

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

RECEIVED

Form ACO-1
June 2009

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM

JUN 25 2010

WELL HISTORY - DESCRIPTION OF WELL & LEASE

6/23/10

OPERATOR: License # 5144
Name: Mull Drilling Company, Inc.
Address 1: 1700 N. Waterfront Parkway, Bldg. #1200
Address 2:
City: Wichita State: KS Zip: 67206 + 6637
Contact Person: Mark Shreve
Phone: (316) 264-6366
CONTRACTOR: License # 5929
Name: Duke Drilling Company, Inc.
Wellsite Geologist: Kevin Kessler
Purchaser: N/A

API No. 15 - 063-21833-000 KCC WICHITA
Spot Description:
E2 NE SW SW Sec. 31 Twp. 15 S. R. 26 East West
990 Feet from North / South Line of Section
1,011 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Gove
Lease Name: Curtis "D" Well #: 1-31
Field Name: Wildcat
Producing Formation: N/A

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.):

Elevation: Ground: 2563' Kelly Bushing: 2572'
Total Depth: 4570' Plug Back Total Depth: N/A
Amount of Surface Pipe Set and Cemented at: 232 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.

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 #:
3/18/10 3/27/10 3/27/10
Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 27,000 ppm Fluid volume: 1,000 bbls
Dewatering method used: Evaporation
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. East West
County: Permit #:

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.
Signature: [Signature]
Title: President/COO Date: 6/23/10

KCC Office Use ONLY
 Letter of Confidentiality Received Date: 6-23-10
 Confidential Release Date:
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NS Date: 6-30-10
FA

Operator Name: Mull Drilling Company, Inc. Lease Name: Curtis "D" Well #: 1-31
 Sec. 31 Twp. 15 S. R. 26 East West County: Gove

KCC
 JUN 23 11
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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 <i>(Attach Additional Sheets)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Anhydrite	2000	(+ 572)
Electric Log Run	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	B/Anhydrite	2034	(+ 538)
Electric Log Submitted Electronically <i>(If no, Submit Copy)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Heebner Shale	3806	(- 1234)
List All E. Logs Run:		B/KC	4157	(- 1585)
Superior: CDL/CNL; DIL; Sonic & Micro		Ft. Scott	4350	(- 1778)
		Cherokee Shale	4376	(- 1804)
		Mississippian	4448	(- 1876)

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
Surface	12 1/4"	8 5/8"	20#	232'	Common	160	2% cc, 3% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> 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

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TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR.		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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ALLIED CEMENTING CO., LLC. 33859

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

KCC
JUN 23 2010

SERVICE POINT: Russell

DATE <u>3-28-10</u>	SEC. <u>31</u>	TWP. <u>15</u>	RANGE <u>26</u>	CAMEL NO. <u>CONFIDENTIAL</u>	ON LOCATION	JOB START <u>6:30 a.m.</u>	JOB FINISH <u>2:00 p.m.</u>
LEASE <u>Curtis D</u>			WELL # <u>1-31</u>	LOCATION <u>Hwy 4 WICHITA W TO QUINCY</u>		COUNTY <u>Greene</u>	STATE <u>KS</u>
OLD OR NEW (Circle one) <u>NEW</u>				<u>RH 4 W 1/4 W 5100</u>			

CONTRACTOR Auke #4

TYPE OF JOB Rotary Plug

HOLE SIZE 7 7/8 T.D. 4570

CASING SIZE _____ DEPTH _____

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2 x 11 DEPTH 2010

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT _____

OWNER _____

CEMENT AMOUNT ORDERED 205 60% 40% Gel 1/4" FFK

COMMON	<u>123</u>	@	<u>13.65</u>	<u>1678.95</u>
POZMIX	<u>82</u>	@	<u>7.60</u>	<u>623.20</u>
GEL	<u>7</u>	@	<u>20.40</u>	<u>142.80</u>
CHLORIDE		@		
ASC		@		
<u>Flo Seal</u>	<u>51</u>	@	<u>2.45</u>	<u>124.95</u>
RECEIVED				
<u>JUN 25 2010</u>				
KCC WICHITA				
HANDLING	<u>205</u>	@	<u>2.10</u>	<u>430.50</u>
MILEAGE	<u>110.56/mile</u>			<u>615.00</u>
TOTAL				<u>3615.40</u>

EQUIPMENT

PUMP TRUCK CEMENTER _____

417 HELPER Craig

BULK TRUCK _____

347 DRIVER Alan (Coakley)

BULK TRUCK _____

_____ DRIVER _____

REMARKS:

<u>1st Plug</u>	<u>2010</u>	<u>25SK</u>
<u>2nd</u>	<u>980</u>	<u>100SK</u>
<u>3rd</u>	<u>280</u>	<u>40SK</u>
<u>4th</u>	<u>40'</u>	<u>10SK</u>
<u>Rebate</u>	<u>30SK</u>	

CHARGE TO: Mull Drilling

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB _____

PUMP TRUCK CHARGE _____ 1,000.00

EXTRA FOOTAGE _____ @ _____

MILEAGE 30 @ 7.00 210.00

MANIFOLD _____ @ _____

TOTAL 1210.00

PLUG & FLOAT EQUIPMENT

<u>8 5/8 wooden Plug</u>	@	<u>N-C</u>
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
TOTAL _____		

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 Rich Wheeler

SIGNATURE Rich Wheeler

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

NO COPY

ALLIED CEMENTING CO.. LLC. 044507

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

KCC
JUN 23 2010

SERVICE POINT:

Oak Hills

CONFIDENTIAL

DATE <u>3-18-2010</u>	SEC. <u>31</u>	TWP. <u>15S</u>	RANGE <u>27W</u>	CALLED OUT	ON LOCATION <u>2:00pm</u>	JOB START <u>8:00PM</u>	JOB FINISH <u>8:30PM</u>
LEASE <u>Ante D</u>	WELL# <u>1-31</u>	LOCATION <u>Wichita W to Quarter 4 N to city</u>			COUNTY <u>Goos</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)		<u>1/2 W - 1/4 W - 1/2 W W @ FARMYARD</u>			<u>THRU CORALS</u>		

CONTRACTOR Dube rig #4
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4" T.D. 232
 CASING SIZE 8 5/8 DEPTH 232
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. 15 ft
 PERFS.
 DISPLACEMENT 13 3/4

OWNER
 CEMENT
 AMOUNT ORDERED 160 SKS Com 3#2

EQUIPMENT
 PUMP TRUCK CEMENTER Kelly
 # 431 HELPER Fuzzy
 BULK TRUCK
 # 347 DRIVER Willbur
 BULK TRUCK
 # DRIVER

COMMON	<u>160</u>	@	<u>13.65</u>	<u>2184.00</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.40</u>	<u>61.20</u>
CHLORIDE	<u>6SKS</u>	@	<u>57.15</u>	<u>342.90</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>160 SKS</u>	@	<u>2.10</u>	<u>336.00</u>
MILEAGE	<u>109 SK mile</u>			<u>507.00</u>
TOTAL				<u>342.92</u>
				<u>3450.00</u>

REMARKS:
Cement did circulate
Plug down @ 8:30 pm
Thanks Kelly & crew

SERVICE
 DEPTH OF JOB 232'
 PUMP TRUCK CHARGE 999.00
 EXTRA FOOTAGE @
 MILEAGE 30 miles @ 7.00 210.00
 MANIFOLD @
 @
 @
 TOTAL 1209.00

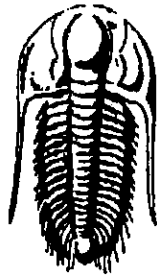
CHARGE TO: Mull Drilling
 STREET
 CITY STATE ZIP

PLUG & FLOAT EQUIPMENT
1-8 5/8 Plug NO charge
 @
 @
 @
 @
 RECEIVED
 JUN 25 2010
 KCC WICHITA TOTAL

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 Rich Wheeler
 SIGNATURE Rich Wheeler

SALES TAX (If Any)
 TOTAL CHARGES
 DISCOUNT IF PAID IN 30 DAYS



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837

ATTN: Mark Shreve

31-15S-26W Gove KS

Curtis "D" #1-31

Start Date: 2010.03.22 @ 11:51:39

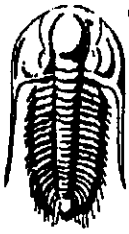
End Date: 2010.03.22 @ 19:34:03

Job Ticket #: 38211 DST #: 1

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**RECEIVED
JUN 25 2010
KCC WICHITA**

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

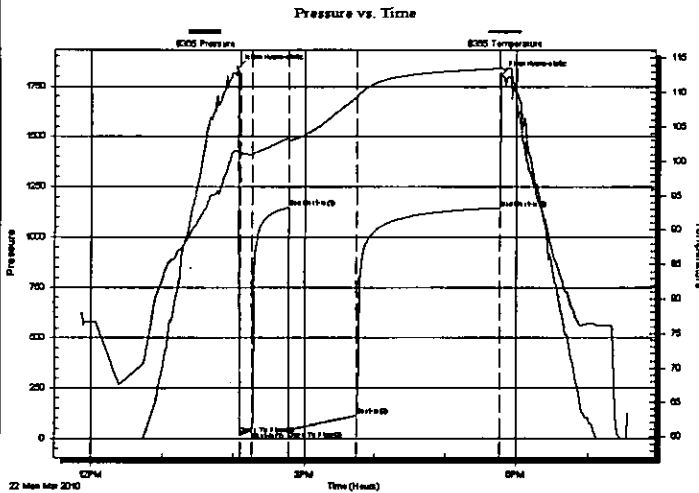
Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38211 DST#: 1
Test Start: 2010.03.22 @ 11:51:39

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 14:05:04
Time Test Ended: 19:34:03
Test Type: **Conventional Bottom Hole**
Tester: **Ray Schwager**
Unit No: **42**
Interval: **3800.00 ft (KB) To 3845.00 ft (KB) (TVD)**
Reference Elevations: **2572.00 ft (KB)**
Total Depth: **3845.00 ft (KB) (TVD)** **2563.00 ft (CF)**
Hole Diameter: **7.85 inches** Hole Condition: **Fair** **KB to GR/CF: 9.00 ft**

Serial #: 8365 **Inside**
Press@RunDepth: **110.38 psig @ 3810.01 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.03.22** End Date: **2010.03.22** Last Calib.: **2010.03.22**
Start Time: **11:51:39** End Time: **19:34:03** Time On Btm: **2010.03.22 @ 14:03:04**
Time Off Btm: **2010.03.22 @ 17:47:03**

TEST COMMENT: IFF-w k bl 1/2" to 3" bl
FFP-w k to a gd bl 1" to 6 1/2" bl
Times 10-30-60-120
no bl on shut-in



PRESSURE SUMMARY

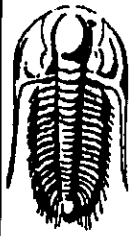
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.69	101.37	Initial Hydro-static
2	19.57	100.47	Open To Flow (1)
13	35.59	100.95	Shut-In(1)
43	1145.97	103.36	End Shut-In(1)
44	39.04	103.01	Open To Flow (2)
102	110.38	109.31	Shut-In(2)
223	1141.55	113.50	End Shut-In(2)
224	1807.25	113.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	MW 25%M75%W w/show of oil	1.12
120.00	Water	1.68

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38211 DST#: 1
Test Start: 2010.03.22 @ 11:51:39

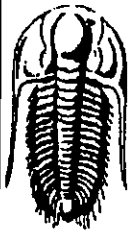
Tool Information

Drill Pipe:	Length: 3803.00 ft	Diameter: 3.80 inches	Volume: 53.35 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 53.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3800.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.02 ft			
Tool Length:	66.02 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			3780.00	
Shut In Tool	5.00			3785.00	
Hydraulic tool	5.00			3790.00	
Packer	5.00			3795.00	21.00 Bottom Of Top Packer
Packer	5.00			3800.00	
Stubb	1.00			3801.00	
Perforations	9.00			3810.00	
Recorder	0.01	8365	Inside	3810.01	
Recorder	0.01	6625	Outside	3810.02	
Blank Spacing	32.00			3842.02	
Bullnose	3.00			3845.02	45.02 Bottom Packers & Anchor

Total Tool Length: 66.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38211 DST#: 1
Test Start: 2010.03.22 @ 11:51:39

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	32000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.72 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1200.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

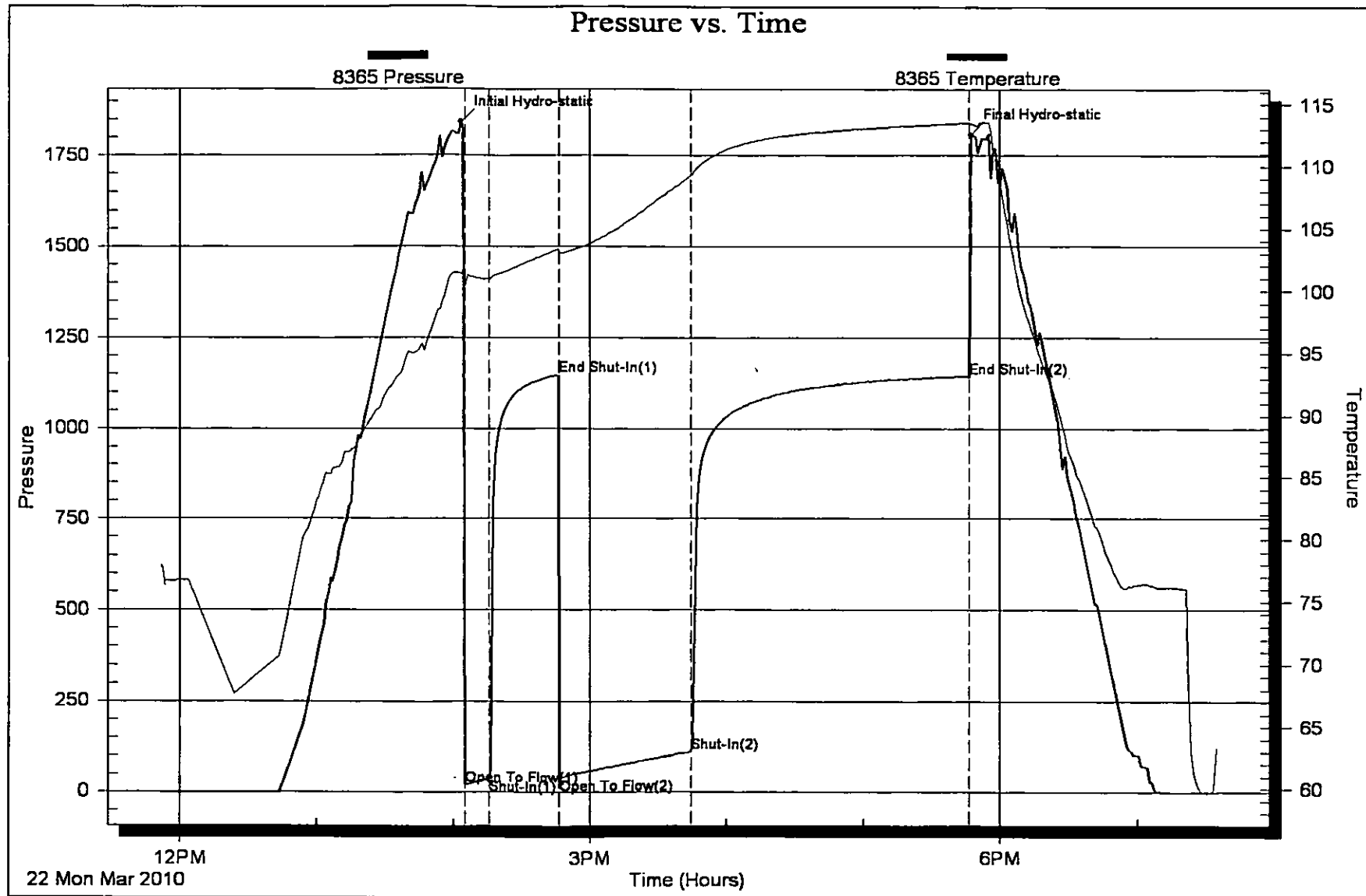
Length ft	Description	Volume bbl
80.00	MW 25% M75% W w/show of oil	1.122
120.00	Water	1.683

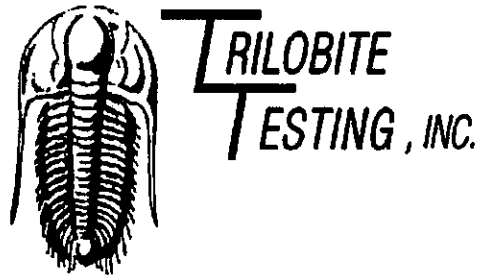
Total Length: 200.00 ft Total Volume: 2.805 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .26@60F





DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837

ATTN: Mark Shreve

31-15S-26W Gove KS

Curtis "D" #1-31

Start Date: 2010.03.23 @ 17:36:05

End Date: 2010.03.24 @ 01:44:29

Job Ticket #: 38212 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

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38212 DST#: 2
Test Start: 2010.03.23 @ 17:36:05

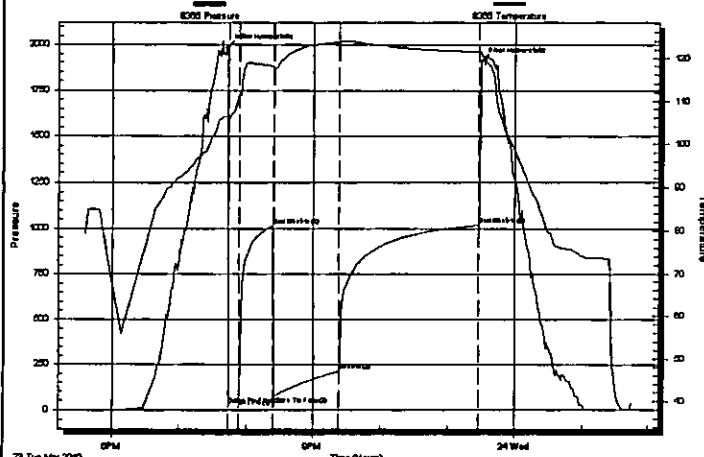
GENERAL INFORMATION:

Formation: **LKC H-I**
Deviated: **No Whipstock:** ft (KB)
Time Tool Opened: 19:44:00
Time Test Ended: 01:44:29
Interval: **4000.00 ft (KB) To 4065.00 ft (KB) (TVD)**
Total Depth: **4065.00 ft (KB) (TVD)**
Hole Diameter: **7.85 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Ray Schwager**
Unit No: **42**
Reference Elevations: **2572.00 ft (KB)**
2563.00 ft (CF)
KB to GR/CF: **9.00 ft**

Serial #: 8365 Inside
Press@RunDepth: **213.46 psig @ 4006.01 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.03.23** End Date: **2010.03.24** Last Calib.: **2010.03.24**
Start Time: **17:36:05** End Time: **01:44:29** Time On Btm: **2010.03.23 @ 19:41:30**
Time Off Btm: **2010.03.23 @ 23:29:29**

TEST COMMENT: IFP-w k to strg in 9 min
FFP-w k to strg in 16 min
Times 10-30-60-120

Pressure vs. Time



PRESSURE SUMMARY

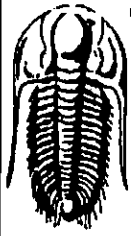
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1984.49	106.34	Initial Hydro-static
3	27.44	106.06	Open To Flow (1)
12	64.24	111.43	Shut-In(1)
42	1014.49	117.93	End Shut-In(1)
43	71.28	117.59	Open To Flow (2)
102	213.46	123.74	Shut-In(2)
227	1018.61	121.51	End Shut-In(2)
228	1910.03	121.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	125'GIP	0.00
20.00	CO	0.28
95.00	O&GCWM 15%G10%O15%W60%M	1.33
180.00	SO&GCMW 5%G2%O15%M78%W	2.52
120.00	Water	1.68

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc

Curtis "D" #1-31

1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

31-15S-26W Gove KS

Job Ticket: 38212

DST#: 2

Test Start: 2010.03.23 @ 17:36:05

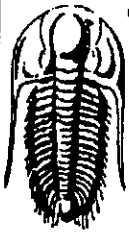
Tool Information

Drill Pipe:	Length: 3994.00 ft	Diameter: 3.80 inches	Volume: 56.03 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 56.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4000.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.02 ft			
Tool Length:	86.02 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			3980.00	
Shut In Tool	5.00			3985.00	
Hydraulic tool	5.00			3990.00	
Packer	5.00			3995.00	21.00 Bottom Of Top Packer
Packer	5.00			4000.00	
Stubb	1.00			4001.00	
Perforations	5.00			4006.00	
Recorder	0.01	8365	Inside	4006.01	
Recorder	0.01	6625	Outside	4006.02	
Blank Spacing	33.00			4039.02	
Perforations	23.00			4062.02	
Bullnose	3.00			4065.02	65.02 Bottom Packers & Anchor

Total Tool Length: 86.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38212 DST#: 2
Test Start: 2010.03.23 @ 17:36:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 38 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 58000 ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.48 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3100.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

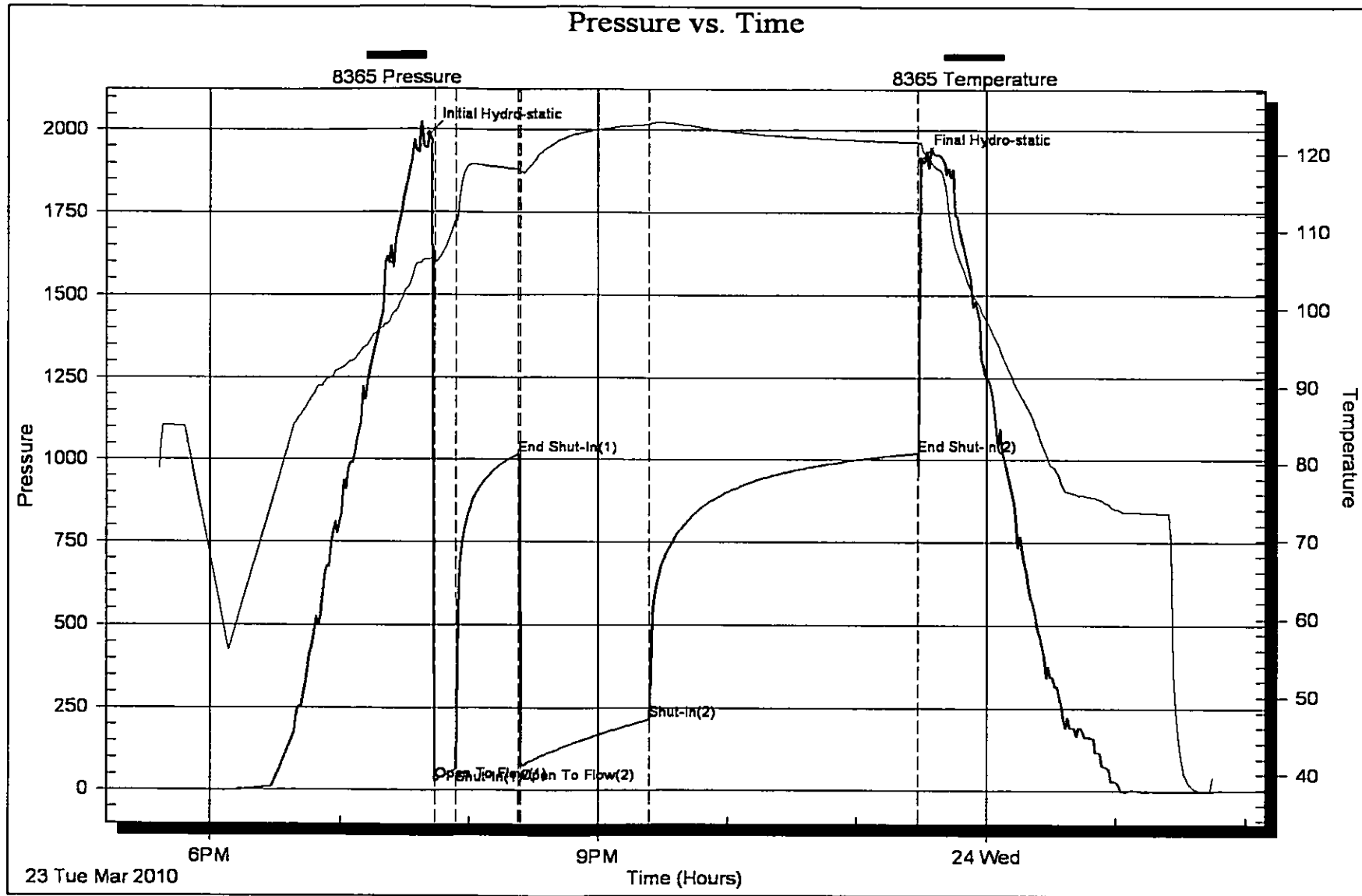
Length ft	Description	Volume bbl
0.00	125'GIP	0.000
20.00	CO	0.281
95.00	O&GCMM 15%G10%O15%W60%M	1.333
180.00	SO&GCMW 5%G2%O15%M78%W	2.525
120.00	Water	1.683

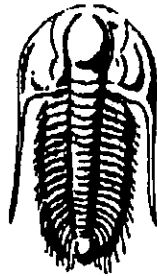
Total Length: 415.00 ft Total Volume: 5.822 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .15@60F





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837

ATTN: Mark Shreve

31-15S-26W Gove KS

Curtis "D" #1-31

Start Date: 2010.03.24 @ 09:15:46

End Date: 2010.03.24 @ 15:28:40

Job Ticket #: 38213 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Printed: 2010.04.07 @ 14:15:30 Page 1

Mull Drilling Co Inc

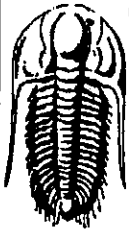
Curtis "D" #1-31

31-15S-26W Gove KS

DST # 3

LKC "J"

2010.03.24



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

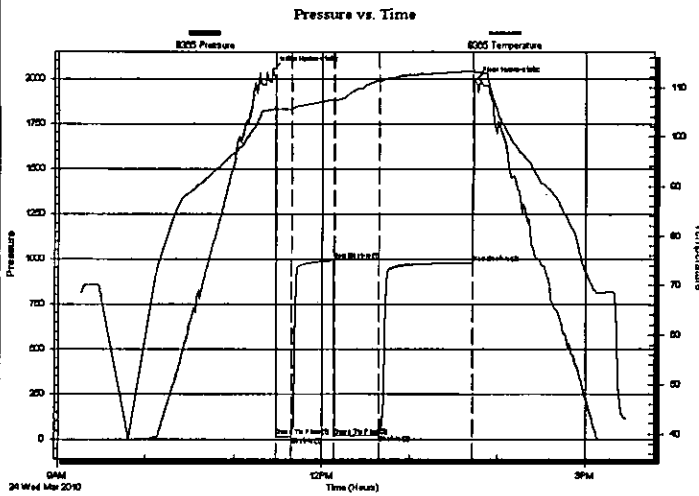
Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38213 DST#: 3
Test Start: 2010.03.24 @ 09:15:46

GENERAL INFORMATION:

Formation: **LKC "J"**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 11:28:41
Time Test Ended: 15:28:40
Interval: **4060.00 ft (KB) To 4090.00 ft (KB) (TVD)**
Total Depth: **4090.00 ft (KB) (TVD)**
Hole Diameter: **7.85 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Ray Schwager**
Unit No: **42**
Reference Elevations: **2572.00 ft (KB)**
2563.00 ft (CF)
KB to GR/CF: **9.00 ft**

Serial #: 8365 Inside
Press@RunDepth: **25.08 psig @ 4061.01 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.03.24** End Date: **2010.03.24** Last Calib.: **2010.03.24**
Start Time: **09:15:46** End Time: **15:28:40** Time On Btm: **2010.03.24 @ 11:26:11**
Time Off Btm: **2010.03.24 @ 13:43:40**

TEST COMMENT: IFF-w k bl 1/4" to 3/4" bl
FFP-surface bl thru-out
Times 10-30-30-60



PRESSURE SUMMARY

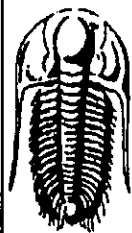
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2046.97	105.36	Initial Hydro-static
3	14.33	105.48	Open To Flow (1)
13	18.60	105.62	Shut-In(1)
42	992.38	107.50	End Shut-In(1)
43	18.75	107.24	Open To Flow (2)
73	25.08	111.26	Shut-In(2)
137	979.32	113.30	End Shut-In(2)
138	1988.55	113.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud	0.28

Gas Rates

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



**TRIOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

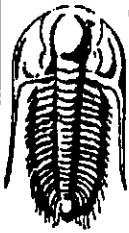
Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38213 DST#: 3
Test Start: 2010.03.24 @ 09:15:46

Tool Information

Drill Pipe:	Length: 4055.00 ft	Diameter: 3.80 inches	Volume: 56.88 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 56.88 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4060.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.02 ft			
Tool Length:	51.02 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			4040.00	
Shut In Tool	5.00			4045.00	
Hydraulic tool	5.00			4050.00	
Packer	5.00			4055.00	21.00 Bottom Of Top Packer
Packer	5.00			4060.00	
Stubb	1.00			4061.00	
Recorder	0.01	8365	Inside	4061.01	
Recorder	0.01	6625	Outside	4061.02	
Perforations	26.00			4087.02	
Bullnose	3.00			4090.02	30.02 Bottom Packers & Anchor
Total Tool Length:	51.02				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38213 DST#: 3
Test Start: 2010.03.24 @ 09:15:46

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.50 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3100.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

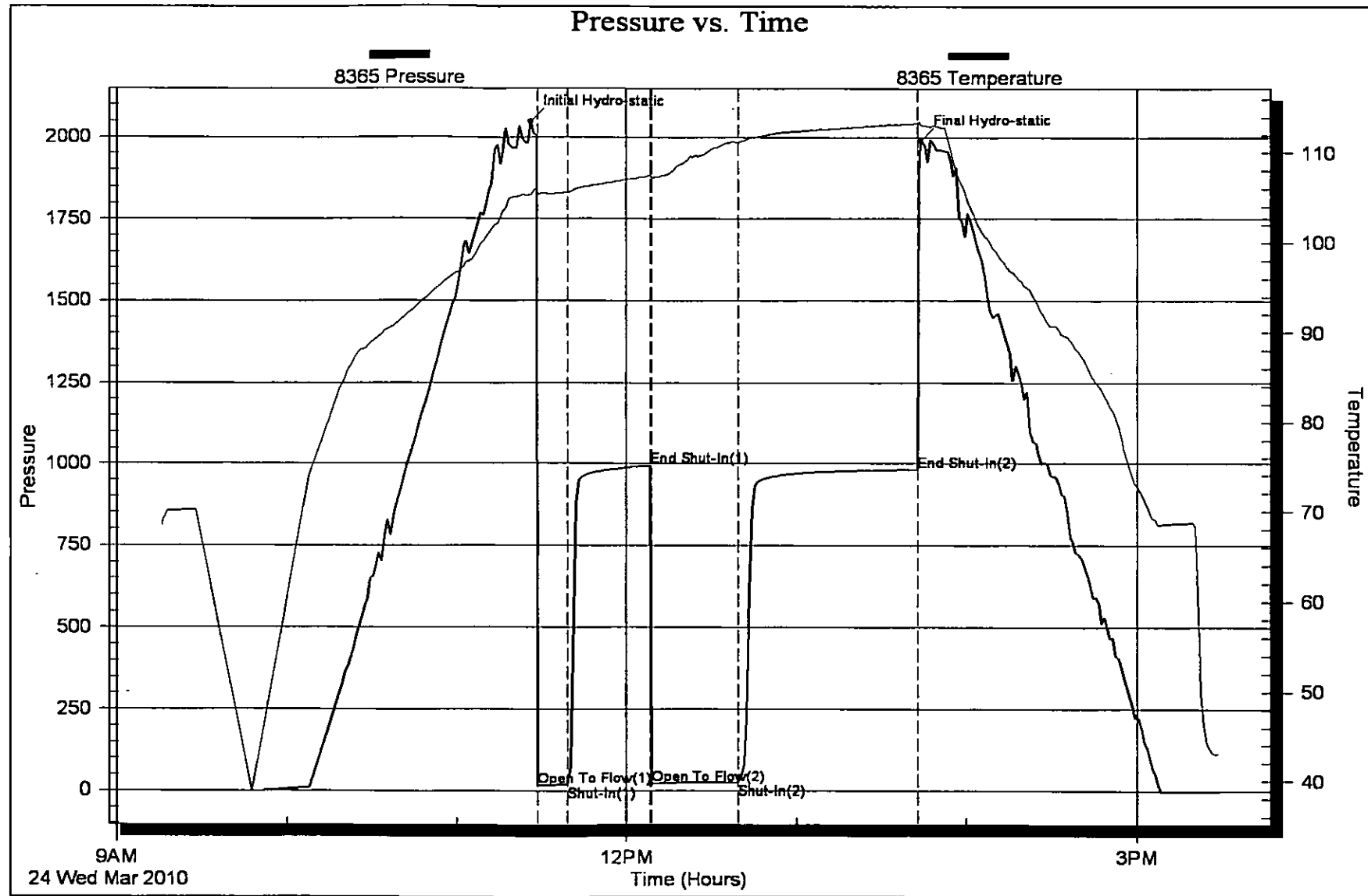
Length ft	Description	Volume bbl
20.00	Mud	0.281

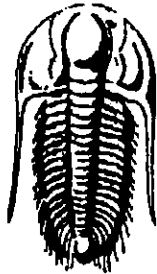
Total Length: 20.00 ft Total Volume: 0.281 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837

ATTN: Mark Shreve

31-15S-26W Gove KS

Curtis "D" #1-31

Start Date: 2010.03.26 @ 12:08:36

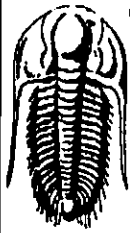
End Date: 2010.03.26 @ 19:51:00

Job Ticket #: 38214 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

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

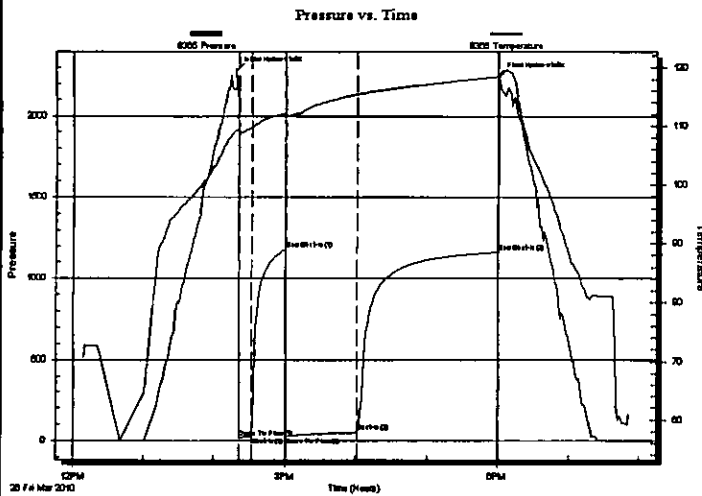
Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38214 DST#: 4
Test Start: 2010.03.26 @ 12:08:36

GENERAL INFORMATION:

Formation: **ft-scott-Miss**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 14:20:31
Time Test Ended: 19:51:00
Interval: **4355.00 ft (KB) To 4460.00 ft (KB) (TVD)**
Total Depth: **4460.00 ft (KB) (TVD)**
Hole Diameter: **7.85 inches** Hole Condition: **Fair**
Reference Elevations: **2572.00 ft (KB)**
2563.00 ft (CF)
KB to GR/CF: **9.00 ft**

Serial #: **8365** Inside
Press@RunDepth: **51.62 psig @ 4360.01 ft (KB)**
Start Date: **2010.03.26** End Date: **2010.03.26**
Start Time: **12:08:36** End Time: **19:51:00**
Capacity: **8000.00 psig**
Last Calib.: **2010.03.26**
Time On Btm: **2010.03.26 @ 14:18:31**
Time Off Btm: **2010.03.26 @ 18:01:30**

TEST COMMENT: IFF-w k bl 1/4" to 2" bl
FFP-w k to a fr bl 1/4" to 6" bl
Times 10-30-60-120
ISIP-surface bl bk , FSP-no bl



PRESSURE SUMMARY

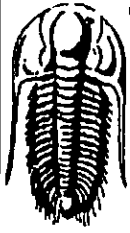
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2282.77	109.27	Initial Hydro-static
2	18.91	108.31	Open To Flow (1)
13	26.58	109.71	Shut-In (1)
42	1180.42	112.10	End Shut-In (1)
43	27.03	111.71	Open To Flow (2)
103	51.62	115.36	Shut-In (2)
222	1161.25	118.48	End Shut-In (2)
223	2246.13	118.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	60'GIP	0.00
40.00	CO	0.56
30.00	OCM 18% O82%M	0.42
30.00	OCM 10% O90%M	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38214 DST#: 4
Test Start: 2010.03.26 @ 12:08:36

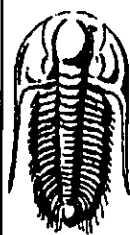
Tool Information

Drill Pipe:	Length: 4362.00 ft	Diameter: 3.80 inches	Volume: 61.19 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 61.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4355.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	105.02 ft			
Tool Length:	126.02 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			4335.00	
Shut In Tool	5.00			4340.00	
Hydraulic tool	5.00			4345.00	
Packer	5.00			4350.00	21.00 Bottom Of Top Packer
Packer	5.00			4355.00	
Stubb	1.00			4356.00	
Perforations	4.00			4360.00	
Recorder	0.01	8365	Inside	4360.01	
Recorder	0.01	6625	Outside	4360.02	
Blank Spacing	95.00			4455.02	
Bullnose	5.00			4460.02	105.02 Bottom Packers & Anchor

Total Tool Length: 126.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38214 DST#: 4
Test Start: 2010.03.26 @ 12:08:36

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 54.00 sec/qt
Water Loss: 8.34 in³
Resistivity: ohm.m
Salinity: 4900.00 ppm
Filter Cake: 2.00 inches

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

Oil API: 36 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

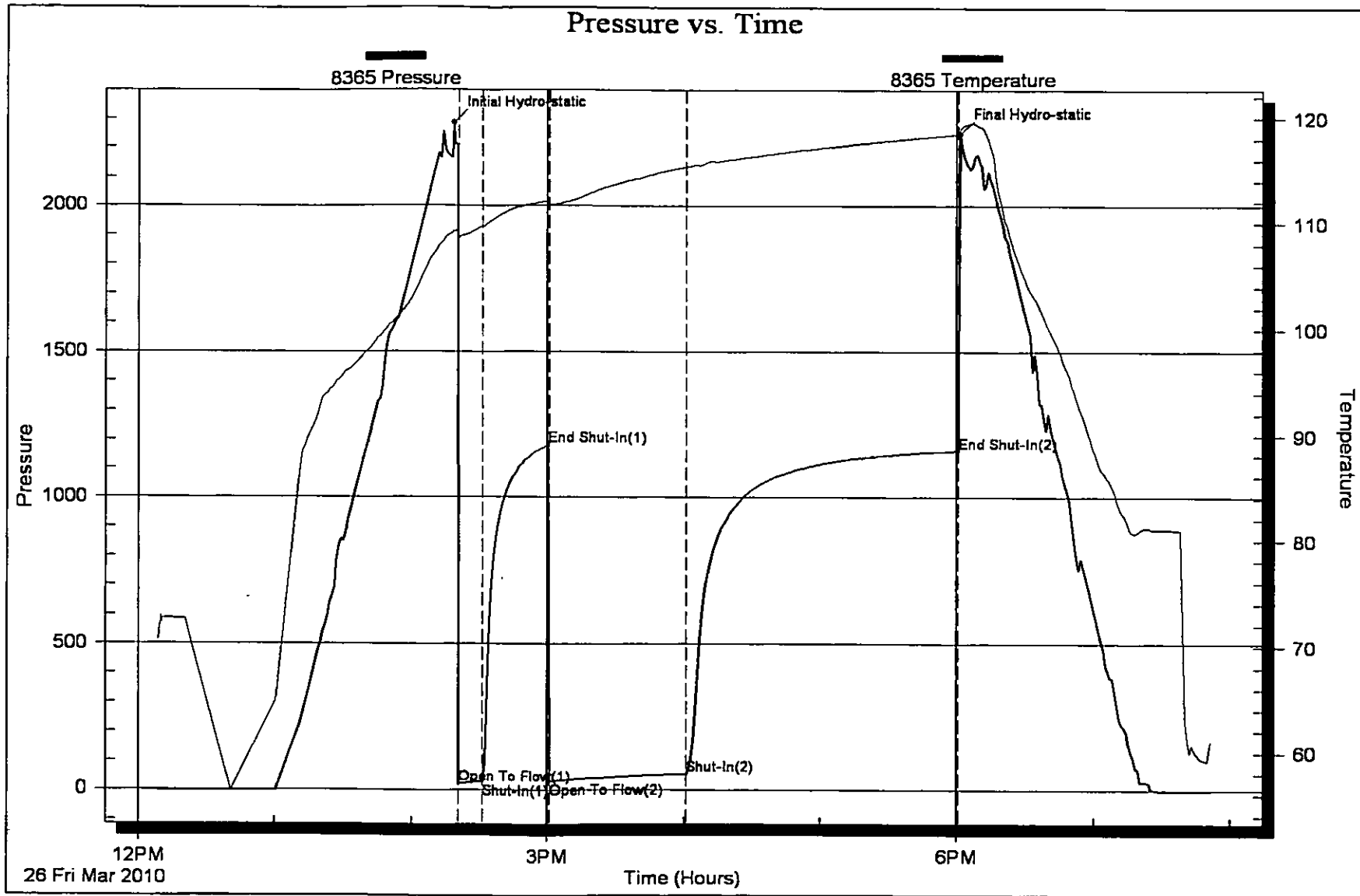
Length ft	Description	Volume bbl
0.00	60'GIP	0.000
40.00	CO	0.561
30.00	OCM 18%O82%M	0.421
30.00	OCM 10%O90%M	0.421

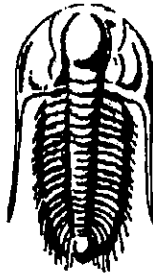
Total Length: 100.00 ft Total Volume: 1.403 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co Inc**

1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837

ATTN: Mark Shreve

31-15S-26W Gove KS

Curtis "D" #1-31

Start Date: 2010.03.27 @ 01:26:23

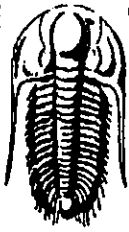
End Date: 2010.03.27 @ 08:19:47

Job Ticket #: 38215 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mull Drilling Co Inc
 1700 N. Waterfront Pkwy
 Bldg. 1200
 Wichita KS 67206-8837
 ATTN: Mark Shreve

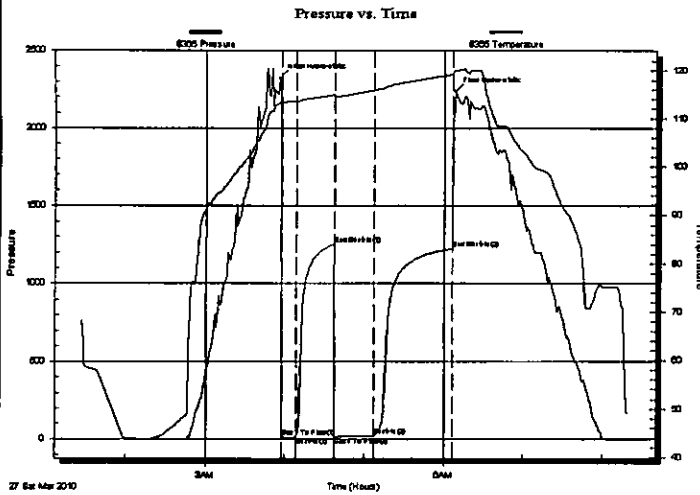
Curtis "D" #1-31
31-15S-26W Gove KS
 Job Ticket: 38215 DST#: 5
 Test Start: 2010.03.27 @ 01:26:23

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: **No** Whipstock: ft (KB)
 Time Tool Opened: 03:57:18
 Time Test Ended: 08:19:47
 Interval: **4460.00 ft (KB) To 4470.00 ft (KB) (TVD)**
 Total Depth: **4470.00 ft (KB) (TVD)**
 Hole Diameter: **7.85 inches** Hole Condition: Fair
 Test Type: **Conventional Bottom Hole**
 Tester: **Ray Schwager**
 Unit No: **42**
 Reference Elevations: **2572.00 ft (KB)**
 2563.00 ft (CF)
 KB to GR/CF: **9.00 ft**

Serial #: **8365** Inside
 Press@RunDepth: **20.95 psig @ 4465.01 ft (KB)**
 Start Date: **2010.03.27** End Date: **2010.03.27**
 Start Time: **01:26:23** End Time: **08:19:47**
 Capacity: **8000.00 psig**
 Last Calib.: **2010.03.27**
 Time On Btm: **2010.03.27 @ 03:55:48**
 Time Off Btm: **2010.03.27 @ 06:08:47**

TEST COMMENT: IFF-surface bl
 FFP-no bl
 Times 10-30-30-60



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2326.22	113.12	Initial Hydro-static
2	13.47	113.09	Open To Flow (1)
13	14.86	113.51	Shut-In(1)
42	1251.78	114.92	End Shut-In(1)
42	15.44	114.13	Open To Flow (2)
72	20.95	115.89	Shut-In(2)
131	1226.38	119.17	End Shut-In(2)
133	2238.01	119.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	CO	0.01
25.00	SOCVM 1%O25%W74%M	0.35

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38215 DST#: 5
Test Start: 2010.03.27 @ 01:26:23

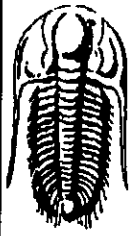
Tool Information

Drill Pipe:	Length: 4459.00 ft	Diameter: 3.80 inches	Volume: 62.55 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 62.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4460.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.02 ft			
Tool Length:	31.02 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			4440.00	
Shut In Tool	5.00			4445.00	
Hydraulic tool	5.00			4450.00	
Packer	5.00			4455.00	21.00 Bottom Of Top Packer
Packer	5.00			4460.00	
Stubb	1.00			4461.00	
Perforations	4.00			4465.00	
Recorder	0.01	8365	Inside	4465.01	
Recorder	0.01	6625	Outside	4465.02	
Perforations	2.00			4467.02	
Bullnose	3.00			4470.02	10.02 Bottom Packers & Anchor

Total Tool Length: 31.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co Inc
1700 N. Waterfront Pkwy
Bldg. 1200
Wichita KS 67206-8837
ATTN: Mark Shreve

Curtis "D" #1-31
31-15S-26W Gove KS
Job Ticket: 38215 DST#: 5
Test Start: 2010.03.27 @ 01:26:23

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	31000 ppm
Viscosity: 67.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.36 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4900.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	CO	0.014
25.00	SOCWM 1%O25%W74%M	0.351

Total Length: 26.00 ft Total Volume: 0.365 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: RW .3 @ 50F

