

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

8/12/12

OPERATOR: License # 30606
Name: Murfin Drilling Company, Inc.
Address 1: 250 N. Water, Suite 300
Address 2: _____
City: Wichita State: KS Zip: 67202 + _____
Contact Person: Leon Rodak
Phone: (316) 267-3241
CONTRACTOR: License # 30606
Name: Murfin Drilling Company, Inc.
Wellsite Geologist: Paul Gunzelman
Purchaser: None

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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 #: _____

<u>04/19/10</u>	<u>04/26/10</u>	<u>04/27/10</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 065-23638-0000

Spot Description: _____

SW NE SW NW Sec. 19 Twp. 10 S. R. 21 East West
1,960 Feet from North / South Line of Section
750 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

County: Graham

Lease Name: Seamac Well #: 1-19

Field Name: Nora

Producing Formation: None

Elevation: Ground: 2256 Kelly Bushing: 2261

Total Depth: 3980 Plug Back Total Depth: None

Amount of Surface Pipe Set and Cemented at: 220 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 #: _____

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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: _____

Title: VP Production Date: 08/12/10

KCC Office Use ONLY

Letter of Confidentiality Received

Date: 8/12/10 - 8/12/12

Confidential Release Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT I II III Approved by: AD Date: 8/19/10

PA

Operator Name: Murfin Drilling Company, Inc. Lease Name: Seamac Well #: 1-19
 Sec. 19 Twp. 10 S. R. 21 East West County: Graham

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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Dual Induction, Compensated Porosity, Microresistivity ✓	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum See Attached List <div style="text-align: center;"> KCC AUG 13 2010 CONFIDENTIAL </div>
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CASING RECORD <input checked="" 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		8 5/8	23#	220	Common	150	3% cc, 2% 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)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Seamac #1-19 1960 FNL 750 FWL Sec. 19-T10S-R21W 2261' KB							Raymond Unit #1-19 2500 FNL 1700 FWL Sec. 19-T10S-R21W 2251' KB	
Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Anhydrite	1742	+519	Flat	1736	+525	+6	1732	+519
B/Anhydrite	1788	+473	-3	1784	+477	+1	1775	+476
Topeka	3288	-1027	flat	3285	-1024	+3	3278	-1027
Heebner	3500	-1239	-3	3498	-1237	-1	3487	-1236
Toronto	3523	-1262	-2	3520	-1259	+1	3511	-1260
Lansing	3538	-1277	-3	3535	-1274	Flat	3525	-1274
Stark	3737	-1476	-4	3732	-1471	+1	3723	-1472
BKC	3771	-1510	-3	3768	-1507	Flat	3758	-1507
Arbuckle	NDE			NDE			3875	-1624
RTD	3980						3990	
LTD				3979			3990	

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PO BOX 31 Russell, KS 67665

PROD COPY INVOICE

Leif acct.

Invoice Number: 122436

Invoice Date: Apr 19, 2010

Page: 1

Voice: (785) 483-3887
 Fax: (785) 483-5566

Bill To:
 Murfin Drlg. Co., Inc.
 250 N. Water
 STE #300
 Wichita, KS 67202

operator pay
mcc
BH

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Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Seamac #1-19	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-01	Russell	Apr 19, 2010	5/19/10

Quantity	Item	Description	Unit Price	Amount
150.00	MAT	Class A Common	13.50	2,025.00
3.00	MAT	Gel	20.25	60.75
5.00	MAT	Chloride	51.50	257.50
75.00	SER	Handling	2.25	168.75
55.00	SER	Mileage 75 sx @.10 per sk per mi	7.50	412.50
1.00	SER	Surface.	991.00	991.00
55.00	SER	Pump truck Mileage	7.00	385.00

Account	Qty	Unit	No	Amount	Description
03600	008	18	3644	4430.55 (1505.18)	Concrete S. Csg.

ALL PRICES ARE NET, PAYABLE
 30 DAYS FOLLOWING DATE OF
 INVOICE. 1 1/2% CHARGED
 THEREAFTER. IF ACCOUNT IS
 CURRENT, TAKE DISCOUNT OF

\$ 1505.18

ONLY IF PAID ON OR BEFORE

May 14, 2010

Subtotal	4,300.50
Sales Tax	130.05
Total Invoice Amount	4,430.55
Payment/Credit Applied	
TOTAL	4,430.55

OKM

Disc
1505.18
2925.37

ALLIED CEMENTING CO., LLC. 33918

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

SERVICE POINT:
Russell KS

DATE <u>4-19-10</u>	SEC. <u>19</u>	TWP. <u>10</u>	RANGE <u>21</u>	CALLED OUT	ON LOCATION	JOB START <u>10:00pm</u>	JOB FINISH <u>10:30pm</u>
LEASE <u>Seamac</u>	WELL # <u>1-19</u>	LOCATION <u>Red Line & Bogue Rd Jct. South</u>			COUNTY <u>Graham</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			<u>to Rd C. 1 West 1/2 North 1/4 East North into.</u>				

CONTRACTOR Murfin Drilling Rig #8

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 220'

CASING SIZE 8 5/8 DEPTH 220'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15'

PERFS. _____

DISPLACEMENT 13 Bbl

OWNER _____

CEMENT AMOUNT ORDERED 150 com 3% cc 2% Gel

EQUIPMENT _____

PUMP TRUCK # 417 CEMENTER John Roberts
HELPER Matt

BULK TRUCK # 410 DRIVER Ron

BULK TRUCK # _____ DRIVER _____

COMMON	<u>150</u>	@	<u>13.50</u>	<u>2025.00</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.25</u>	<u>60.75</u>
CHLORIDE	<u>5</u>	@	<u>51.50</u>	<u>257.50</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>75</u>	@	<u>2.25</u>	<u>168.75</u>
MILEAGE	<u>110/56/mile</u>			<u>412.50</u>
TOTAL				<u>2924.50</u>

REMARKS:

Est. Circulation

Mix 150 sk cement

Displace w/ 13 Bbl H2O

Cement Did Circulate!

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			<u>991.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>55</u>	@	<u>7.00</u>
MANIFOLD		@	
		@	
		@	
TOTAL <u>1376.00</u>			

CHARGE TO: Murfin Drilling

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		
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.

SALES TAX (If Any) _____

TOTAL CHARGES 2924.50

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME Rodney Farr

SIGNATURE Rodney Farr

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PO BOX 31 Russell, KS 67665

INVOICE

Invoice Number: 122543

Invoice Date: Apr 27, 2010

Page: 1

Voice: (785) 483-3887
Fax: (785) 483-5566

PROD COPY

Bill To:
Murfin Drig. Co., Inc.
250 N. Water
STE #300
Wichita, KS 67202

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*operator pay
MOC
Bm*

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Seamac #1-19	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-03	Great Bend	Apr 27, 2010	5/27/10

Quantity	Item	Description	Unit Price	Amount
147.00	MAT	Class A Common	13.50	1,984.50
98.00	MAT	Pozmix	7.55	739.90
8.00	MAT	Gel	20.25	162.00
61.00	MAT	Flo Seal	2.45	149.45
122.00	SER	Handling	2.25	274.50
55.00	SER	Mileage 122 sx @ .10 per sk per mi	12.20	671.00
1.00	SER	Plug to Abandon ✓	990.00	990.00
55.00	SER	Pump Truck Mielage	7.00	385.00

Amount	Hig	L	No.	Amount	Description
03600	008	20	3644	5653.63	PTA
				(1844.72)	

Subtotal	5,356.35
Sales Tax	297.28
Total Invoice Amount	5,653.63
Payment/Credit Applied	
TOTAL	5,653.63

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ ~~1339.00~~
1874.72

*per
Judy*

ONLY IF PAID ON OR BEFORE
May 22, 2010

1874.72
3778.91

ALLIED CEMENTING CO., LLC. 036373

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

SERVICE POINT:
Great Bend

DATE <u>4-27-10</u>	SEC. <u>19</u>	TWP. <u>10</u>	RANGE <u>21</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>3:30 AM</u>
LEASE <u>Sinmac</u>		WELL # <u>1-19</u>	LOCATION <u>Wakenney N to Redline rd</u>		COUNTY <u>Graham</u>	STATE <u>Ks.</u>	
<input checked="" type="radio"/> OLD <input type="radio"/> NEW (Circle one)		LOCATION <u>W to Boyce Rd. Sta Cal 1 1/2 N 1/4 E N. 1/2</u>					

CONTRACTOR Martin Drilling Rig # 8 OWNER _____

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. 3980'

CASING SIZE _____ DEPTH _____

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2 DEPTH 3955'

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT _____

CEMENT	AMOUNT ORDERED	<u>245</u>	<u>60/40</u>	<u>4.861</u>
		<u>14 # Fl.</u>		
COMMON	<u>147</u>	@ <u>13.50</u>	<u>1984.50</u>	
POZMIX	<u>98</u>	@ <u>7.55</u>	<u>739.90</u>	
GEL	<u>8</u>	@ <u>20.25</u>	<u>162.00</u>	
CHLORIDE		@		
ASC		@		
	<u>Flo Seal</u>	<u>61</u>	@ <u>2.45</u>	<u>149.45</u>
			@	
			@	
			@	
			@	
			@	
HANDLING	<u>122</u>	@ <u>7.25</u>	<u>874.50</u>	
MILEAGE	<u>110/54/16</u>		<u>671.00</u>	
			TOTAL	<u>3981.35</u>

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EQUIPMENT

PUMP TRUCK CEMENTER Shane

181 HELPER Alvin

BULK TRUCK

596-306 DRIVER Carlene

BULK TRUCK

_____ DRIVER _____

REMARKS:

3955' 25 sks.

1265' 25 sks

956' 100 sks

270' 40 sks

40' 10 sks

Rat Hole 30 sks

Mouse Hole 15 sks

SERVICE

DEPTH OF JOB _____

PUMP TRUCK CHARGE _____ 990.00

EXTRA FOOTAGE @ _____

MILEAGE 55 @ 7.00 385.00

MANIFOLD @ _____

_____ @ _____

_____ @ _____

TOTAL 1375.00

CHARGE TO: Martin Drilling

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

_____ @ _____

_____ @ _____

Dry Hole Plug @ _____ N-C

_____ @ _____

_____ @ _____

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.

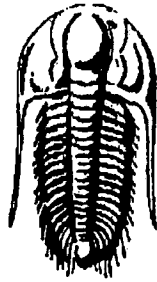
SALES TAX (If Any) _____

TOTAL CHARGES 3981.35

DISCOUNT 0 IF PAID IN 30 DAYS

PRINTED NAME Rodney Fair

SIGNATURE Rodney Fair



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

**KCC
AUG 12 2010
CONFIDENTIAL**

ATTN: Paul Gunzelman

19-10s-21w Graham KS

Seamac #1-19

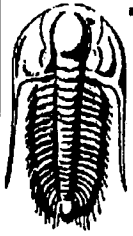
Start Date: 2010.04.23 @ 22:22:56

End Date: 2010.04.24 @ 05:46:56

Job Ticket #: 37139 DST #: 1

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Company, Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Seamac #1-19

19-10s-21w Graham KS

Job Ticket: 37139 **DST#: 1**

Test Start: 2010.04.23 @ 22:22:56

GENERAL INFORMATION:

Formation: **LKC-"A-D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:05:26
 Time Test Ended: 05:46:56
 Interval: **3530.00 ft (KB) To 3606.00 ft (KB) (TVD)**
 Total Depth: **3606.00 ft (KB) (TVD)**
 Hole Diameter: **7.80 inches** Hole Condition: **Good**
 Test Type: **Conventional Bottom Hole**
 Tester: **Jason McLemore**
 Unit No: **32**
 Reference Elevations: **2261.00 ft (KB)**
2256.00 ft (CF)
 KB to GR/CF: **5.00 ft**

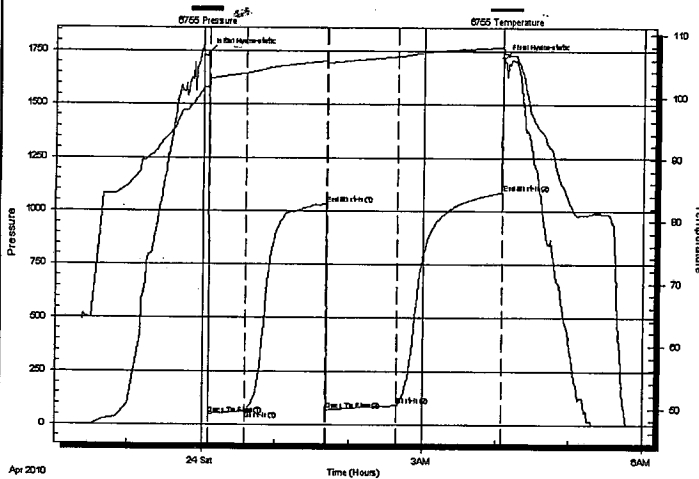
Serial #: 6755

Inside

Press@RunDepth: 91.29 psig @ 3598.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.04.23 End Date: 2010.04.24 Last Calib.: 2010.04.24
 Start Time: 22:22:58 End Time: 05:46:56 Time On Btm: 2010.04.24 @ 00:04:56
 Time Off Btm: 2010.04.24 @ 04:05:26

TEST COMMENT: IFP-Fair Blow ,Built to 4"
 ISI-Dead
 FFP-Fair Blow ,Built to 10"
 FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

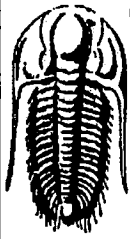
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1739.34	101.88	Initial Hydro-static
1	47.02	102.45	Open To Flow (1)
31	64.77	103.81	Shut-In(1)
96	1034.06	105.80	End Shut-In(1)
97	67.99	105.43	Open To Flow (2)
154	91.29	106.53	Shut-In(2)
240	1089.38	108.03	End Shut-In(2)
241	1719.77	107.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCM-15%O-85%M	0.30
55.00	Gassy Oil-15%G-85%Oil	0.27
0.00	90' Gas In Pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS

Job Ticket: 37139 **DST#: 1**

Test Start: 2010.04.23 @ 22:22:56

Tool Information

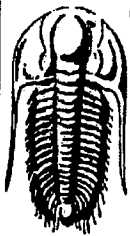
Drill Pipe:	Length: 3354.00 ft	Diameter: 3.80 inches	Volume: 47.05 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 40000.00 lb
			<u>Total Volume: 47.94 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3530.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.00 ft			
Tool Length:	99.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Change Over Sub	1.00			3508.00	
Shut In Tool	5.00			3513.00	
Hydraulic tool	5.00			3518.00	
Safety Joint	2.00			3520.00	
Packer	5.00			3525.00	23.00 Bottom Of Top Packer
Packer	5.00			3530.00	
Stubb	1.00			3531.00	
Perforations	3.00			3534.00	
Change Over Sub	1.00			3535.00	
Blank Spacing	62.00			3597.00	
Change Over Sub	1.00			3598.00	
Recorder	0.00	6755	Inside	3598.00	
Recorder	0.00	8360	Outside	3598.00	
Perforations	5.00			3603.00	
Bullnose	3.00			3606.00	76.00 Bottom Packers & Anchor

Total Tool Length: 99.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS
Job Ticket: 37139 **DST#: 1**
Test Start: 2010.04.23 @ 22:22:56

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	35 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCM-15%O-85%M	0.295
55.00	Gassy Oil-15%G-85%Oil	0.270
0.00	90' Gas In Pipe	0.000

Total Length: 115.00 ft Total Volume: 0.565 bbl

Num Fluid Samples: 0

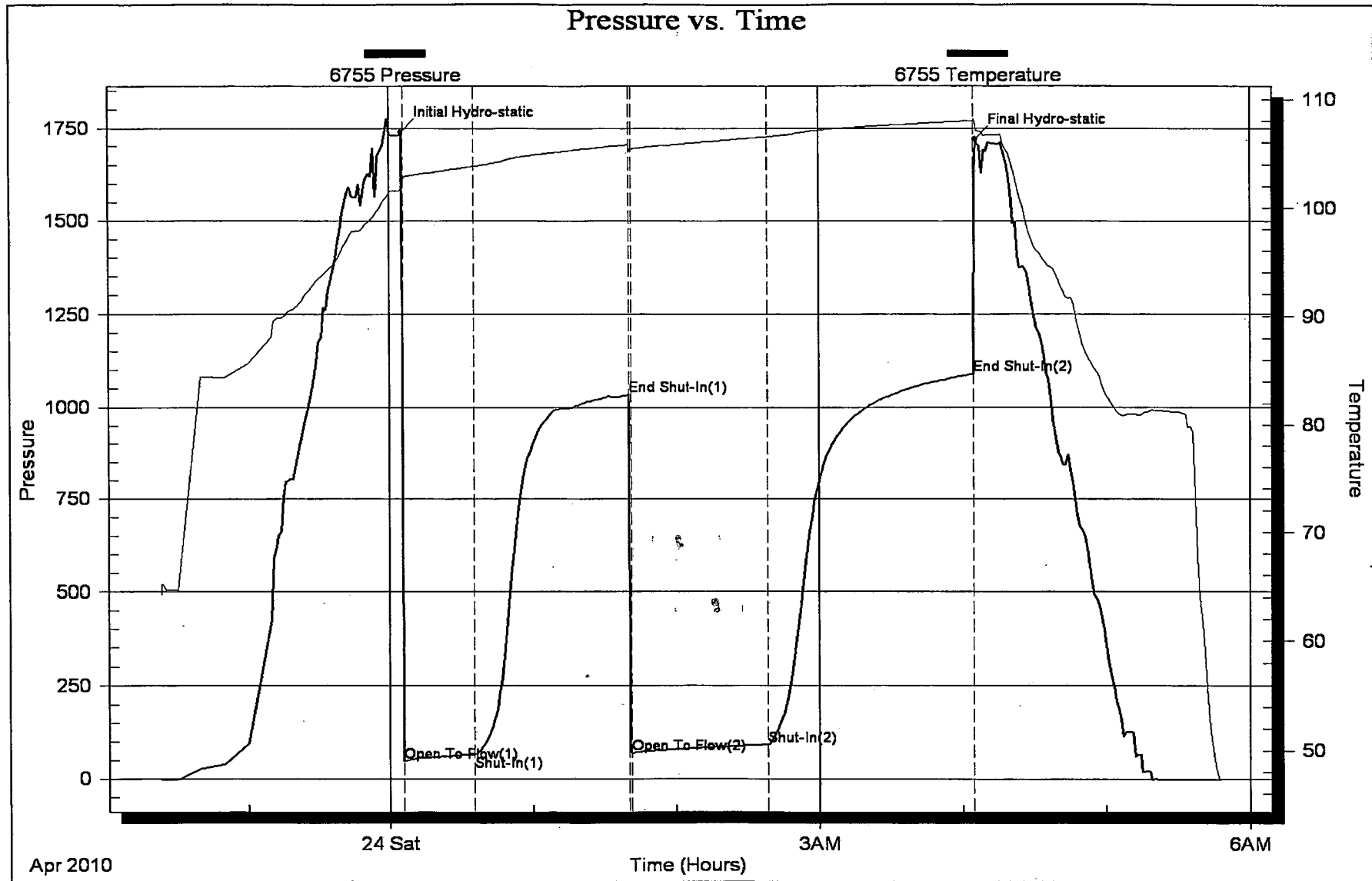
Num Gas Bombs: 0

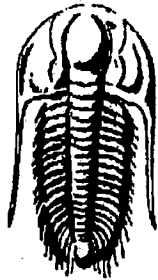
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

19-10s-21w Graham KS

Seamac #1-19

Start Date: 2010.04.24 @ 16:30:53

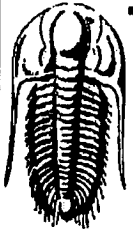
End Date: 2010.04.24 @ 22:55:53

Job Ticket #: 37140 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

Murfin Drilling Company, Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Seamac #1-19

19-10s-21w Graham KS

Job Ticket: 37140

DST#: 2

Test Start: 2010.04.24 @ 16:30:53

GENERAL INFORMATION:

Formation: **LKC-"G-H"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:09:53

Time Test Ended: 22:55:53

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3630.00 ft (KB) To 3696.00 ft (KB) (TVD)**

Total Depth: 3696.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2261.00 ft (KB)

2256.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6755 Inside

Press@RunDepth: 33.26 psig @ 3668.00 ft (KB)

Start Date: 2010.04.24

End Date: 2010.04.24

Start Time: 16:30:55

End Time: 22:55:53

Capacity: 8000.00 psig

Last Calib.: 2010.04.24

Time On Btm: 2010.04.24 @ 19:09:23

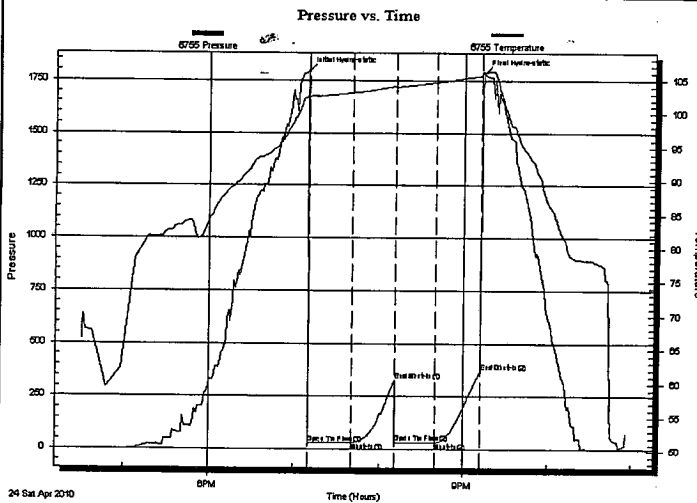
Time Off Btm: 2010.04.24 @ 21:13:23

TEST COMMENT: IFF-Weak Blow ,Deadin 12 Min.

ISI-Dead

FFP-Dead

FSL-Dead



PRESSURE SUMMARY

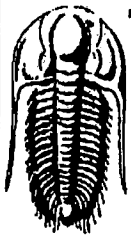
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1791.31	102.82	Initial Hydro-static
1	29.95	102.47	Open To Flow (1)
31	31.57	103.13	Shut-In(1)
62	325.55	104.12	End Shut-In(1)
62	32.11	103.97	Open To Flow (2)
91	33.26	104.72	Shut-In(2)
123	369.03	105.68	End Shut-In(2)
124	1783.52	105.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Mud W/Oil Specks	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS
Job Ticket: 37140 **DST#: 2**
Test Start: 2010.04.24 @ 16:30:53

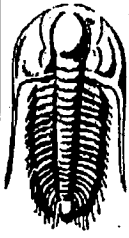
Tool Information

Drill Pipe:	Length: 3450.00 ft	Diameter: 3.80 inches	Volume: 48.39 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume:	49.28 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3630.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	89.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3608.00	
Shut In Tool	5.00			3613.00	
Hydraulic tool	5.00			3618.00	
Safety Joint	2.00			3620.00	
Packer	5.00			3625.00	23.00 Bottom Of Top Packer
Packer	5.00			3630.00	
Stubb	1.00			3631.00	
Perforations	3.00			3634.00	
Change Over Sub	1.00			3635.00	
Blank Spacing	32.00			3667.00	
Change Over Sub	1.00			3668.00	
Recorder	0.00	6755	Inside	3668.00	
Recorder	0.00	8360	Outside	3668.00	
Perforations	25.00			3693.00	
Bullnose	3.00			3696.00	66.00 Bottom Packers & Anchor

Total Tool Length: 89.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS

Job Ticket: 37140 **DST#: 2**

Test Start: 2010.04.24 @ 16:30:53

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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

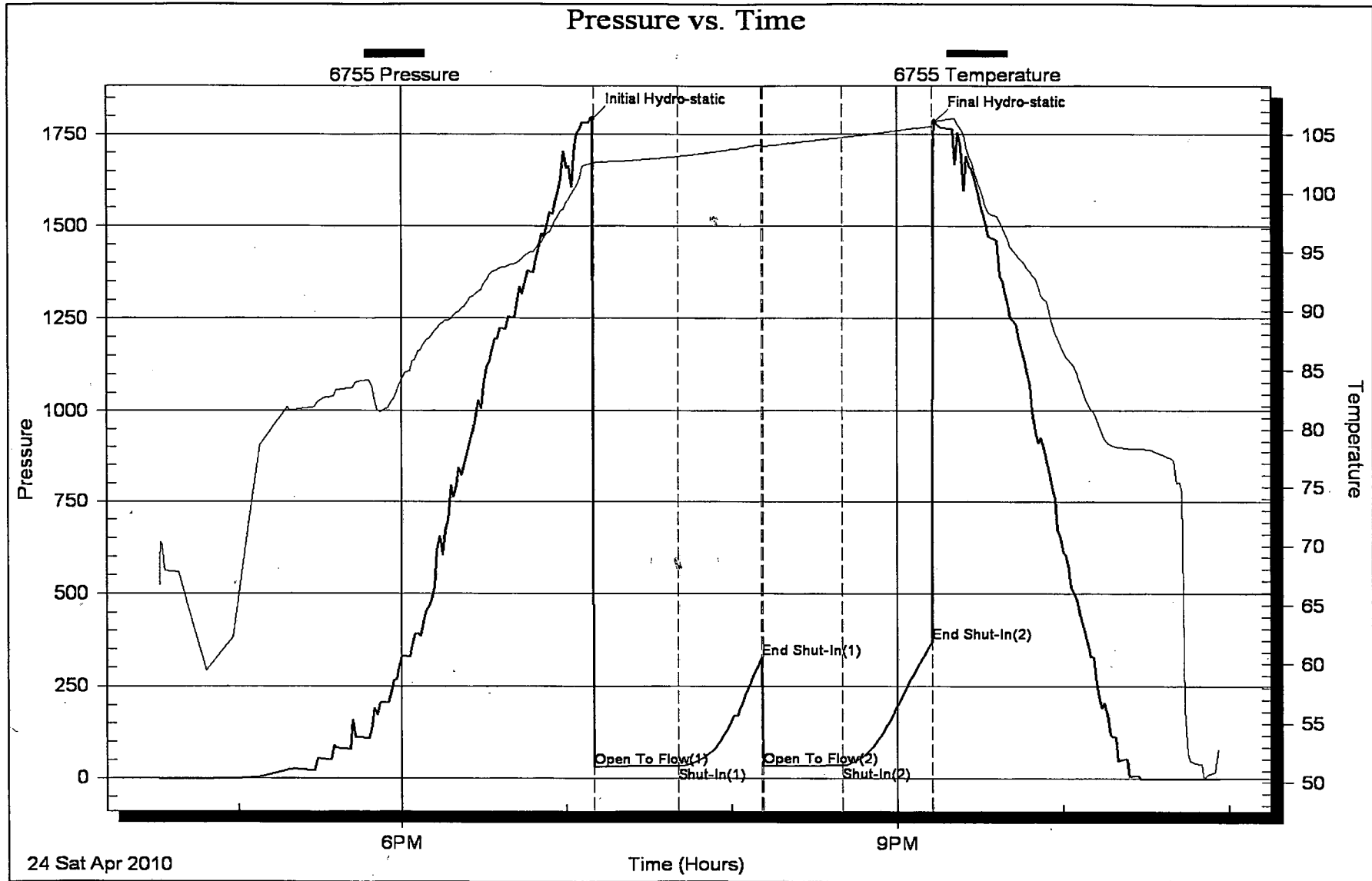
Length ft	Description	Volume bbl
3.00	Mud W/Oil Specks	0.015

Total Length: 3.00 ft Total Volume: 0.015 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company, Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

19-10s-21w Graham KS

Seamac #1-19

Start Date: 2010.04.25 @ 08:59:06

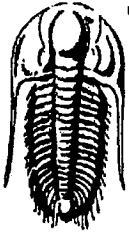
End Date: 2010.04.25 @ 12:36:36

Job Ticket #: 37141 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

Murfin Drilling Company, Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Seamac #1-19

19-10s-21w Graham KS

Job Ticket: 37141 **DST#: 3**

Test Start: 2010.04.25 @ 08:59:06

GENERAL INFORMATION:

Formation: **LKC-"I-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 12:36:36

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3700.00 ft (KB) To 3771.00 ft (KB) (TVD)**

Total Depth: 3771.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2261.00 ft (KB)

2256.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6755 Inside

Press@RunDepth: psig @ 3737.00 ft (KB)

Start Date: 2010.04.25

End Date:

2010.04.25

Capacity: 8000.00 psig

Last Calib.: 2010.04.25

Start Time: 08:59:08

End Time:

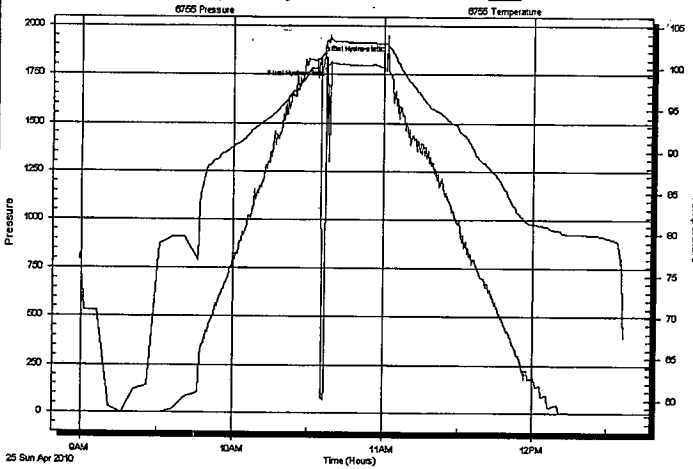
12:36:36

Time On Btm: 2010.04.25 @ 10:33:36

Time Off Btm: 2010.04.25 @ 10:39:06

TEST COMMENT: IFP-Packer Failure,pull tool

Pressure vs. Time



PRESSURE SUMMARY

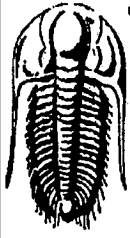
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1822.52	100.07	Initial Hydro-static
6	1808.80	103.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
400.00	Drilling Mud	3.97

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS
Job Ticket: 37141 **DST#: 3**
Test Start: 2010.04.25 @ 08:59:06

Tool Information

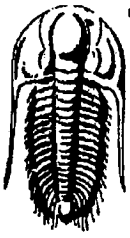
Drill Pipe:	Length: 3514.00 ft	Diameter: 3.80 inches	Volume: 49.29 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 40000.00 lb
			<u>Total Volume: 50.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3700.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	94.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3678.00	
Shut In Tool	5.00			3683.00	
Hydraulic tool	5.00			3688.00	
Safety Joint	2.00			3690.00	
Packer	5.00			3695.00	23.00 Bottom Of Top Packer
Packer	5.00			3700.00	
Stubb	1.00			3701.00	
Perforations	3.00			3704.00	
Change Over Sub	1.00			3705.00	
Blank Spacing	31.00			3736.00	
Change Over Sub	1.00			3737.00	
Recorder	0.00	6755	Inside	3737.00	
Recorder	0.00	8360	Outside	3737.00	
Perforations	31.00			3768.00	
Bullnose	3.00			3771.00	71.00 Bottom Packers & Anchor

Total Tool Length: 94.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS
Job Ticket: 37141 **DST#: 3**
Test Start: 2010.04.25 @ 08:59:06

Mud and Cushion Information

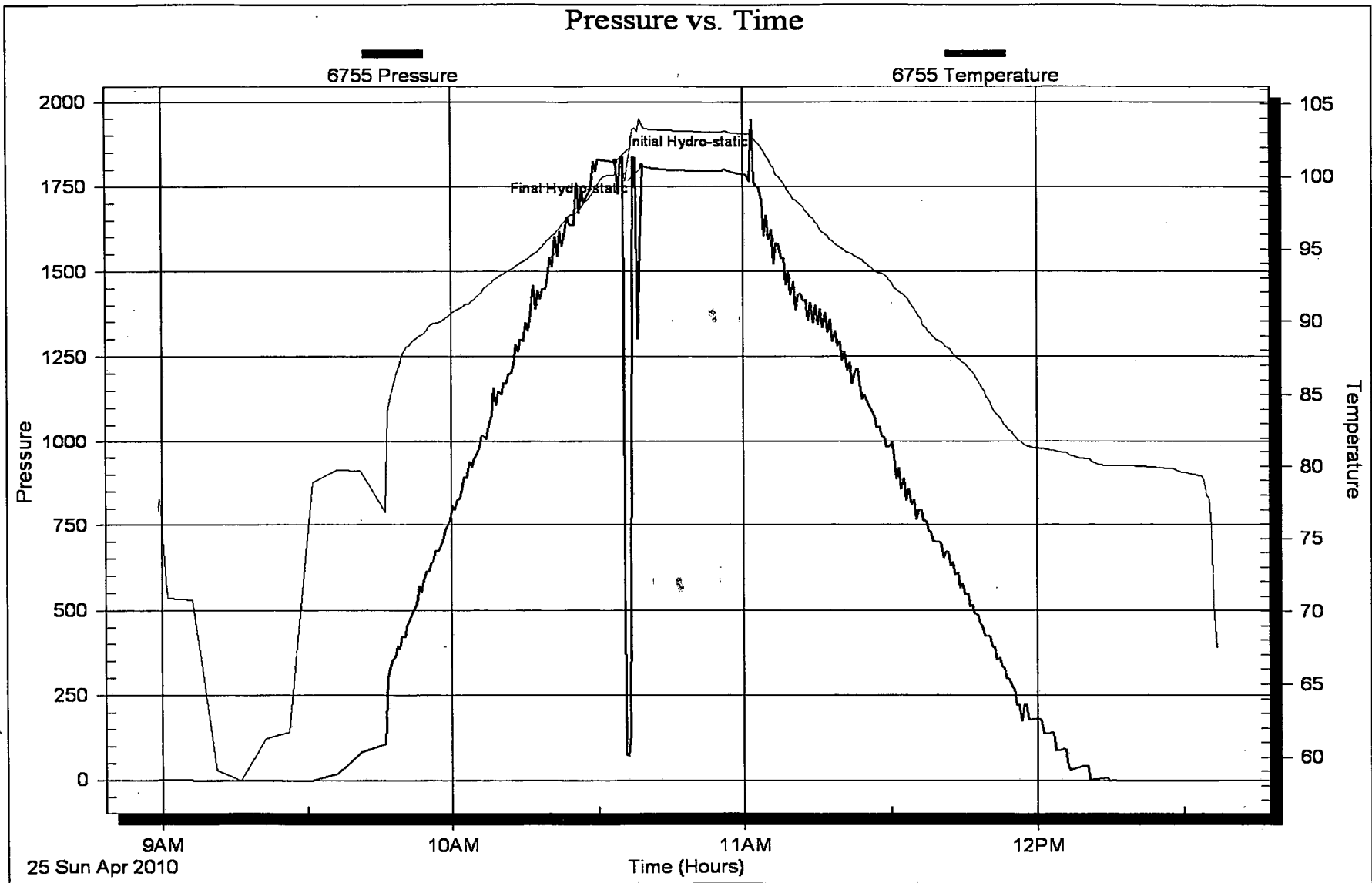
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5400.00 ppm			
Filter Cake: inches			

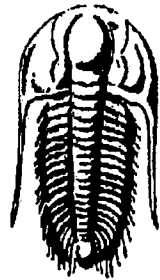
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
400.00	Drilling Mud	3.971

Total Length: 400.00 ft Total Volume: 3.971 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: **Murfin Drilling Company, Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

19-10s-21w Graham KS

Seamac #1-19

Start Date: 2010.04.25 @ 12:50:50

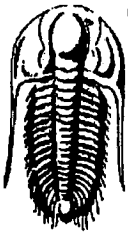
End Date: 2010.04.25 @ 20:32:20

Job Ticket #: 37142 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

Murfin Drilling Company, Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Seamac #1-19

19-10s-21w Graham KS

Job Ticket: 37142 **DST#: 4**

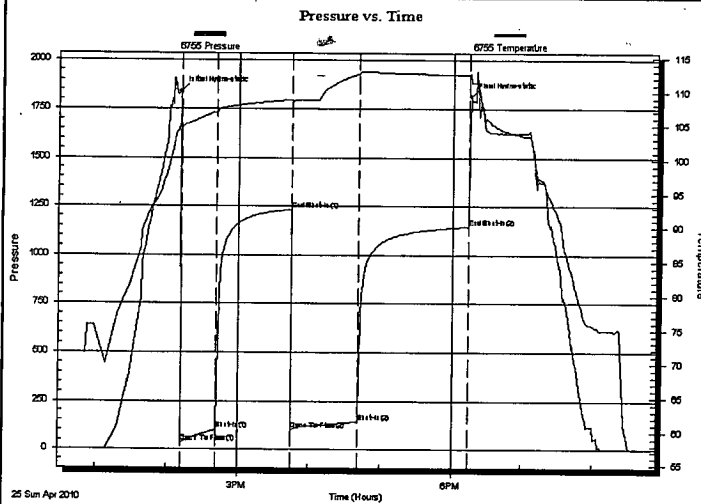
Test Start: 2010.04.25 @ 12:50:50

GENERAL INFORMATION:

Formation: **LKC-"I-L"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:11:50
 Time Test Ended: 20:32:20
 Interval: **3694.00 ft (KB) To 3771.00 ft (KB) (TVD)**
 Total Depth: **3771.00 ft (KB) (TVD)**
 Hole Diameter: **7.80 inches** Hole Condition: Good
 Test Type: Conventional Bottom Hole
 Tester: Jason McLemore
 Unit No: 32
 Reference Elevations: 2261.00 ft (KB)
 2256.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6755 Inside
 Press@RunDepth: 141.35 psig @ 3737.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.04.25 End Date: 2010.04.25 Last Calib.: 2010.04.25
 Start Time: 12:50:52 End Time: 20:32:20 Time On Btm: 2010.04.25 @ 14:11:20
 Time Off Btm: 2010.04.25 @ 18:15:20

TEST COMMENT: IFF-Fair Blow ,Built to 6"
 ISI-Dead
 FFP-Fair Blow ,Built to 7"
 FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1841.05	105.30	Initial Hydro-static
1	35.63	104.81	Open To Flow (1)
31	100.87	106.93	Shut-In(1)
94	1232.11	108.82	End Shut-In(1)
94	104.11	108.33	Open To Flow (2)
150	141.35	112.60	Shut-In(2)
243	1145.62	112.48	End Shut-In(2)
244	1815.57	111.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
210.00	Muddy Water-65%W-35%M	1.31

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS
Job Ticket: 37142 **DST#: 4**
Test Start: 2010.04.25 @ 12:50:50

Tool Information

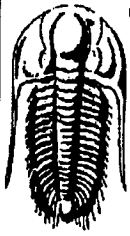
Drill Pipe:	Length: 3514.00 ft	Diameter: 3.80 inches	Volume: 49.29 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 42000.00 lb
			<u>Total Volume: 50.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3694.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.00 ft			
Tool Length:	100.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3672.00	
Shut In Tool	5.00			3677.00	
Hydraulic tool	5.00			3682.00	
Safety Joint	2.00			3684.00	
Packer	5.00			3689.00	23.00 Bottom Of Top Packer
Packer	5.00			3694.00	
Stubb	1.00			3695.00	
Perforations	9.00			3704.00	
Change Over Sub	1.00			3705.00	
Blank Spacing	31.00			3736.00	
Change Over Sub	1.00			3737.00	
Recorder	0.00	6755	Inside	3737.00	
Recorder	0.00	8360	Outside	3737.00	
Perforations	31.00			3768.00	
Bullnose	3.00			3771.00	77.00 Bottom Packers & Anchor

Total Tool Length: 100.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company, Inc.

Seamac #1-19

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

19-10s-21w Graham KS
Job Ticket: 37142 **DST#: 4**
Test Start: 2010.04.25 @ 12:50:50

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:	30000 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	6.79 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
210.00	Muddy Water-65%W-35%M	1.306

Total Length: 210.00 ft Total Volume: 1.306 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .256 @62 = 30000 ppm chlorides

