odor in fresh samples.

MARMATON SECTION

4303-4310' Limestone; gray, finely crystalline, chalky, slightly fossiliferous, few with scattered pin point porosity, trace stain, trace of free oil and no odor in fresh samples.

4336-4346' Limestone; cream, gray, yellow, granular, few fossiliferous, poor visible porosity, no show.

4350-4364' Limestone; gray, chalky, fossiliferous, dense plus white chalk.

4370-4390' Limestone; gray, chalky, dense, trace dark tarry stain, no show of free oil and no odor in fresh samples.

PAWNEE SECTION

4400-4410' Limestone; white, cream, finely crystalline, fossiliferous, poor scattered pin point porosity, scattered light stain, trace of free oil, and gassy odor in fresh samples.

4420-4426' Limestone; gray, chalky, fossiliferous, poor porosity, no shows.

FT SCOTT SECTION

4443-4450' Limestone; white, gray, finely crystalline, fossiliferous, poor visible porosity, brown stain, trace of free oil and good odor in fresh samples.

Drill Stem Test #3 4384-4448'

Times: 30-45-30-60

Blow: Strong

Recovery: 310' oil specked mud  
120' muddy water

Pressures: ISIP 931 psi  
FSIP 916 psi  
IFP 31-147 psi  
FFP 153-212 psi  
HSH 2193-2184 psi

CHEROKEE SECTION

4470-4482' Limestone; gray, slightly dolomitic, fossiliferous in part, poor visible porosity, questionable fractured porosity, trace brown stain, trace of free oil and gas and faint odor in fresh samples.

4497-4510' Limestone; gray, chalky, fossiliferous, slightly cherty, few with scattered brown and black stain, no free oil and no odor in fresh samples.

4520-4530' Limestone; gray, chalky, no shows.

JOHNSON SECTION

4537-4550' Limestone; white, gray, cream, chalky, slightly fossiliferous, poor pin point and fine vuggy type porosity, brown stain, show of free oil and odor in fresh samples.

Drill Stem Test #4 4451-4550'

Times: 30-45-30-60

Blow: Weak

Recovery: 60' mud

Pressures: ISIP 902 psi  
FSIP 899 psi  
IFP 20-35 psi  
FFP 38-51 psi  
HSH 2281-2221 psi

MISSISSIPPIAN SECTION

4588-4596' Limestone; gray, white, yellow, granular, chalky, no shows.

4596-4620' Dolomite; brown, finely crystalline, sucrosic, slightly cherty, no shows.

4620-4640' Dolomite; white, opaque, plus abundant translucent, opaque chert.

4640-4650' Dolomite; gray, white, cherty and chert as above, no shows.

Credo Petroleum Corporation  
Hemmett #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 5

Rotary Total Depth	4650 (-1679)
Log Total Depth	4655 (-1684)

**Recommendations**

The Hemmett #1-30 was plugged and abandoned at the Rotary Total depth 4650 (-1679).

Respectfully submitted;

*James C. Musgrove*  
James C. Musgrove and  
Bruce B. Ard,  
Petroleum Geologists

*Bruce B. Ard*



*Ard Consulting Services*  
**Bruce B. Ard**

Scale 1:240 (5"=100') Imperial

Well Name: Hemmert 1-30  
Location: Section 30- T10S - R31W Thomas County, Kansas  
Licence Number: API #15-193-20780-0000  
Spud Date: 01-03-2011  
Surface Coordinates: 410' FSL & 2000' FWL  
Region: Wildcat  
Drilling Completed: 01-13-2011

Bottom Hole  
Coordinates: 2966' K.B. Elevation (ft): 2971'  
Ground Elevation (ft): 3700 To: RTD Total Depth (ft): 4650  
Logged Interval (ft): 3700  
Formation: Mississippian  
Type of Drilling Fluid: Chemical Gel/Polymer Fresh Water -Based

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: Credo Petroleum Corporation  
Address: 1801 Broadway, Suite 900  
Denver, Co. 80202

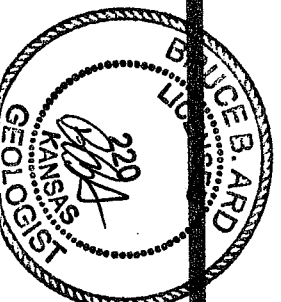
**GEOLOGIST**

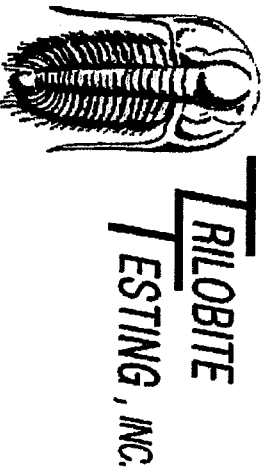
Name: Bruce B. Ard, KLG #220  
Company: Ard Consulting Services - A.C.S.  
Address: 6000 10th Street  
Great Bend, Ks. 67530

**REMARKS**

After review of the Open Hole Logs, DST results & Geological Log; it was recommended to and agreed upon by all interested parties to plug and abandon the Hemmert 1-30 test as a dry hole  
The samples will be delivered, processed and available for review at the KGS Sample Library located in Wichita, Kansas.

Respectfully Submitted, Bruce B. Ard  
Consulting Geologist - KLG #220





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmert #1-30**

Start Date: 2011.01.09 @ 03:43:00

End Date: 2011.01.09 @ 11:20:30

Job Ticket #: 040629      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

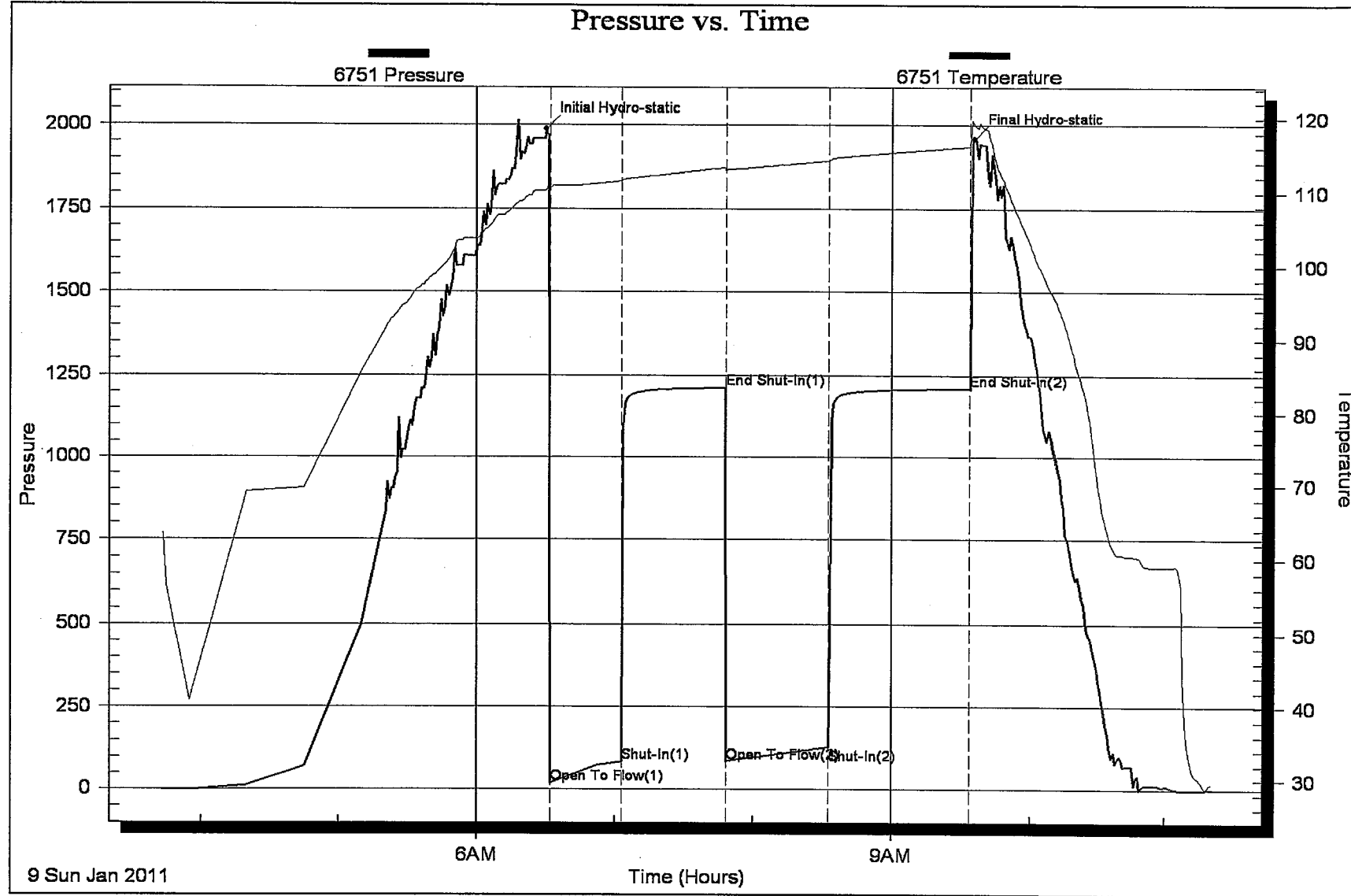
Crede Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

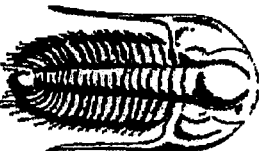
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040629 DST#: 1  
Test Start: 2011.01.09 @ 03:43:00

**Tool Information**

Drill Pipe: Length: 3906.00 ft Diameter: 3.80 inches Volume: 54.79 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: 124.00 ft Diameter: 2.25 inches Volume: 0.61 bbl Weight to Pull Loose: 58000.00 lb  
 Drill Pipe Above KB: 6.50 ft Total Volume: 55.40 bbl Tool Chased 0.00 ft  
 Depth to Top Packer: 4051.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 48000.00 lb  
 Interval between Packers: 31.00 ft  
 Tool Length: 58.50 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			4024.50	
Shut In Tool	5.00			4029.50	
Hydraulic tool	5.00			4034.50	
Jars	5.00			4039.50	
Safety Joint	2.50			4042.00	
Packer	5.00			4047.00	27.50
Packer	4.00			4051.00	Bottom Of Top Packer
Stubb	1.00			4052.00	
Perforations	2.00			4054.00	
Recorder	0.00	8018	Inside	4054.00	
Recorder	0.00	6751	Outside	4054.00	
Perforations	25.00			4079.00	
Bullnose	3.00			4082.00	31.00
<b>Total Tool Length:</b>					<b>58.50</b>
					Bottom Packers & Anchor





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Crede Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.10 @ 04:59:00

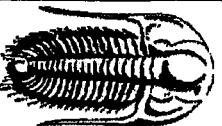
End Date: 2011.01.10 @ 13:36:30

Job Ticket #: 040630      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

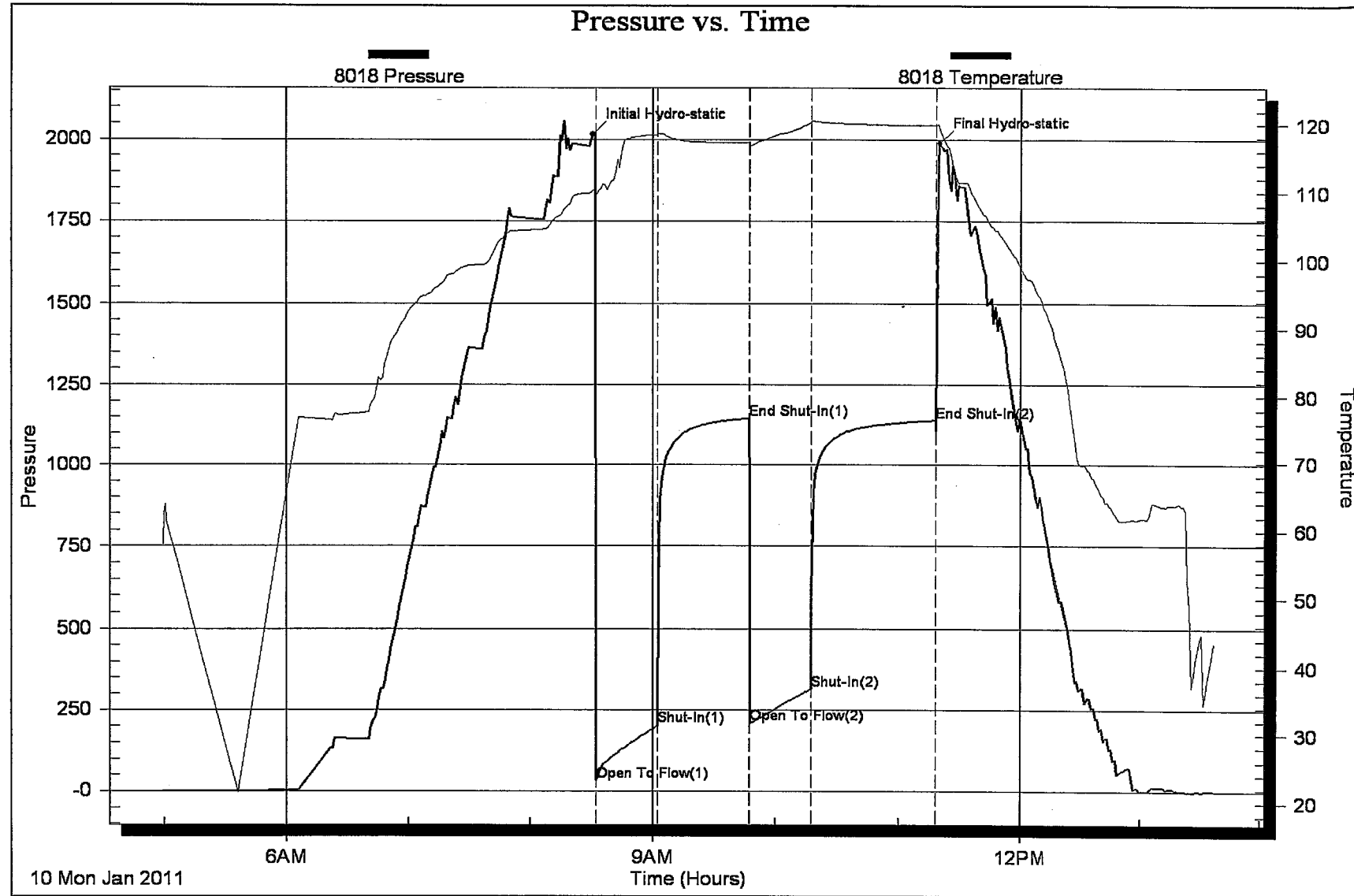
Credo Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

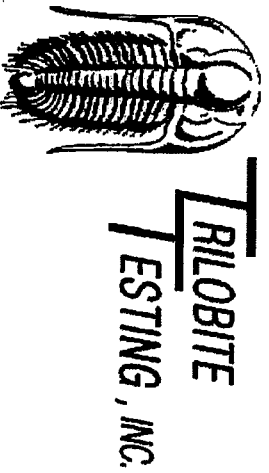
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040630 DST#: 2  
Test Start: 2011.01.10 @ 04:59:00

**Tool Information**

Drill Pipe: Length: 3969.00 ft Diameter: 3.80 inches Volume: 55.67 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: 124.00 ft Diameter: 2.25 inches Volume: 0.61 bbl Weight to Pull Loose: 60000.00 lb  
 Drill Pipe Above KB: 5.50 ft Total Volume: 56.28 bbl Tool Chased 0.00 ft  
 Depth to Top Packer: 4115.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 52000.00 lb  
 Interval between Packers: 131.00 ft  
 Tool Length: 158.50 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			4088.50	
Shut In Tool	5.00			4093.50	
Hydraulic tool	5.00			4098.50	
Jars	5.00			4103.50	
Safety Joint	2.50			4106.00	
Packer	5.00			4111.00	27.50
					Bottom Of Top Packer
Packer	4.00			4115.00	
Stubb	1.00			4116.00	
Perforations	3.00			4119.00	
Recorder	0.00	8018	Inside	4119.00	
Recorder	0.00	6751	Outside	4119.00	
Perforations	28.00			4147.00	
Change Over Sub	1.00			4148.00	
Drill Pipe	94.00			4242.00	
Change Over Sub	1.00			4243.00	
Bullnose	3.00			4246.00	131.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>158.50</b>				





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Aird

**30-10-31 Thomas, KS**

**Hemmert #1-30**

Start Date: 2011.01.11 @ 13:28:00

End Date: 2011.01.11 @ 22:28:00

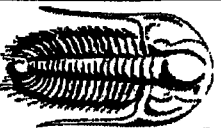
Job Ticket #: 040631      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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





**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

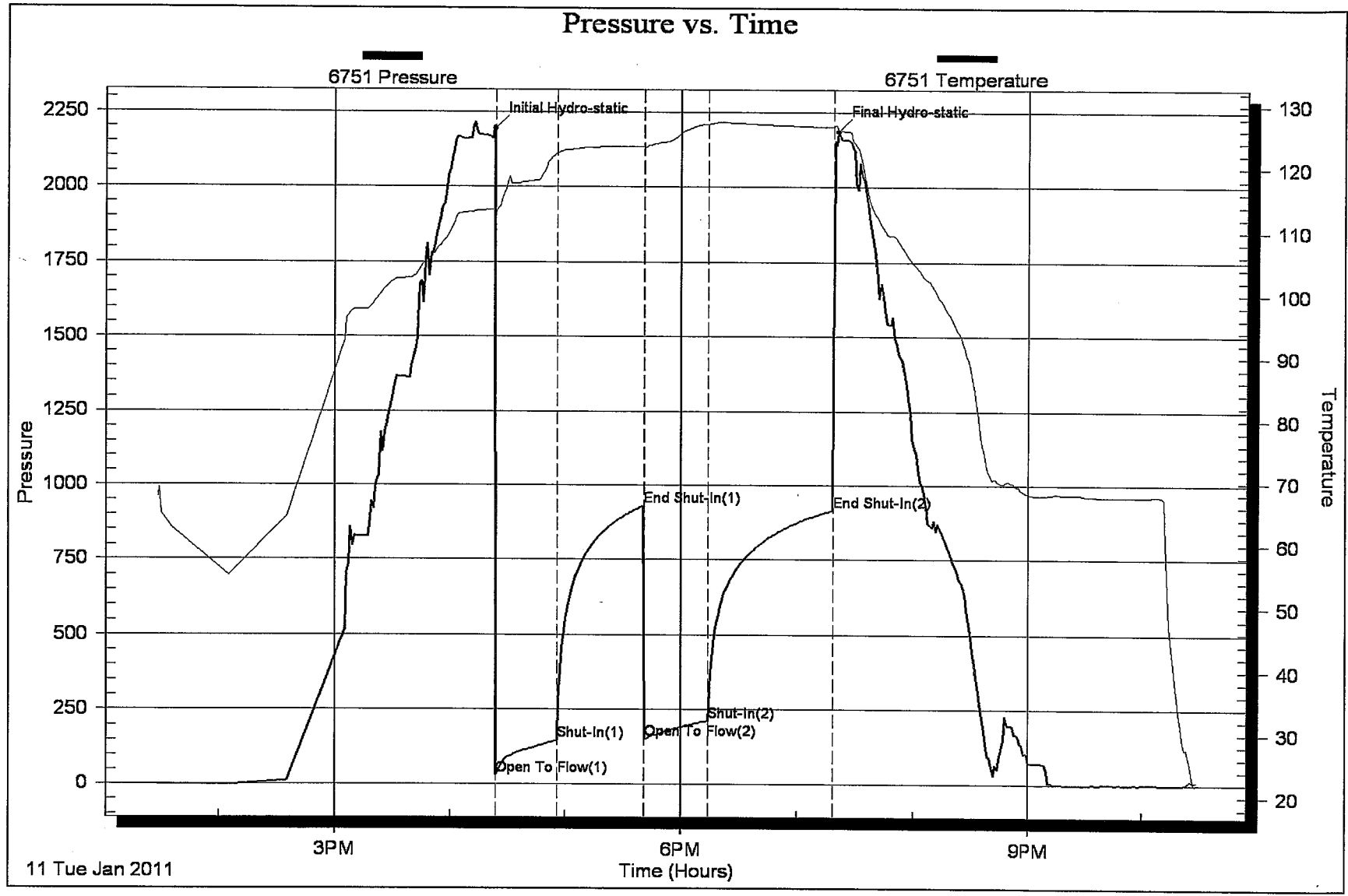
Credo Petroleum Corp.  
1801 Broadway # 900  
Denver, CO 80202  
ATTN: Bruce Ard

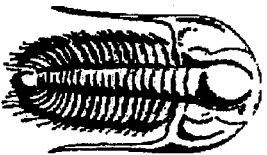
Hemmett #1-30  
30-10-31 Thomas, KS  
Job Ticket: 040631      DST#: 3  
Test Start: 2011.01.11 @ 13:28:00

**Tool Information**

Drill Pipe: Length: 4252.00 ft Diameter: 3.80 inches Volume: 59.64 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: 120.00 ft Diameter: 2.25 inches Volume: 0.59 bbl Weight to Pull Loose: 56000.00 lb  
 Drill Pipe Above KB: 15.50 ft Total Volume: 60.23 bbl Tool Chased ft  
 Depth to Top Packer: 4384.00 ft String Weight: Initial 48000.00 lb  
 Depth to Bottom Packer: ft Final 50000.00 lb  
 Interval between Packers: 64.00 ft  
 Tool Length: 91.50 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			4357.50	
Shut In Tool	5.00			4362.50	
Hydraulic tool	5.00			4367.50	
Jars	5.00			4372.50	
Safety Joint	2.50			4375.00	
Packer	5.00			4380.00	27.50
Packer	4.00			4384.00	Bottom Of Top Packer
Stubb	1.00			4385.00	
Perforations	2.00			4387.00	
Recorder	0.00	8018	Inside	4387.00	
Recorder	0.00	6751	Outside	4387.00	
Perforations	24.00			4411.00	
Change Over Sub	1.00			4412.00	
Drill Pipe	32.00			4444.00	
Change Over Sub	1.00			4445.00	
Bullnose	3.00			4448.00	64.00
					Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>91.50</b>				





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway # 900  
Denver, CO 80202

ATTN: Bruce Ard

**30-10-31 Thomas, KS**

**Hemmett #1-30**

Start Date: 2011.01.12 @ 13:25:00

End Date: 2011.01.12 @ 21:06:00

Job Ticket #: 040632      DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE**  
**TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

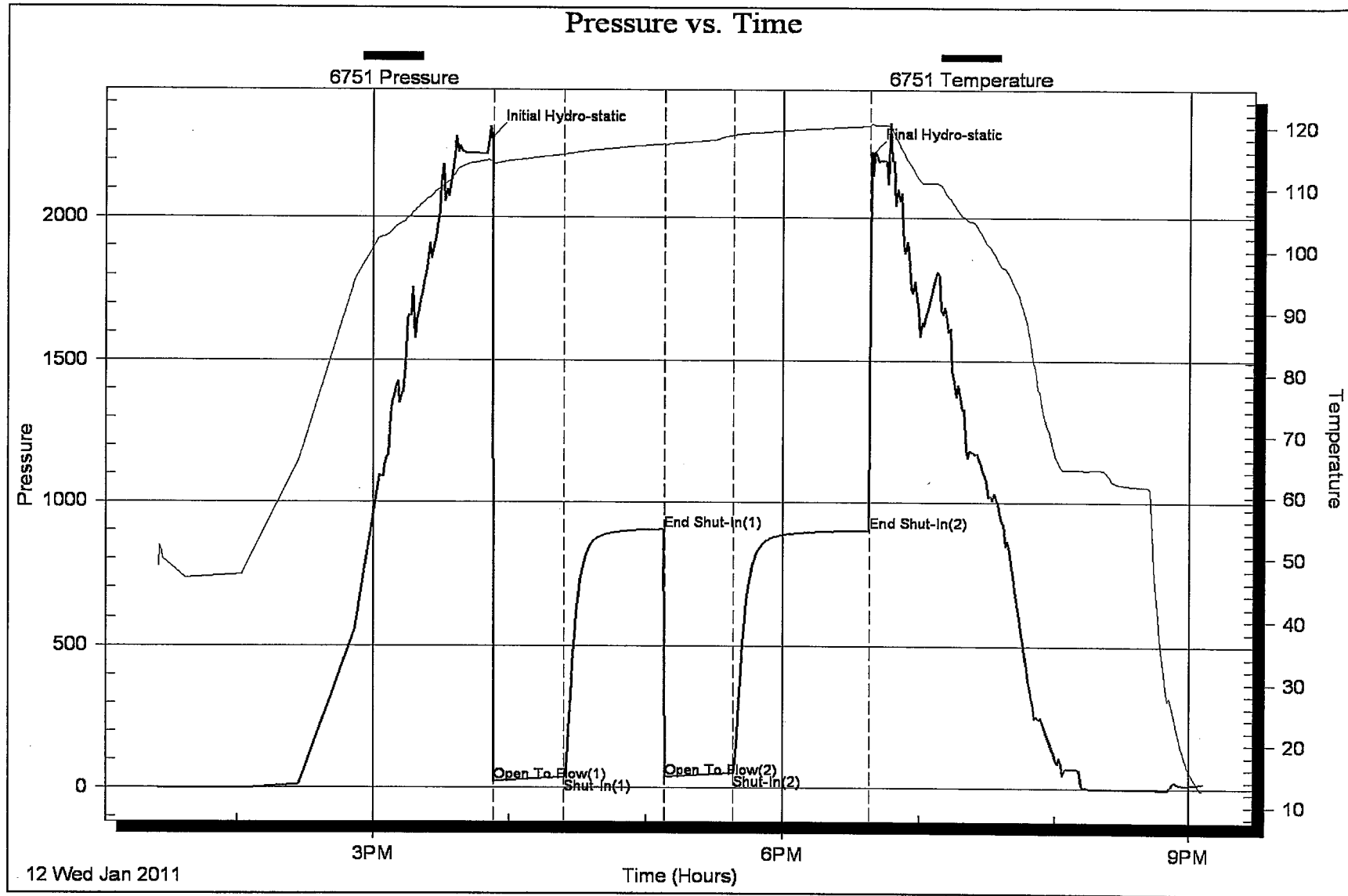
Crede Petroleum Corp.  
1801 Broadw ay # 900  
Denver, CO 80202  
ATTN: Bruce Ard

Hemmerl #1-30  
**30-10-31 Thomas, KS**  
Job Ticket: 040632      DST#: 4  
Test Start: 2011.01.12 @ 13:25:00

**Tool Information**

Drill Pipe: Length: 4319.00 ft Diameter: 3.80 inches Volume: 60.58 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: 120.00 ft Diameter: 2.25 inches Volume: 0.59 bbl Weight to Pull Loose: 60000.00 lb  
 Drill Pipe Above KB: 15.50 ft Total Volume: 61.17 bbl Tool Chased ft  
 Depth to Top Packer: 4451.00 ft String Weight: Initial 52000.00 lb  
 Depth to Bottom Packer: ft Final 52000.00 lb  
 Interval between Packers: 99.00 ft  
 Tool Length: 126.50 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			4424.50	
Shut In Tool	5.00			4429.50	
Hydraulic tool	5.00			4434.50	
Jars	5.00			4439.50	
Safety Joint	2.50			4442.00	
Packer	5.00			4447.00	27.50 Bottom Of Top Packer
Packer	4.00			4451.00	
Stubb	1.00			4452.00	
Perforations	1.00			4453.00	
Recorder	0.00	8018	Inside	4453.00	
Recorder	0.00	6751	Outside	4453.00	
Perforations	30.00			4483.00	
Change Over Sub	1.00			4484.00	
Drill Pipe	62.00			4546.00	
Change Over Sub	1.00			4547.00	
Bullnose	3.00			4550.00	99.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>126.50</b>				



12 Wed Jan 2011

**JAMES C. MUSGROVE**

Petroleum Geologist  
P. O. Box 215  
212 Main St.  
Clatfin, KS 67525

FEB - 3 2011

Office (620) 588-4250

Res. Clatfin (620) 587-3444

Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 1

**Dry and Abandoned**

**Contractor:** WW Drilling Company (Rig #4)

**Commenced:** January 3, 2011

**Completed:** January 13, 2011

**Elevation:** 2971' K.B.; 2969' D.F.; 2966' G.L.

**Casing Program:** Surface; 8 5/8" @ 247'  
Production; none.

**Samples:** Samples saved and examined 3700' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 3700' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Drill Stem Tests:** There were four (4) Drill Stem Tests ran by Trilobite Testing Company.

**Electric Log:** By Log Tech; Dual Induction, Dual Compensated Porosity Log,  
Micro Log and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	2506	+465
Base Anhydrite	2534	+437
Topoka	3734	-763
Heebner	3955	-984
Toronto	3981	-1010
Lansing	3997	-1026
Stark Shale	4211	-1240
Base Kansas City	4273	-1302
Marmaton	4303	-1332
Pawnee	4398	-1427
Ft Scott	4434	-1463
Cherokee Shale	4459	-1488
Johnson Zone	4536	-1565
Mississippian	4588	-1627
Rotary Total Depth	4650	-1679
Log Total Depth	4655	-1684

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

There were several zones of well-developed porosity encountered in the drilling of the Topoka Section but no shows of oil and/or gas was noted

**TORONTO SECTION**

3982-3990' Limestone; white, fine and medium crystalline, chalky, few fossiliferous, black stain, no show of free oil and no odor in fresh samples.

**LANSING SECTION**

3997-4004' Limestone; white/cream, fine to medium crystalline, fossiliferous in part, scattered porosity, trace poor questionable stain, no show of free oil and no odor in fresh samples.

4008-4014' Limestone; gray, medium crystalline, fossiliferous, chalky, poor stain, one (1) piece trace of free oil and no odor in fresh samples.

4030-4036' Limestone; white, finely crystalline, fossiliferous in part, chalky, no shows.

4041-4050' Limestone; gray, chalky, no shows.

4065-4076' Limestone; tan, fine to medium crystalline, oolitic in part, chalky, scattered porosity, brown and dark brown stain, show of free oil and no odor in fresh samples.

**Drill Stem Test #1 4051-4082'**

**Times: 30-45-45-60**

**Blow: Weak to fair (7 ½ inches)**

**Recovery: 235' muddy water, spots of oil in tool**

<b>Pressures:</b>	<b>ISIP</b>	<b>1211</b>	<b>psi</b>
	<b>FSIP</b>	<b>1208</b>	<b>psi</b>
	<b>IFP</b>	<b>17-82</b>	<b>psi</b>
	<b>FFP</b>	<b>82-127</b>	<b>psi</b>
	<b>HSH</b>	<b>1988-1958</b>	<b>psi</b>

4095-4110' Limestone; white, chalky, poor visible porosity, no shows.

4110-4120' Limestone; as above.

4133-4139' Limestone; gray, chalky, few fossiliferous, poor visible porosity, plus gray and white cherty, questionable dead stain.

4146-4160' Limestone; cream, finely crystalline, slightly fossiliferous, poor porosity, questionable brown edge staining, no show of free oil and no odor in fresh samples.

4197-4204' Limestone; white, chalky, few oomoldic, scattered porosity, brown and black stain, trace of free oil and odor sample broken.

4223-4236' Limestone; white, finely crystalline, fossiliferous, chalky, pin point porosity, few scattered vuggy type porosity, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #2 4115-4246'

Times: 30-45-45-60

Blow: Strong

Recovery: 78' mud  
565' muddy water

Pressures: ISIP 1145 psi  
FSIP 1139 psi  
IFP 31-201 psi  
FFP 208-314 psi  
HSH 2015-1987 psi

4257-4264' Limestone; gray, chalky, fossiliferous in part, poor visible porosity, trace poor stain, and faint odor in fresh samples.

MARMATON SECTION

4303-4310' Limestone; gray, finely crystalline, chalky, slightly fossiliferous, few with scattered pin point porosity, trace stain, trace of free oil and no odor in fresh samples.

4336-4346' Limestone; cream, gray, yellow, granular, few fossiliferous, poor visible porosity, no show.

4350-4364' Limestone; gray, chalky, fossiliferous, dense plus white chalk.

4370-4390' Limestone; gray, chalky, dense, trace dark tarry stain, no show of free oil and no odor in fresh samples.

PAWNEE SECTION

4400-4410' Limestone; white, cream, finely crystalline, fossiliferous, poor scattered pin point porosity, scattered light stain, trace of free oil, and gassy odor in fresh samples.

4420-4426' Limestone; gray, chalky, fossiliferous, poor porosity, no shows.

FT SCOTT SECTION

4443-4450' Limestone; white, gray, finely crystalline, fossiliferous, poor visible porosity, brown stain, trace of free oil and good odor in fresh samples.



Drill Stem Test #3 4384-4448'

Times: 30-45-30-60

Blow: Strong

Recovery: 310' oil specked mud  
120' muddy water

Pressures: ISIP 931 psi  
FSIP 916 psi  
IFP 31-147 psi  
FFP 153-212 psi  
HSH 2193-2184 psi

CHEROKEE SECTION

4470-4482' Limestone; gray, slightly dolomitic, fossiliferous in part, poor visible porosity, questionable fractured porosity, trace brown stain, trace of free oil and gas and faint odor in fresh samples.

4497-4510' Limestone; gray, chalky, fossiliferous, slightly cherty, few with scattered brown and black stain, no free oil and no odor in fresh samples.

4520-4530' Limestone; gray, chalky, no shows.

JOHNSON SECTION

4537-4550' Limestone; white, gray, cream, chalky, slightly fossiliferous, poor pin point and fine vuggy type porosity, brown stain, show of free oil and odor in fresh samples.

Drill Stem Test #4 4451-4550'

Times: 30-45-30-60

Blow: Weak

Recovery: 60' mud

Pressures: ISIP 902 psi  
FSIP 899 psi  
IFP 20-35 psi  
FFP 38-51 psi  
HSH 2281-2221 psi

MISSISSIPPIAN SECTION

4588-4596' Limestone; gray, white, yellow, granular, chalky, no shows.

4596-4620' Dolomite; brown, finely crystalline, sucrosic, slightly cherty, no shows.

4620-4640' Dolomite; white, opaque, plus abundant translucent, opaque chert.

4640-4650' Dolomite; gray, white, cherty and chert as above, no shows.

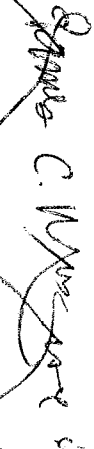
Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 5

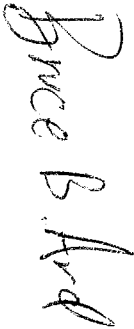
Rotary Total Depth	4650 (-1679)
Log Total Depth	4655 (-1684)

**Recommendations**

The Hemmet #1-30 was plugged and abandoned at the Rotary Total depth 4650 (-1679).

Respectfully submitted;

  
James C. Musgrove and  
Bruce B. Ard,  
Petroleum Geologists



# ALLIED CEMENTING CO., LLC.

Federal Tax I.D. # 20-5975804

040809

REMIT TO P.O. BOX 31  
 RUSSELL, KANSAS 67665

SERVICE POINT:  
 Adelaide S

DATE <u>1-13-14</u>	SEC <u>30</u>	TWP. <u>10 S</u>	RANGE <u>31 W</u>	LOCATION <u>OWLEY 16.2 N. 12 W.</u>	CALLED OUT	ON LOCATION <u>9:00pm</u>	JOB START <u>2:30</u>	JOB FINISH <u>7:00</u>
LEASE <u>16 Ennwerdt</u>	WELL # <u>1-30</u>	LOCATION <u>OWLEY 16.2 N. 12 W.</u>		COUNTY <u>THOMAS</u>	STATE <u>KS</u>			
OLD OR NEW (Circle one) <u>NEW</u>				LOCATION <u>112 S 6 W</u>				

CONTRACTOR U-CO #4 OWNER \_\_\_\_\_

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. \_\_\_\_\_

CASING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 4 1/2 DEPTH 2510'

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

DISPLACEMENT \_\_\_\_\_

EQUIPMENT

PUMP TRUCK CEMENTER FEZZY

# 421 HELPER DANNON

BULK TRUCK \_\_\_\_\_

# 396 DRIVER JERRY

BULK TRUCK \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:  
251K @ 2510'  
105K @ 1670'  
405K @ 290'  
105K @ 40' w/ plug  
505K @ PH

CHARGE TO: Credo Petroleum

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

DEPTH OF JOB 2510

PUMP TRUCK CHARGE \_\_\_\_\_

EXTRA FOOTAGE \_\_\_\_\_

MILEAGE 5 @ 7.00 35.00

MANIFOLD \_\_\_\_\_ @ \_\_\_\_\_

FEES \_\_\_\_\_ @ \_\_\_\_\_

TOTAL 1052.00

PLUG & FLOAT EQUIPMENT

1-8 5/8 plug @ \_\_\_\_\_ 40.00

\_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_ \_\_\_\_\_

TOTAL 40.00

To Allied Cementing Co., LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME PON GUY

SIGNATURE Pon Guy

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS



**JAMES C. MUSGROVE**

Petroleum Geologist  
P.O. Box 215  
212 Main St.  
Clatfin, KS 67525

Office (620) 588-4250

Res. Clatfin (620) 587-3444

Credo Petroleum Corporation  
Hemmet #1-30  
NW-SE-SE-SW (410' FSL & 2000' FWL)  
Section 30-10s-31w  
Thomas County, Kansas  
Page No. 1

**Dry and Abandoned**

**Contractor:** WW Drilling Company (Rig #4)

**Commenced:** January 3, 2011

**Completed:** January 13, 2011

**Elevation:** 2971' K.B.; 2969' D.F.; 2966' G.L.

**Casing Program:** Surface; 8 5/8" @ 247'  
Production; none.

**Samples:** Samples saved and examined 3700' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 3700' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Drill Stem Tests:** There were four (4) Drill Stem Tests ran by Trilobite Testing Company.

**Electric Log:** By Log Tech; Dual Induction, Dual Compensated Porosity Log, Micro Log and Borehole Compensated Sonic Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	2506	+465
Base Anhydrite	2534	+437
Topeka	3734	-763
Heebner	3955	-984
Toronto	3981	-1010
Lansing	3997	-1026
Stark Shale	4211	-1240
Base Kansas City	4273	-1302
Marmaton	4303	-1332
Pawnee	4398	-1427
Ft Scott	4434	-1463
Cherokee Shale	4459	-1488
Johnson Zone	4536	-1565
Mississippian	4588	-1627
Rotary Total Depth	4650	-1679
Log Total Depth	4655	-1684

(All tops and zones corrected to Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

There were several zones of well-developed porosity encountered in the drilling of the Topeka Section but no shows of oil and/or gas was noted

**TORONTO SECTION**

3982-3990' Limestone; white, fine and medium crystalline, chalky, few fossiliferous, black stain, no show of free oil and no odor in fresh samples.

**LANSING SECTION**

3997-4004' Limestone; white/cream, fine to medium crystalline, fossiliferous in part, scattered porosity, trace poor questionable stain, no show of free oil and no odor in fresh samples.

4008-4014' Limestone; gray, medium crystalline, fossiliferous, chalky, poor stain, one (1) piece trace of free oil and no odor in fresh samples.

4030-4036' Limestone; white, finely crystalline, fossiliferous in part, chalky, no shows.

4041-4050' Limestone; gray, chalky, no shows.

4065-4076' Limestone; tan, fine to medium crystalline, oolitic in part, chalky, scattered porosity, brown and dark brown stain, show of free oil and no odor in fresh samples.

**Drill Stem Test #1** **4051-4082'**

**Times:** 30-45-45-60

**Blow:** Weak to fair (7 ½ inches)

**Recovery:** 235' muddy water, spots of oil in tool

<b>Pressures:</b>	<b>ISIP</b>	<b>1211</b>	<b>psi</b>
	<b>FSIP</b>	<b>1208</b>	<b>psi</b>
	<b>IFP</b>	<b>17-82</b>	<b>psi</b>
	<b>FFP</b>	<b>82-127</b>	<b>psi</b>
	<b>HSH</b>	<b>1988-1958</b>	<b>psi</b>

4095-4110' Limestone; white, chalky, poor visible porosity, no shows.

4110-4120' Limestone; as above.

4133-4139' Limestone; gray, chalky, few fossiliferous, poor visible porosity, plus gray and white cherty, questionable dead stain.

4146-4160' Limestone; cream, finely crystalline, slightly fossiliferous, poor porosity, questionable brown edge staining, no show of free oil and no odor in fresh samples.

4197-4204' Limestone; white, chalky, few oomoldic, scattered porosity, brown and black stain, trace of free oil and odor sample broken.

4223-4236' Limestone; white, finely crystalline, fossiliferous, chalky, pin point porosity, few scattered vuggy type porosity, brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #2 4115-4246'

Times: 30-45-45-60

Blow: Strong

Recovery: 78' mud  
565' muddy water

Pressures: ISIP 1145 psi  
FSIP 1139 psi  
IFP 31-201 psi  
FFP 208-314 psi  
HSH 2015-1987 psi

4257-4264' Limestone; gray, chalky, fossiliferous in part, poor visible porosity, trace poor stain, and faint odor in fresh samples.

MARMATON SECTION

4303-4310' Limestone; gray, finely crystalline, chalky, slightly fossiliferous, few with scattered pin point porosity, trace stain, trace of free oil and no odor in fresh samples.

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Respectfully submitted;

*James C. Musgrove*  
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Petroleum Geologists

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