

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

12/29/10

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: Tom Funk
Purchaser: None

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Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SLOW
- 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 #: _____

11/06/10	11/15/10	11/16/10
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 109-20954-0000

Spot Description: _____

SW SE NE NE Sec. 13 Twp. 12 S. R. 35 East West

1100 Feet from North / South Line of Section

500 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: Logan

Lease Name: Schertz Well #: 1-13

Field Name: Wildcat

Producing Formation: None

Elevation: Ground: 3195 Kelly Bushing: 3206

Total Depth: 4835 Plug Back Total Depth: None

Amount of Surface Pipe Set and Cemented at: 256 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 #: _____

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: VP Production Date: 12/28/10

KCC Office Use ONLY RECEIVED

- Letter of Confidentiality Received
Date: 12/29/10 - 12/29/10 **DEC 30 2010**
- Confidential Release Date: _____
- Wireline Log Received **KCC WICHITA**
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: NS Date: 1-12/11

Operator Name: Murfin Drilling Company, Inc. Lease Name: Schertz Well #: 1-13
 Sec. 13 Twp. 12 S. R. 35 East West County: Logan

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 DEC 29 2010 CONFIDENTIAL </div>
--	--

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#	256	Common	185	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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
---	---	--

Schertz #1-13 1100' FNL 500' FEL Sec. 13-T12S-R35W 3206' KB							Moss #1 2100' FNL 2100' FWL Sec. 18-T12S-R34W 3224' KB	
Formation	SampleTops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Anhydrite	2640	+566	+20	2642	+564	+18	2678	+546
B/Anhydrite	2664	+542	+20	2665	+541	+19	2702	+522
Topeka	3816	-610	+16	3812	-606	+20	3850	-626
Heebner	4037	-831	+28	4037	-831	+28	4083	-859
Lansing	4080	-874	+25	4078	-872	+27	4123	-899
Stark	4317	-1111	+32	4321	-1115	+28	4367	-1143
Marmaton	4451	-1245	+31	4460	-1254	+22	4500	-1276
Up Pawnee	4517	-1311	+31	4519	-1313	+29	4566	-1342
Mississippi	4767	-1561	+39	4776	-1570	+30	4824	-1600
RTD	4835						4917	
LTD				4836			4923	

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PO BOX 31 Russell, KS 67665

INVOICE

Invoice Number: 125187

Invoice Date: Nov 6, 2010

Page: 1

PROD COPY

Voice: (785) 483-3887

Fax: (785) 483-5566

Bill To:

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

*operator Pay
MOC*

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Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Shertz #1-13	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Nov 6, 2010	12/6/10

Quantity	Item	Description	Unit Price	Amount
185.00	MAT	Class A Common	15.45	2,858.25
3.00	MAT	Gel	20.80	62.40
7.00	MAT	Chloride	58.20	407.40
195.00	SER	Handling	2.40	468.00
20.00	SER	Mileage 195 sx @ .10 per sk per mi	19.50	390.00
1.00	SER	Surface	1,018.00	1,018.00
20.00	SER	Pump Truck Mileage	7.00	140.00

Account	Use Tag	W. T.	No.	Amount	Description
<i>OBV00</i>	<i>02245</i>	<i>3794</i>	<i>5587.00</i>	<i>(1870.41)</i>	<i>Cement S. Csg.</i>

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

\$ 1870.41

ONLY IF PAID ON OR BEFORE
Dec 1, 2010

Subtotal	5,344.05
Sales Tax	242.95
Total Invoice Amount	5,587.00
Payment/Credit Applied	
TOTAL	5,587.00

- 1870.41
371659

ALLIED CEMENTING CO., LLC. 035606

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

SERVICE POINT:

0911215
11-7-10

DATE <u>11-6-10</u>	SEC. <u>13</u>	TWP. <u>25</u>	RANGE <u>35W</u>	CALLED OUT	ON LOCATION <u>4:30pm</u>	JOB START <u>3:00am</u>	JOB FINISH <u>3:30am</u>
LEASE <u>Shretz</u>	WELL # <u>1-13</u>	LOCATION <u>Passivity 55 415.00</u>			COUNTY <u>Logan</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Murphy + 22
 TYPE OF JOB Surf
 HOLE SIZE 12 1/4 T.D. 258'
 CASING SIZE 8 1/8 DEPTH 257'
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. 15'
 PERFS.
 DISPLACEMENT 15.4

OWNER
 CEMENT
 AMOUNT ORDERED 185 com 390cc
290 gel

EQUIPMENT
 PUMP TRUCK CEMENTER Fuzzy
 # 434 HELPER Rilly
 BULK TRUCK
 # 404 DRIVER LaRene
 BULK TRUCK
 # DRIVER

COMMON	<u>185</u>	@ <u>15.45</u>	<u>2858.25</u>
POZMIX		@	
GEL	<u>3</u>	@ <u>20.80</u>	<u>62.40</u>
CHLORIDE	<u>7</u>	@ <u>58.20</u>	<u>407.40</u>
ASC		@	
HANDLING	<u>195</u>	@ <u>2.40</u>	<u>468.00</u>
MILEAGE	<u>10.5 km</u>		<u>390.00</u>
TOTAL			<u>4186.05</u>

REMARKS:

Cement did circulate
Sub complete @ 3:45am
Thanks Fuzzy + crew

SERVICE

DEPTH OF JOB	<u>257'</u>		
PUMP TRUCK CHARGE	<u>1018.00</u>		
EXTRA FOOTAGE	@		
MILEAGE	<u>20</u>	@ <u>7.00</u>	<u>140.00</u>
MANIFOLD	@		
TOTAL			<u>1658.00</u>

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CHARGE TO: Murphy Dals.
 STREET
 CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
TOTAL			

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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 Kelly Wilson
 SIGNATURE Kelly Wilson

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



PO BOX 31 Russell, KS 67665

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

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

INVOICE

Invoice Number: 125328
 Invoice Date: Nov 16, 2010
 Page: 1

PROD COPY

*operator pay
 moc / or*

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Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Schertz #1-13	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-03	Oakley	Nov 16, 2010	12/16/10

Quantity	Item	Description	Unit Price	Amount
132.00	MAT	Class A Common	15.45	2,039.40
88.00	MAT	Pozmix	8.00	704.00
8.00	MAT	Gel	20.80	166.40
55.00	MAT	Flo Seal	2.50	137.50
230.00	SER	Handling	2.40	552.00
20.00	SER	Mileage 230 sx @ .10 per sk per mi	23.00	460.00
1.00	SER	Plug to Abandon	1,185.00	1,185.00
20.00	SER	Pump Truck Mileage	7.00	140.00
1.00	EQP	8.5/8 Dry Hole Plug	40.00	40.00

Account	Unit	W	Amount	Description
03000	022	W	37945820.27	PTA
			(1898.51)	
			050	

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

\$ 1898.51

ONLY IF PAID ON OR BEFORE

Dec 11, 2010

Subtotal	5,424.30
Sales Tax	395.97
Total Invoice Amount	5,820.27
Payment/Credit Applied	
TOTAL	5,820.27

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(1898.51)
3921.76

ALLIED CFMENTING CO., LLC. 040839

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

SERVICE POINT:
Oakley

DATE <u>12-16-10</u>	SEC. <u>13</u>	TWP. <u>12S</u>	RANGE <u>35W</u>	CALLED OUT	ON LOCATION	JOB START <u>7:20 AM</u>	JOB FINISH <u>8:30 AM</u>
LEASE <u>Schertz</u>	WELL # <u>1-13</u>	LOCATION <u>Page city 5s</u>	COUNTY <u>Logan</u>	STATE <u>KS</u>			
OLD OR <input checked="" type="radio"/> NEW (Circle one)			<u>W + S into</u>				

CONTRACTOR Murfin Drilling Rig 22 OWNER Same

TYPE OF JOB PTA
 HOLE SIZE 7 7/8 T.D. 4835'
 CASING SIZE _____ DEPTH _____
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE 4 1/2 DEPTH 2645'
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. _____
 PERFS. _____
 DISPLACEMENT _____

CEMENT
 AMOUNT ORDERED 220 SKS 6940 4835'
14 Flo-seal

EQUIPMENT

PUMP TRUCK CEMENTER Andrew
 # 423-281 HELPER Larene
 BULK TRUCK
 # 373 DRIVER Darrin
 BULK TRUCK
 # _____ DRIVER _____

COMMON	<u>132 SKS</u>	@	<u>15.45</u>	<u>2039.40</u>
POZMIX	<u>88 SKS</u>	@	<u>8.00</u>	<u>704.00</u>
GEL	<u>8 SKS</u>	@	<u>20.80</u>	<u>166.40</u>
CHLORIDE		@		
ASC		@		
	<u>Flo-seal 35#</u>	@	<u>2.50</u>	<u>137.50</u>
		@		
		@		
		@		
		@		
HANDLING	<u>230 SKS</u>	@	<u>2.40</u>	<u>552.00</u>
MILEAGE	<u>10^{1/2} SK/mile</u>			<u>460.00</u>
				TOTAL <u>4059.30</u>

REMARKS:
25 SKS @ 2645'
100 SKS @ 1200'
40 SKS @ 300'
10 SKS @ 40'
15 SKS mouse hole
30 SKS Rat hole

Thank you

CHARGE TO: Murfin
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB 2645'
 PUMP TRUCK CHARGE _____ 1185.00
 EXTRA FOOTAGE @ _____
 MILEAGE 20 miles @ 7.00 140.00
 MANIFOLD @ _____
 @ _____
 @ _____

TOTAL 1325.00

PLUG & FLOAT EQUIPMENT

8 5/8
1 Dry hole plug @ 40.00
 @ _____
 @ _____
 @ _____
 @ _____
 TOTAL 40.00

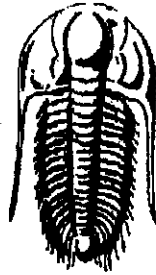
To Allied Cementing Co., LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS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

PRINTED NAME Kelly Wilson
 SIGNATURE Kelly Wilson

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

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

13-12s-35w Logan KS

Schertz #1-13

Start Date: 2010.11.10 @ 13:33:15

End Date: 2010.11.10 @ 21:35:45

Job Ticket #: 039694 DST #: 1

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

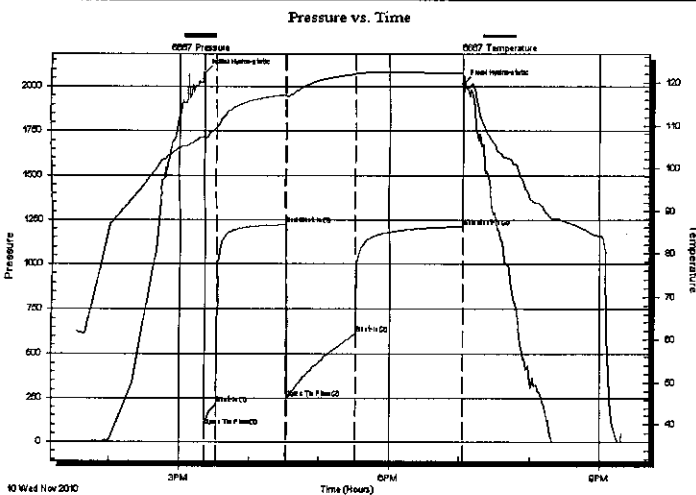
Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039694 **DST#: 1**
Test Start: 2010.11.10 @ 13:33:15

GENERAL INFORMATION:

Formation: **B-D**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 15:21:45
Time Test Ended: 21:35:45
Interval: **4100.00 ft (KB) To 4150.00 ft (KB) (TVD)**
Total Depth: **4150.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Shane McBride**
Unit No: **40**
Reference Elevations: **3206.00 ft (KB)**
3195.00 ft (CF)
KB to GR/CF: **11.00 ft**

Serial #: 6667 **Outside**
Press@RunDepth: **612.43 psig @ 4101.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.11.10** End Date: **2010.11.10** Last Calib.: **2010.11.10**
Start Time: **13:33:15** End Time: **21:18:45** Time On Btm: **2010.11.10 @ 15:21:30**
Time Off Btm: **2010.11.10 @ 19:03:00**

TEST COMMENT: B.O.B. in 3 min.
No return
B.O.B. in 4 1/2 min.
No return



PRESSURE SUMMARY

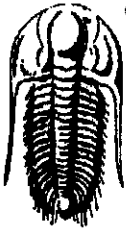
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2075.84	107.38	Initial Hydro-static
1	84.25	106.98	Open To Flow (1)
10	217.84	109.51	Shut-In(1)
70	1221.15	117.13	End Shut-In(1)
71	249.97	116.86	Open To Flow (2)
130	612.43	121.99	Shut-In(2)
221	1211.99	122.16	End Shut-In(2)
222	2015.27	122.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1054.00	water 100%w	12.62
124.00	s m c w 15% m 85% w	1.74
92.00	m c w 40% m 60% w	1.29

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039694 DST#: 1
Test Start: 2010.11.10 @ 13:33:15

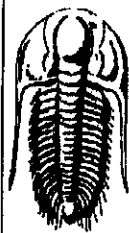
Tool Information

Drill Pipe:	Length: 3850.00 ft	Diameter: 3.80 inches	Volume: 54.01 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 55.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4100.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	70.00 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			4081.00	
Shut In Tool	5.00			4086.00	
Hydraulic tool	5.00			4091.00	
Packer	5.00			4096.00	20.00 Bottom Of Top Packer
Packer	4.00			4100.00	
Stubb	1.00			4101.00	
Recorder	0.00	6771	Inside	4101.00	
Recorder	0.00	6667	Outside	4101.00	
Perforations	11.00			4112.00	
Change Over Sub	1.00			4113.00	
Drill Pipe	31.00			4144.00	
Change Over Sub	1.00			4145.00	
Bullnose	5.00			4150.00	50.00 Bottom Packers & Anchor

Total Tool Length: 70.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039694 **DST#: 1**
Test Start: 2010.11.10 @ 13:33:15

Mud and Cushion Information

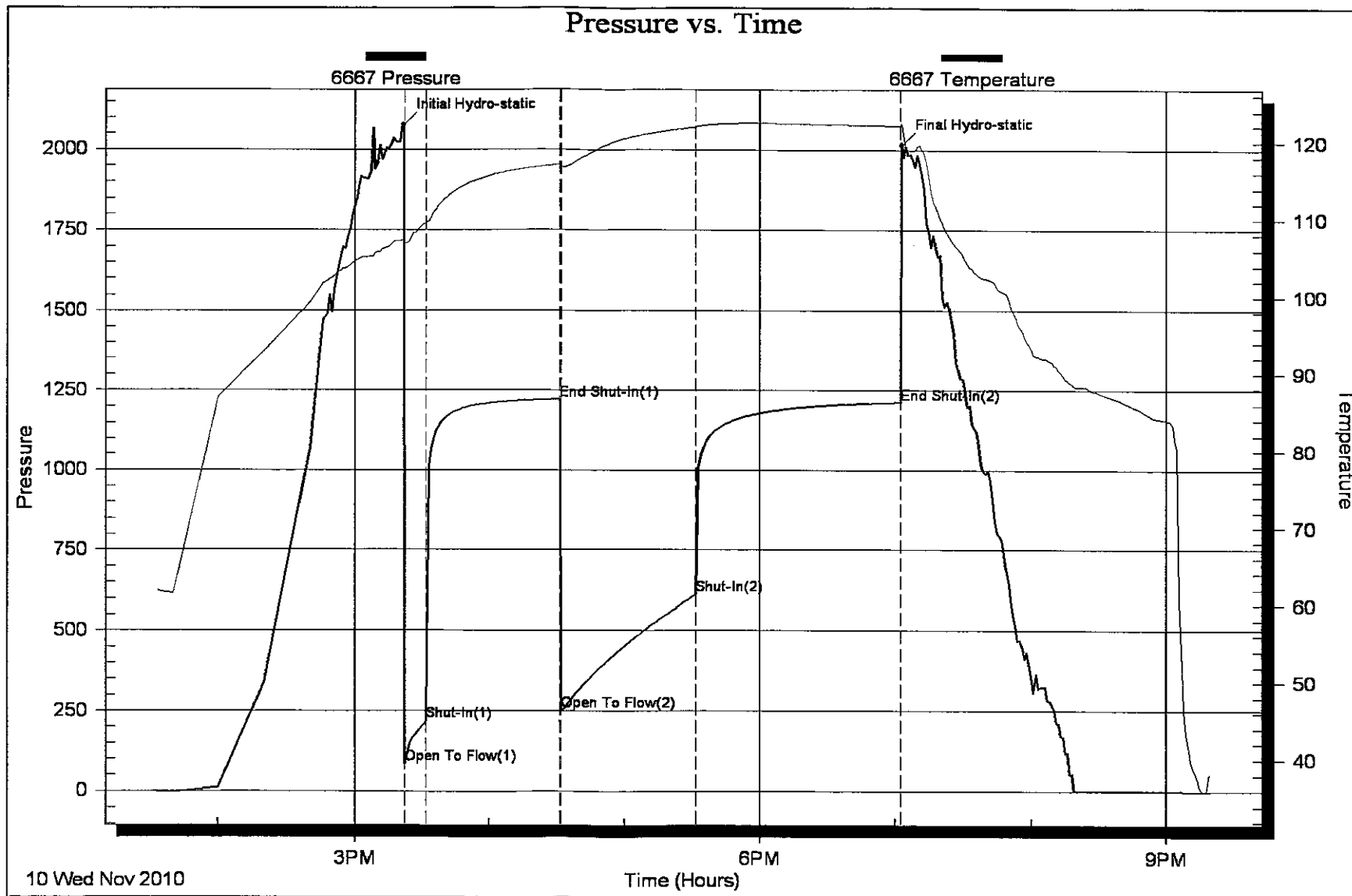
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	29500 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.12 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5600.00 ppm			
Filter Cake: 2.00 inches			

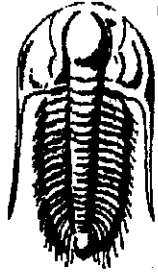
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1054.00	water 100%w	12.617
124.00	s m c w 15%m 85%w	1.739
92.00	m c w 40%m 60%w	1.291

Total Length: 1270.00 ft Total Volume: 15.647 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: nw .274 @ 60*f = 29,500 chlor





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

13-12s-35w Logan KS

Schertz #1-13

Start Date: 2010.11.11 @ 04:00:46

End Date: 2010.11.11 @ 12:45:16

Job Ticket #: 039695 DST #: 2

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

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Murfin Drilling Co

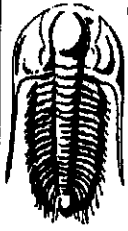
Schertz #1-13

13-12s-35w Logan KS

DST # 2

E-F

2010.11.11



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

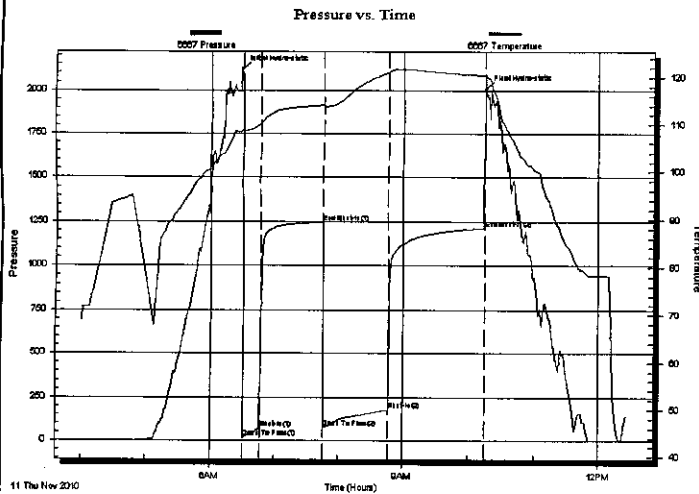
Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039695 DST#: 2
Test Start: 2010.11.11 @ 04:00:46

GENERAL INFORMATION:

Formation: E-F
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:30:46
Time Test Ended: 12:45:16
Interval: 4157.00 ft (KB) To 4187.00 ft (KB) (TVD)
Total Depth: 4187.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Reference Elevations: 3206.00 ft (KB)
3195.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6667 Outside
Press@RunDepth: 175.79 psig @ 4158.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.11.11 End Date: 2010.11.11 Last Calib.: 2010.11.11
Start Time: 04:00:46 End Time: 12:26:16 Time On Btm: 2010.11.11 @ 06:29:31
Time Off Btm: 2010.11.11 @ 10:15:16

TEST COMMENT: 4" in blow
No return
9 1/2" in blow
No return



PRESSURE SUMMARY

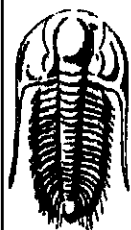
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2119.59	108.85	Initial Hydro-static
2	19.31	108.52	Open To Flow (1)
17	68.41	110.07	Shut-In(1)
76	1244.79	114.06	End Shut-In(1)
77	73.41	113.68	Open To Flow (2)
137	175.79	120.86	Shut-In(2)
225	1213.00	120.40	End Shut-In(2)
226	2006.35	120.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
238.00	s m c w 10% m 90% w	1.17
124.00	m c w 30% m 70% w oil spots on top	1.74

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

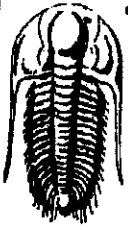
Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039695 DST#: 2
Test Start: 2010.11.11 @ 04:00:46

Tool Information

Drill Pipe:	Length: 3909.00 ft	Diameter: 3.80 inches	Volume: 54.83 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 56.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4157.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	50.00 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			4138.00	
Shut in Tool	5.00			4143.00	
Hydraulic tool	5.00			4148.00	
Packer	5.00			4153.00	20.00 Bottom Of Top Packer
Packer	4.00			4157.00	
Stubb	1.00			4158.00	
Recorder	0.00	6771	Inside	4158.00	
Recorder	0.00	6667	Outside	4158.00	
Perforations	24.00			4182.00	
Bullnose	5.00			4187.00	30.00 Bottom Packers & Anchor
Total Tool Length:	50.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039695 DST#: 2
Test Start: 2010.11.11 @ 04:00:46

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	33000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.12 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5600.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

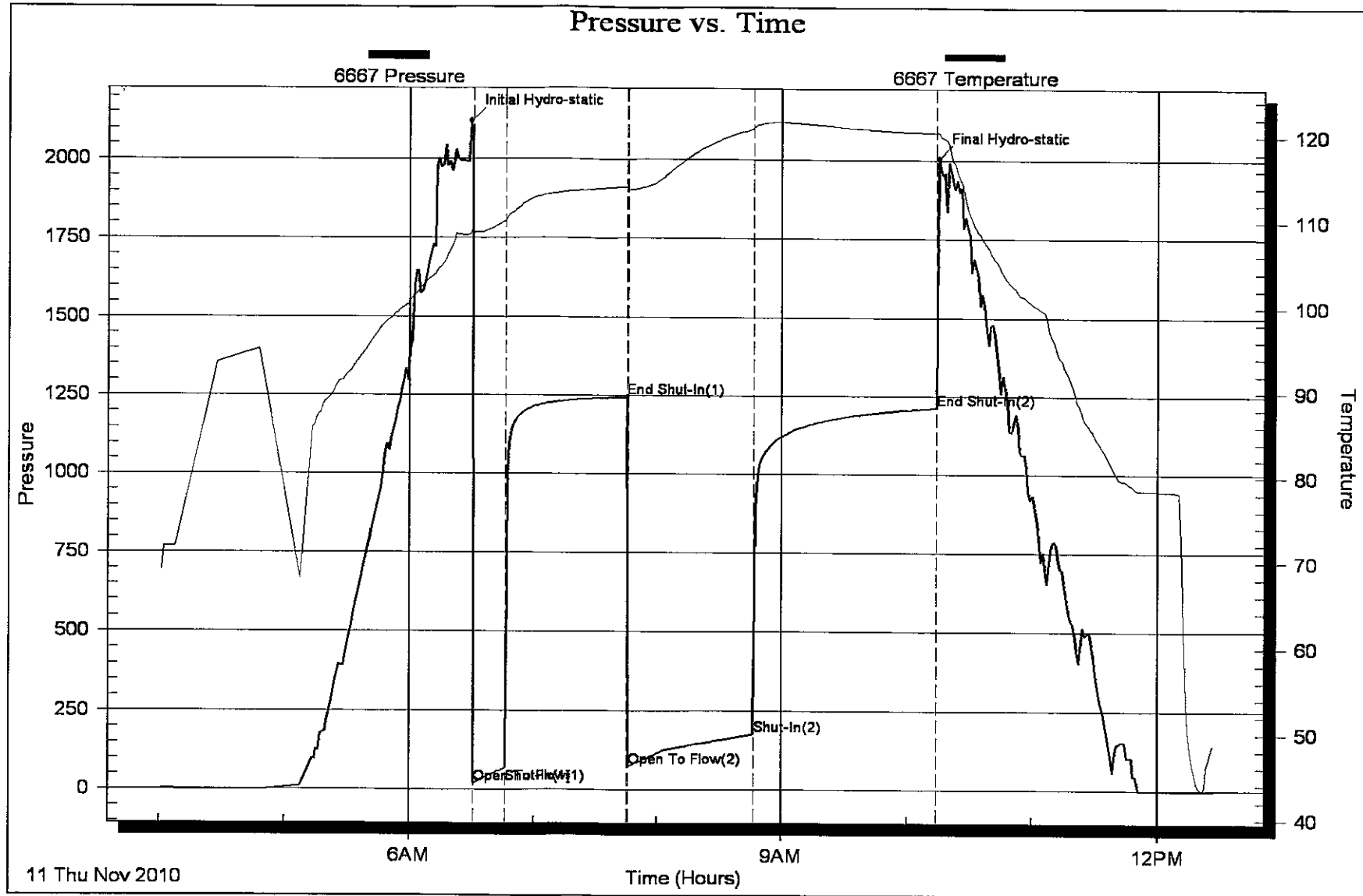
Length ft	Description	Volume bbl
238.00	s m c w 10%m 90%w	1.170
124.00	m c w 30%m 70%w oil spots on top	1.739

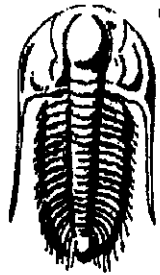
Total Length: 362.00 ft Total Volume: 2.909 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: rw .284 @ 50*f = 33,000 chlor





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

13-12s-35w Logan KS

Schertz #1-13

Start Date: 2010.11.12 @ 02:20:28

End Date: 2010.11.12 @ 11:20:43

Job Ticket #: 039696 DST #: 3

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

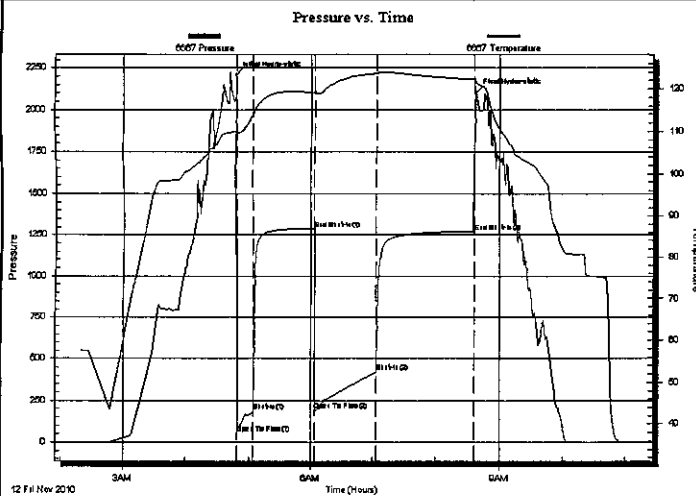
Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039696 **DST#: 3**
Test Start: 2010.11.12 @ 02:20:28

GENERAL INFORMATION:

Formation: **H-I-J**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: **04:47:58**
Time Test Ended: **11:20:43**
Interval: **4226.00 ft (KB) To 4322.00 ft (KB) (TVD)**
Total Depth: **4322.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Shane McBride**
Unit No: **40**
Reference Elevations: **3206.00 ft (KB)**
3195.00 ft (CF)
KB to GR/CF: **11.00 ft**

Serial #: 6667 **Outside**
Press@RunDepth: **420.20 psig @ 4227.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.11.12** End Date: **2010.11.12** Last Calib.: **2010.11.12**
Start Time: **02:20:28** End Time: **11:01:43** Time On Btm: **2010.11.12 @ 04:47:43**
Time Off Btm: **2010.11.12 @ 08:37:28**

TEST COMMENT: **B.O.B. in 11 1/2 min.**
No return
B.O.B. in 14 1/2 min.
No return



PRESSURE SUMMARY

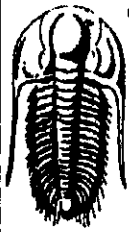
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.88	110.05	Initial Hydro-static
1	54.09	109.13	Open To Flow (1)
17	183.38	113.94	Shut-In(1)
76	1288.54	119.15	End Shut-In(1)
77	190.57	118.83	Open To Flow (2)
136	420.20	123.67	Shut-In(2)
229	1272.99	122.26	End Shut-In(2)
230	2102.97	122.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
481.00	water 100%w	4.58
186.00	m c w 20%m 80%w	2.61
186.00	m c w 35%m 65%w	2.61

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039696 **DST#: 3**
Test Start: 2010.11.12 @ 02:20:28

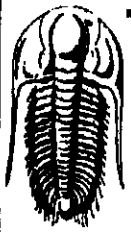
Tool Information

Drill Pipe:	Length: 4000.00 ft	Diameter: 3.80 inches	Volume: 56.11 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 57.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	4226.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	96.00 ft			
Tool Length:	116.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4207.00	
Shut In Tool	5.00			4212.00	
Hydraulic tool	5.00			4217.00	
Packer	5.00			4222.00	20.00 Bottom Of Top Packer
Packer	4.00			4226.00	
Stubb	1.00			4227.00	
Recorder	0.00	6771	Inside	4227.00	
Recorder	0.00	6667	Outside	4227.00	
Perforations	25.00			4252.00	
Change Over Sub	1.00			4253.00	
Drill Pipe	63.00			4316.00	
Change Over Sub	1.00			4317.00	
Bullnose	5.00			4322.00	96.00 Bottom Packers & Anchor

Total Tool Length: 116.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Schertz #1-13

250 N Water Ste 300
Wichita, KS 67202

13-12s-35w Logan KS

Job Ticket: 039696

DST#: 3

ATTN: Tom Funk

Test Start: 2010.11.12 @ 02:20:28

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	31000 ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.53 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
481.00	water 100%w	4.579
186.00	m c w 20%m 80%w	2.609
186.00	m c w 35%m 65%w	2.609

Total Length: 853.00 ft Total Volume: 9.797 bbl

Num Fluid Samples: 0

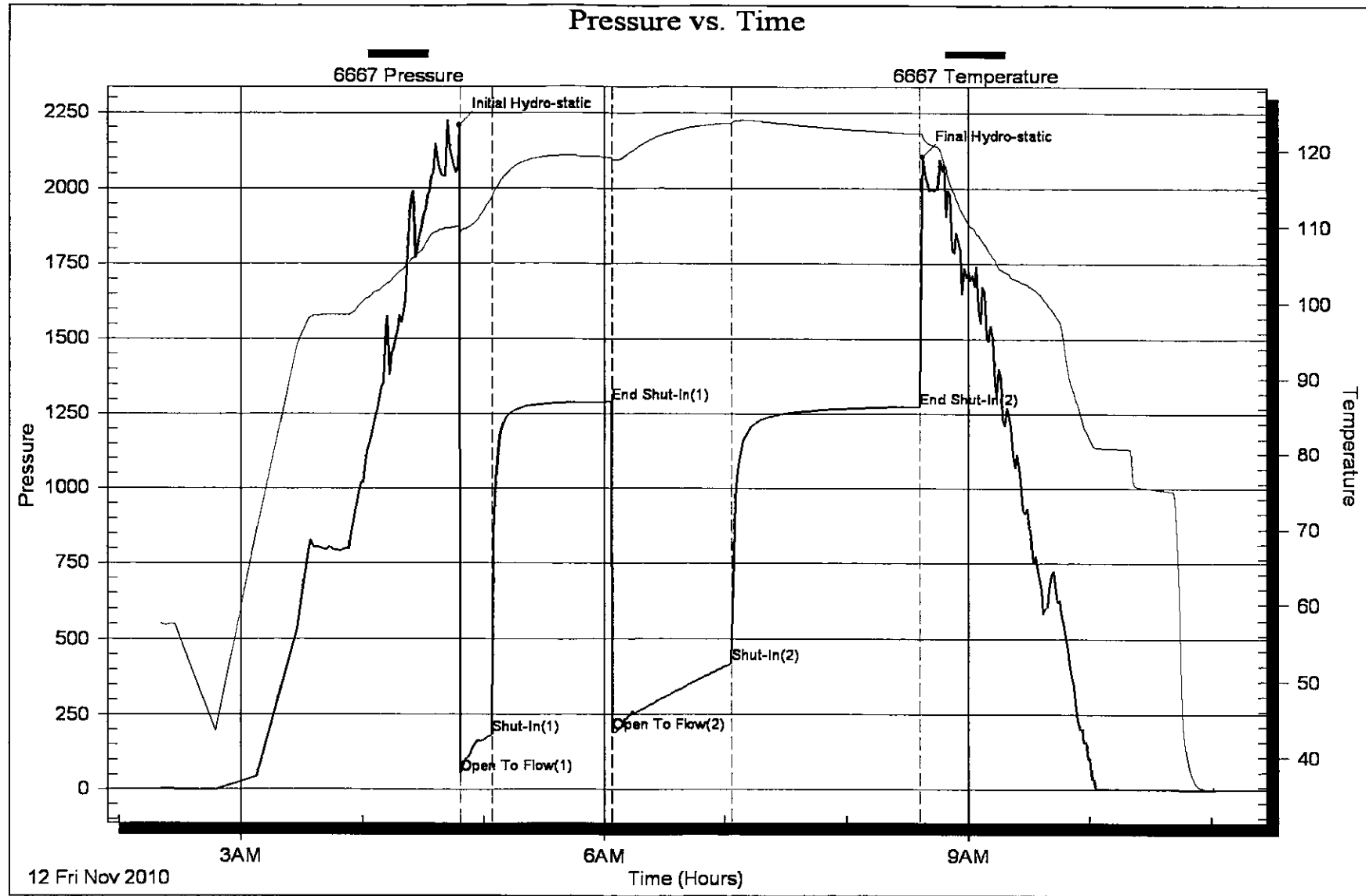
Num Gas Bombs: 0

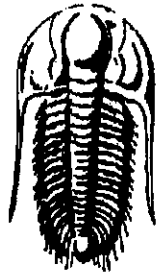
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .279 @ 52*f = 31,000 chlor





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

13-12s-35w Logan KS

Schertz #1-13

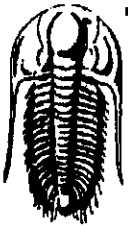
Start Date: 2010.11.13 @ 15:36:11

End Date: 2010.11.13 @ 22:50:11

Job Ticket #: 039697 DST #: 4

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039697 DST#: 4
Test Start: 2010.11.13 @ 15:36:11

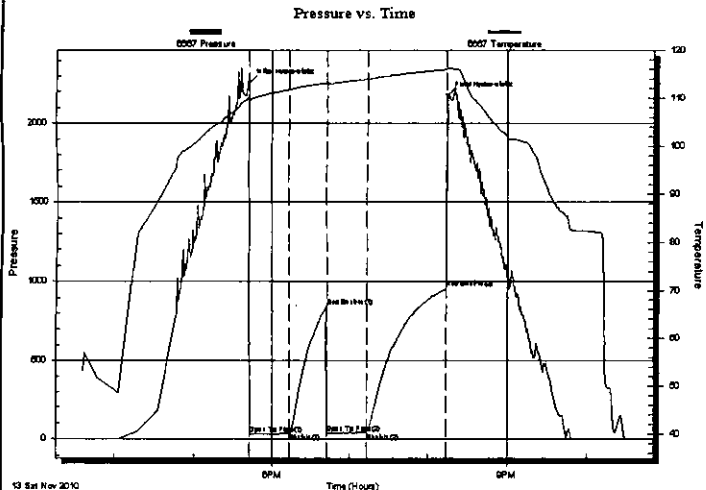
GENERAL INFORMATION:

Formation: **Pawnee, Myrick Sta, Ft**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:42:41
Time Test Ended: 22:50:11
Interval: **4505.00 ft (KB) To 4630.00 ft (KB) (TVD)**
Total Depth: **4630.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: Fair
Reference Elevations: 3206.00 ft (KB)
3195.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6667 Outside
Press@RunDepth: 40.52 psig @ 4506.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.11.13 End Date: 2010.11.13 Last Calib.: 2010.11.13
Start Time: 15:36:11 End Time: 22:31:11 Time On Btm: 2010.11.13 @ 17:42:26
Time Off Btm: 2010.11.13 @ 20:14:11

TEST COMMENT: 1/4" in. blow died in 9 min.
No return
No blow
No return

PRESSURE SUMMARY



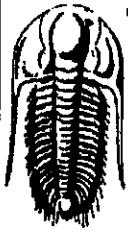
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2258.58	110.25	Initial Hydro-static
1	30.89	109.24	Open To Flow (1)
32	35.57	111.82	Shut-In(1)
60	840.24	113.21	End Shut-In(1)
61	37.42	112.76	Open To Flow (2)
91	40.52	114.02	Shut-In(2)
152	957.64	116.02	End Shut-In(2)
152	2179.29	116.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100% m	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039697 DST#: 4
Test Start: 2010.11.13 @ 15:36:11

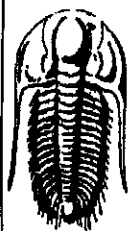
Tool Information

Drill Pipe:	Length: 4257.00 ft	Diameter: 3.80 inches	Volume: 59.71 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 60.88 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4505.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	125.00 ft			
Tool Length:	145.00 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			4486.00	
Shut In Tool	5.00			4491.00	
Hydraulic tool	5.00			4496.00	
Packer	5.00			4501.00	20.00 Bottom Of Top Packer
Packer	4.00			4505.00	
Stubb	1.00			4506.00	
Recorder	0.00	6771	Inside	4506.00	
Recorder	0.00	6667	Outside	4506.00	
Perforations	24.00			4530.00	
Change Over Sub	1.00			4531.00	
Drill Pipe	93.00			4624.00	
Change Over Sub	1.00			4625.00	
Bullnose	5.00			4630.00	125.00 Bottom Packers & Anchor

Total Tool Length: 145.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039697 DST#: 4
Test Start: 2010.11.13 @ 15:36:11

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	44.00 sec/qt	Cushion Volume:	bbf		
Water Loss:	6.76 in ³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7600.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

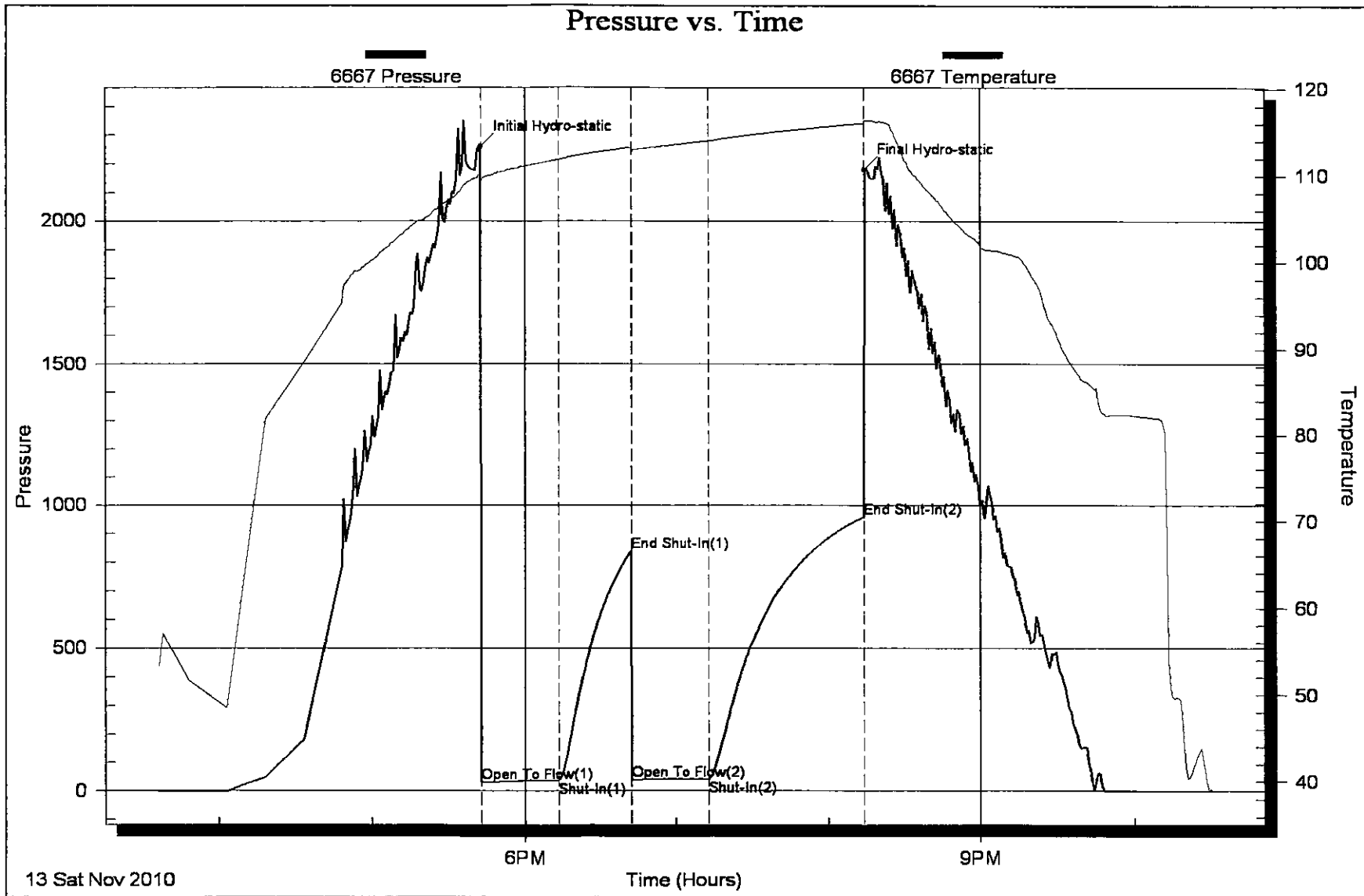
Length ft	Description	Volume bbf
5.00	mud 100%m	0.025

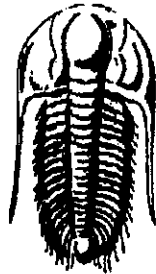
Total Length: 5.00 ft Total Volume: 0.025 bbf

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 Co**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

13-12s-35w Logan KS

Schertz #1-13

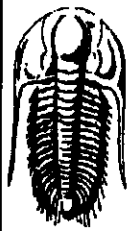
Start Date: 2010.11.14 @ 08:50:51

End Date: 2010.11.14 @ 18:25:06

Job Ticket #: 039698 DST #: 5

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

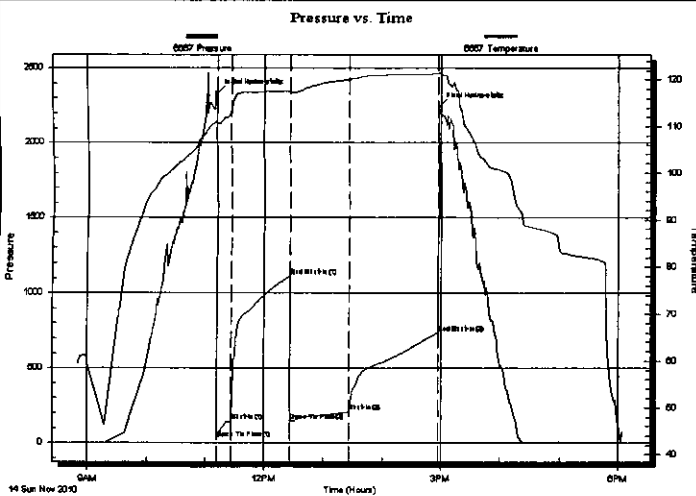
Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 039698 **DST#: 5**
Test Start: 2010.11.14 @ 08:50:51

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 11:11:36
Time Test Ended: 18:25:06
Interval: **4596.00 ft (KB) To 4700.00 ft (KB) (TVD)**
Total Depth: **4700.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Shane McBride**
Unit No: **40**
Reference Elevations: **3206.00 ft (KB)**
3195.00 ft (CF)
KB to GR/CF: **11.00 ft**

Serial #: 6667 **Outside**
Press@RunDepth: **204.23 psig @ 4597.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.11.14** End Date: **2010.11.14** Last Calib.: **2010.11.14**
Start Time: **08:50:51** End Time: **18:06:06** Time On Btm: **2010.11.14 @ 11:11:21**
Time Off Btm: 2010.11.14 @ 14:58:21

TEST COMMENT: 3 1/2" in blow
No return
1 1/4" in blow died back to 1/4" in. (blow w as off due to nipple on floor manifold being cracked)
No return



PRESSURE SUMMARY

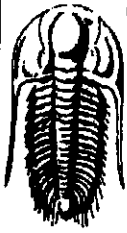
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2338.43	111.05	Initial Hydro-static
1	29.03	110.50	Open To Flow (1)
15	140.33	113.49	Shut-In(1)
75	1109.18	117.58	End Shut-In(1)
75	141.67	117.27	Open To Flow (2)
135	204.23	120.04	Shut-In(2)
226	735.42	121.24	End Shut-In(2)
227	2246.89	121.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
268.00	s m c o 10% m 90% o tr/of gas	1.59
186.00	m c o 30% m 70% o tr/of gas	2.61

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Schertz #1-13

250 N Water Ste 300
Wichita, KS 67202

13-12s-35w Logan KS

Job Ticket: 039698

DST#: 5

ATTN: Tom Funk

Test Start: 2010.11.14 @ 08:50:51

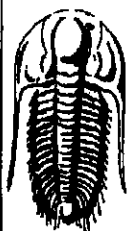
Tool Information

Drill Pipe:	Length: 4352.00 ft	Diameter: 3.80 inches	Volume: 61.05 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 85000.00 lb
			Total Volume: 62.22 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4596.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	104.00 ft			
Tool Length:	124.00 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			4577.00	
Shut In Tool	5.00			4582.00	
Hydraulic tool	5.00			4587.00	
Packer	5.00			4592.00	20.00 Bottom Of Top Packer
Packer	4.00			4596.00	
Stubb	1.00			4597.00	
Recorder	0.00	6771	Inside	4597.00	
Recorder	0.00	6667	Outside	4597.00	
Perforations	33.00			4630.00	
Change Over Sub	1.00			4631.00	
Drill Pipe	63.00			4694.00	
Change Over Sub	1.00			4695.00	
Bullnose	5.00			4700.00	104.00 Bottom Packers & Anchor

Total Tool Length: 124.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Schertz #1-13

250 N Water Ste 300
Wichita, KS 67202

13-12s-35w Logan KS

Job Ticket: 039698

DST#: 5

ATTN: Tom Funk

Test Start: 2010.11.14 @ 08:50:51

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.77 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 7600.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

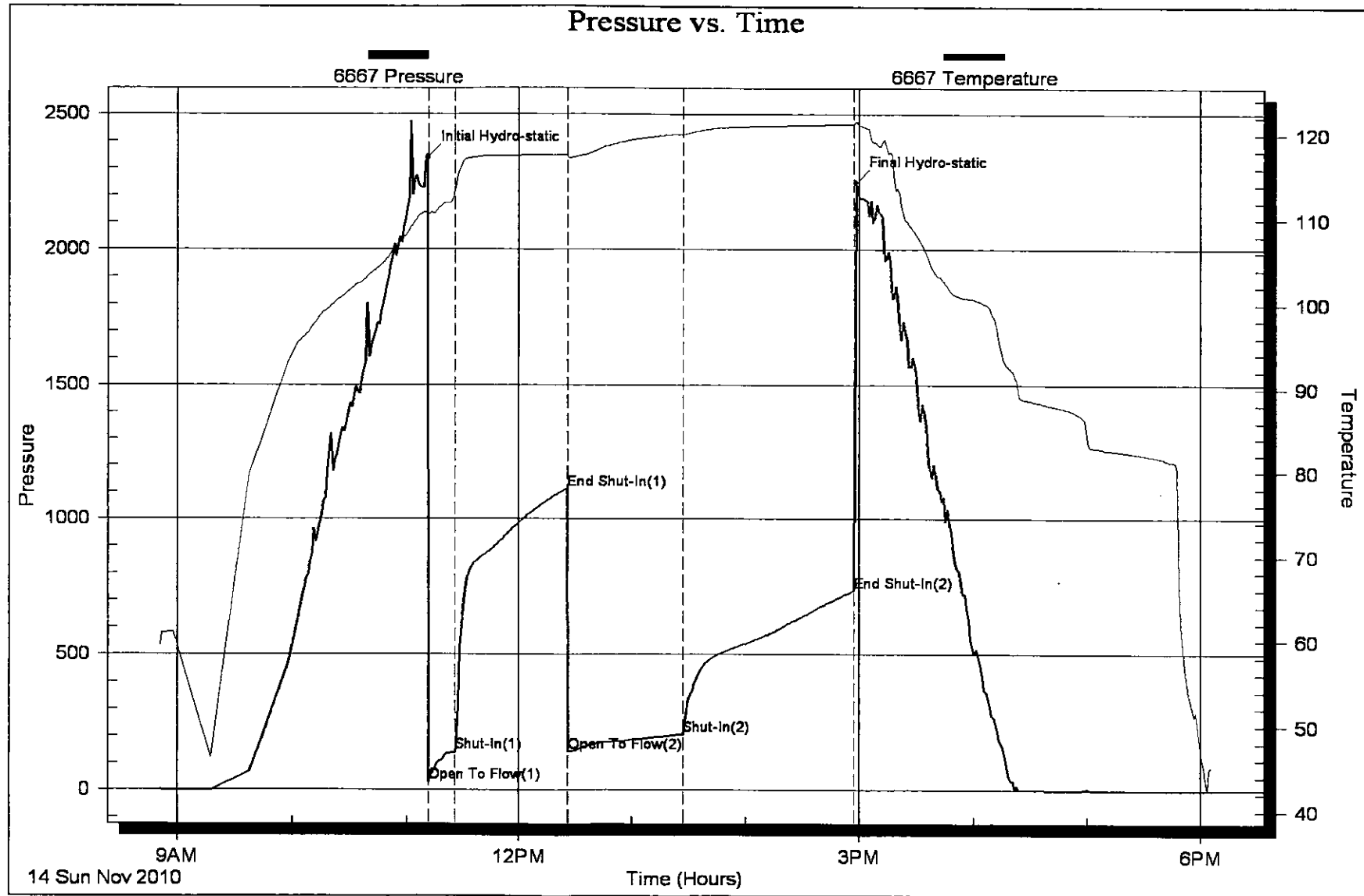
Length ft	Description	Volume bbl
268.00	s m c o 10% m 90% o tr/of gas	1.591
186.00	m c o 30% m 70% o tr/of gas	2.609

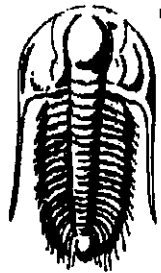
Total Length: 454.00 ft Total Volume: 4.200 bbl

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 Co**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

13-12s-35w Logan KS

Schertz #1-13

Start Date: 2010.11.15 @ 15:52:15

End Date: 2010.11.15 @ 23:05:45

Job Ticket #: 040190 DST #: 6

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

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

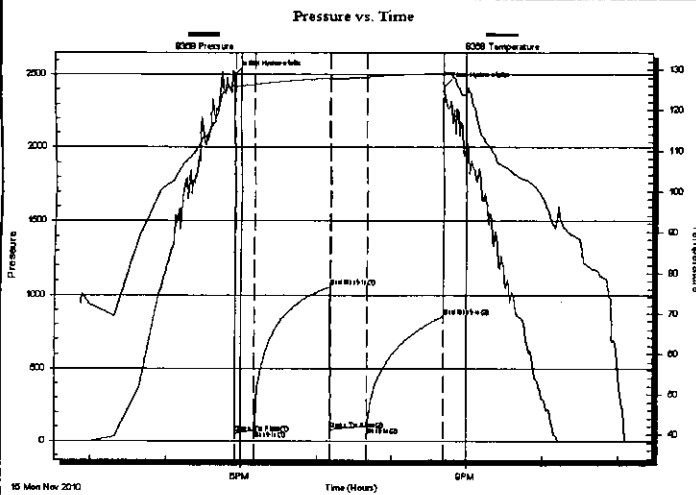
Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 040190 DST#: 6
Test Start: 2010.11.15 @ 15:52:15

GENERAL INFORMATION:

Formation: **Base1 Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:55:00
Time Test Ended: 23:05:45
Interval: **4750.00 ft (KB) To 4835.00 ft (KB) (TVD)**
Total Depth: **4835.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: Fair
Reference Elevations: **3206.00 ft (KB)**
3195.00 ft (CF)
KB to GR/CF: **11.00 ft**

Serial #: **8358** Inside
Press@RunDepth: **100.48 psig @ 4751.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.11.15** End Date: **2010.11.15** Last Calib.: **2010.11.15**
Start Time: **15:52:15** End Time: **23:05:45** Time On Btm: **2010.11.15 @ 17:54:45**
Time Off Btm: **2010.11.15 @ 20:42:00**

TEST COMMENT: IF: Built to 1" blow
IS: No return blow
FF: Built to weak surface blow
FS: No return blow



PRESSURE SUMMARY

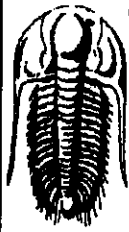
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2500.13	126.44	Initial Hydro-static
1	51.10	125.68	Open To Flow (1)
16	73.22	126.42	Shut-In(1)
76	1056.63	128.03	End Shut-In(1)
76	77.58	127.50	Open To Flow (2)
106	100.48	128.26	Shut-In(2)
167	853.56	129.19	End Shut-In(2)
168	2422.44	129.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	m w ith oil spots	0.59

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Schertz #1-13

250 N Water Ste 300
Wichita, KS 67202

13-12s-35w Logan KS

Job Ticket: 040190

DST#: 6

ATTN: Tom Funk

Test Start: 2010.11.15 @ 15:52:15

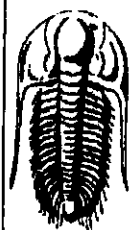
Tool Information

Drill Pipe:	Length: 4507.00 ft	Diameter: 3.80 inches	Volume: 63.22 bbl	Tool Weight: 1500.00 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: 238.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 64.39 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4750.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	105.00 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			4731.00	
Shut In Tool	5.00			4736.00	
Hydraulic tool	5.00			4741.00	
Packer	5.00			4746.00	20.00 Bottom Of Top Packer
Packer	4.00			4750.00	
Stubb	1.00			4751.00	
Recorder	0.00	8358	Inside	4751.00	
Recorder	0.00	8322	Outside	4751.00	
Perforations	5.00			4756.00	
Change Over Sub	1.00			4757.00	
Drill Pipe	63.00			4820.00	
Change Over Sub	1.00			4821.00	
Perforations	12.00			4833.00	
Bullnose	2.00			4835.00	85.00 Bottom Packers & Anchor

Total Tool Length: 105.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co
250 N Water Ste 300
Wichita, KS 67202
ATTN: Tom Funk

Schertz #1-13
13-12s-35w Logan KS
Job Ticket: 040190 **DST#: 6**
Test Start: 2010.11.15 @ 15:52:15

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.96 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5600.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

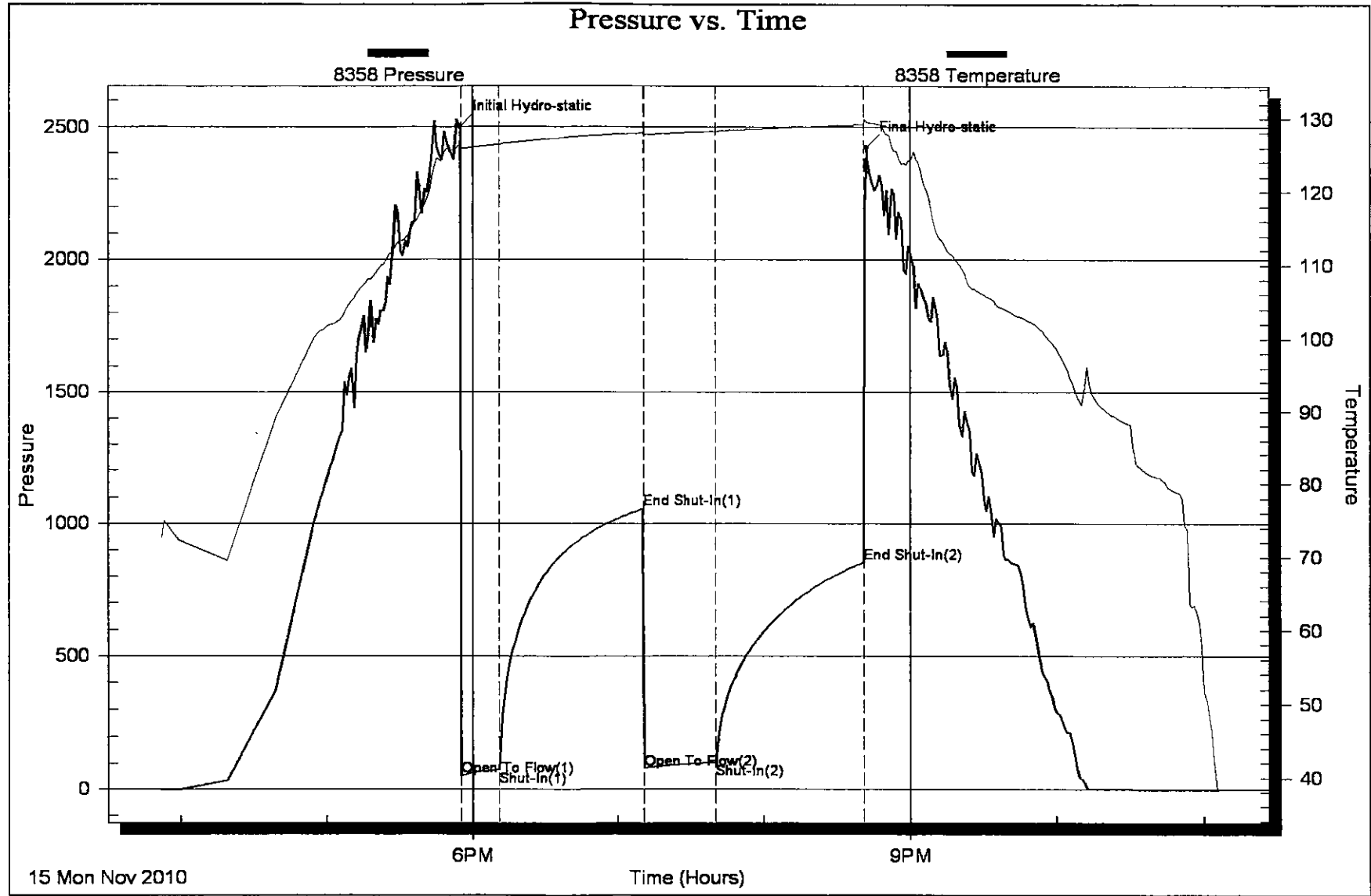
Length ft	Description	Volume bbl
120.00	m with oil spots	0.590

Total Length: 120.00 ft Total Volume: 0.590 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



15 Mon Nov 2010

Time (Hours)