

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

4/7/13

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. **KCC**
Wellsite Geologist: Jeff Christian **APR 07 2011**
Purchaser: MV Purchasing **CONFIDENTIAL**

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 #: _____
12/28/10 01/06/11 01/28/11
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 109-20969-0000
Spot Description:
NW SW SE SE Sec. 01 Twp. 13 S. R. 33 East West
335 Feet from North / South Line of Section
1100 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Logan
Lease Name: DFT Well #: 3-1
Field Name: Tom Tom
Producing Formation: LKC
Elevation: Ground: 3048 Kelly Bushing: 3053
Total Depth: 4740 Plug Back Total Depth: 4702
Amount of Surface Pipe Set and Cemented at: 222 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: 2522 Feet
If Alternate II completion, cement circulated from: 2522
feet depth to: surface w/ 220 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: _____
Title: VP Production Date: 04/06/2011

KCC Office Use ONLY
 Letter of Confidentiality Received
Date: 4/7/11 - 4/7/13 **RECEIVED**
 Confidential Release Date: _____ **APR 11 2011**
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: KCC WICHITA Date: _____

CONFIDENTIAL

Operator Name: Murfin Drilling Company, Inc. Lease Name: DFT Well #: 3-1 **APR 07 2011**
 Sec. 01 Twp. 13 S. R. 33 East West County: Logan **CONFIDENTIAL**

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
--	--

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	222	Common	165	3% cc, 2% gel
Production		5 1/2	15.5	4732	EA2	175	

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 (Amount and Kind of Material Used)	Depth
4	4195 - 4200 LKC "H", 4229-4238 LKC "I"	Treated "H" w/250 gal 15% MCA	
4	4514 - 4523 LWR PAWNEE		
4	4530 - 4541 FT SCOTT		
4	4572 - 4578 CHEROKEE LIME, CIBP @ 4590'	250 gal 15% MCA	
4	4603 - 4608 JOHNSON	250 gal 15% MCA	

TUBING RECORD: Size: <u>2 3/8</u> Set At: <u>4324</u> Packer At: <u>4365</u>		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	KCC WICHITA
Date of First, Resumed Production, SWD or ENHR: <u>02/04/11</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls. <u>28</u>	Gas Mcf <u>112</u>	Water Bbls. <u>112</u>
		Gas-Oil Ratio	Gravity <u>32.6</u>

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 checked="" 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: <u>4195 - 4523</u>
--	---	---

DFT #3-1 335' FSL 1100' FEL Sec. 1-T13S-R33W 3053' KB						DFT #2-1 1050' FSL 1050' FEL Sec. 1-T13S-R33W 3069' KB		
Formation	SampleTops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Anhydrite	2531	+522	-3	2528	+525	Flat	2544	+525
B/Anhydrite	2552	+501	-1	2548	+505	+3	2567	+502
Topeka	3770	-717	-7	3762	-709	+1	3779	-710
Heebner	3992	-939	-8	3988	-935	-4	4000	-931
Lansing	4038	-985	-7	4036	-983	-5	4047	-978
Stark	4272	-1219	-8	4268	-1215	-4	4280	-1211
BKC	4338	-1285	-8	4336	-1283	-6	4346	-1277
Up Pawnee	4474	-1421	-7	4468	-1415	-1	4483	-1414
Mississippi				4682	-1629	-17	4681	-1612
RTD	4740						4750	
LTD				4736			4753	

KCC
APR 07 2011
CONFIDENTIAL

RECEIVED
APR 11 2011
KCC WICHITA



PO BOX 31 Russell, KS 67665

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

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

KCC
 APR 07 2011
 CONFIDENTIAL

PROD COPY

INVOICE

Invoice Number: 125773
 Invoice Date: Dec 28, 2010
 Page: 1

Sub. acct.

*operator pay
 moc/pm*

Customer ID	Well Name## or Customer P.O.	Payment Terms	
Murfin	DFT #3-1	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Dec 28, 2010	1/27/11

Quantity	Item	Description	Unit Price	Amount
165.00	MAT	Class A Common	15.45	2,549.25
3.00	MAT	Gel	20.80	62.40
6.00	MAT	Chloride	58.20	349.20
174.00	SER	Handling	2.40	417.60
15.00	SER	Mileage 174 sx @ .10 per sk per mi	17.40	261.00
1.00	SER	Surface	1,018.00	1,018.00
15.00	SER	Pump Truck Mileage	7.00	105.00

Account	Dist. Reg.	V. L.	No.	Amount	Description
03600	024	vs	3830	4,948.59 (1666.85)	Component S. Csg

OK M

RECEIVED

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

\$ 1666.85 35%

ONLY IF PAID ON OR BEFORE
 Jan 22, 2011

Subtotal	4,762.45
Sales Tax	216.14
Total Invoice Amount	4,978.59
Payment/Credit Applied	KCC WICHITA
TOTAL	4,978.59

- 1666.85
 3311.74



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
1/7/2011	19277

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661
USED FOR <u>new well</u>
APPROVED <u>JR</u>

- Acidizing **KCC**
- Cement **APR 07 2011**
- Tool Rental **CONFIDENTIAL**

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#3-1	D.F.T.	Logan	Murfin Drilling #24	Oil	Development	LongString	Dave
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	5.00	400.00
578D-L	Pump Charge - Long String				1	Job	1,400.00	1,400.00
221	Liquid KCL (Clayfix)				4	Gallon(s)	25.00	100.00T
280	Flocheck 21				500	Gallon(s)	2.50	1,250.00T
290	D-Air				2	Gallon(s)	35.00	70.00T
402-5	5 1/2" Centralizer				15	Each	55.00	825.00T
403-5	5 1/2" Cement Basket				2	Each	200.00	400.00T
404-5	5 1/2" Port Collar				1	Each	1,900.00	1,900.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	225.00	225.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	275.00	275.00T
413-5	5 1/2" Roto Wall Scratcher				15	Each	40.00	600.00T
419-5	5 1/2" Rotating Head Rental				1	Each	150.00	150.00T
325	Standard Cement				225	Sacks	12.00	2,700.00T
276	Flocele				56	Lb(s)	1.50	84.00T
277	Gilsonite (Coal Seal)				1,125	Lb(s)	0.40	450.00T
283	Salt				1,125	Lb(s)	0.15	168.75T
284	Calseal				11	Sack(s)	30.00	330.00T
285	CFR-1				150	Lb(s)	4.00	600.00T
581D	Service Charge Cement				225	Sacks	1.50	337.50
583D	Drayage				988.24	Ton Miles	1.00	988.24
	Subtotal							13,253.49
	Sales Tax Logan County						7.80%	789.96

RECEIVED
APR 11 2011
KCC WICHITA

Thank You For Your Business In 2010!
We Look Forward To Serving You In 2011!

Total \$14,043.45



Services, Inc.

CHARGE TO: MURPHY DRUG
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

KCC
 APR 07 2011
 CONFIDENTIAL

RECEIVED
 APR 11 2011
 KCC WICHITA

TICKET
 19277
 PAGE 1 OF 2

1. SERVICE LOCATIONS <u>HAYS</u>	WELL/PROJECT NO. <u>31</u>	LEASE <u>DET</u>	COUNTY/PARISH <u>LOCAN</u>	STATE <u>KS</u>	CITY	DATE <u>01-07-11</u>	OWNER
2. <u>NESS</u>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR	RIG NAME/NO. <u>MURPHY DRUG # 31</u>	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>1254 W. S. WILSON AVE</u>	ORDER NO.	
3.	WELL TYPE <u>DR</u>	WELL CATEGORY <u>DEVELOP</u>	JOB PURPOSE <u>CONSTRUCTION</u>	WELL PERMIT NO.	<u>15-109-20965</u>	WELL LOCATION <u>51773.233</u>	
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF		UM	UM	UM		
525					MILEAGE #112	80	mi		5.00	400.00
578					Pump Service	1	ea		1400.00	1400.00
221					LIQUID WCL	4	gals		25.00	100.00
280					FLOCCYD 21	500	gals		2.50	1250.00
290					N-ALC	2	gals		35.00	70.00
402					CONTRACTOR	15	ea		5 1/2	825.00
403					Batter	2	ea		5 1/2	400.00
404					POOR COAL	1	ea		5 1/2	1900.00
406					LATEX/DO. PINE ABATEX	1	ea		5 1/2	225.00
407					TARGET FRONT SIDE W/ANDRILL	1	ea		5 1/2	275.00
413					POOR WCL SERVICES	15	ea		75	40.00
419					CONTRACTOR PERM	1	ea		5 1/2	150.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

DATE SIGNED 01-07-11 TIME SIGNED 1230
 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?
 YES NO

WE UNDERSTOOD AND MET YOUR NEEDS?
 YES NO

OUR SERVICE WAS PERFORMED WITHOUT DELAY?
 YES NO

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?
 YES NO

ARE YOU SATISFIED WITH OUR SERVICE?
 YES NO

CUSTOMER DID NOT WISH TO RESPOND

50B	13,253	49
707C		
Loggin		
7187c		
TOTAL	14,043	145

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR Dave Asby APPROVAL _____

Thank You!



Swifton, Inc

PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 19277

CUSTOMER MURPHY DRUG

WELL 3-1, D.F.T.

DATE 01-07-11

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		TIME	DESCRIPTION	WELL		UNIT PRICE	AMOUNT
		LOC	ACCT			DF	QTY.		
325		2			STD EA 2	225	SY	12.00	2700.00
276		2			FLUCEL	56	LB	1.50	84.00
277		2			GRISOLITE	125	LB	3.60	450.00
283		2			SALT	125	LB	1.38	172.50
284		2			CASER	11	SY	30.00	330.00
285		2			CEL.1	150	LB	4.00	600.00
581		2			SERVICE CHG CMT	225	SY	1.50	337.50
583		2			DRAWAL	988.24	TM	1.00	988.24
					SERVICE CHARGE				
					MILEAGE CHARGE				
					TOTAL WEIGHT				
					LOADED MILES				
					TON MILES				

KCC
APR 07 2011
CONFIDENTIAL

RECEIVED
APR 11 2011
WICHITA

CONTINUATION TOTAL 5658.49

JOB LOG

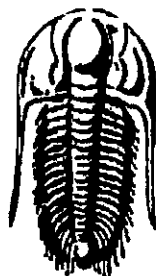
SWIFT Services, Inc.

DATE 01-07-11 PAGE NO. 1

CUSTOMER MILREIN DRG WELL NO. 3-1 LEASE J.F.T JOB TYPE LONGSTRING TICKET NO. 19277

CHART NO.	TIME	RATE (BPM)	VOLUME (BBU) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1230							ON LOCATION CMT: 225 STD EA-2 1/5" IN GROUND
								R204740 SET PIPE 4733 SJ 21.72 INSERT 4711 5 1/2" 55' FT POLY COLLAR ON TOP * S3 2532 FT CENT 1-1/4" S2 BASKET S2-S3 ROTATING SCREEDERS 75 FT
	1500							START CSG @ FLOATER U. 1/2 WAY IN CIRC HOLE PIPE @ TD. HOOD UP BREAK CIRC & ROTATE PIPE
	1700							PLUG RH 30, MH 20
	1800		7.5					
	1810	4.5	15		-		200	WCL FLUSH 2%
			12		-			FLOCHUCK 21 500 GAL
			5		-			WCL FLUSH 2%
			42.5		-			EA-2 CMT 175
								DROP 40 PUG. WASHOUT P4
	1830	7.2	0		✓		200	START DISP 1/2" WCL 157 2000LBS
			70		✓		200	CMT ON BOTTOM
			95		✓		500	
			100		✓		600	
			105		✓		700	
			110		✓		700	
	1845	4.7	112.1		✓		1400	LAND PLUG
	1850							RELEASE - DRY
	1930							JOB COMPLETE
								THANK YOU! DAVE JOSH B. LANE
								RECEIVED APR 11 2011 KCC WICHITA

KCC
APR 07 2011
CONFIDENTIAL



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water
Ste 300
Wichita KS 67202-1216

ATTN: Scott Robinson

1-13s-33w Logan KS

DFT #3-1

Start Date: 2011.01.01 @ 23:39:03

End Date: 2011.01.02 @ 08:24:58

Job Ticket #: 41659 DST #: 1

**KCC
APR 07 2011
CONFIDENTIAL**

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

**RECEIVED
APR 11 2011
KCC WICHITA**

Murfin Drilling Co Inc

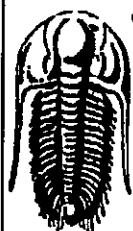
DFT #3-1

1-13s-33w Logan KS

DST # 1

LKC E-F

2011.01.01



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

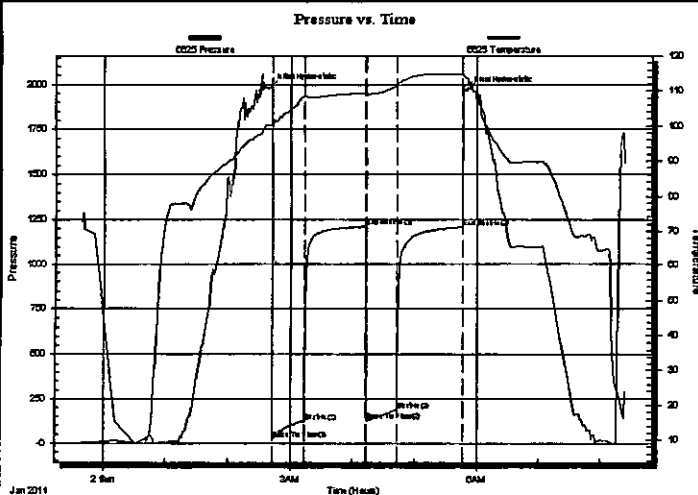
DFT #3-1
1-13s-33w Logan KS
Job Ticket: 41659 **DST#: 1**
Test Start: 2011.01.01 @ 23:39:03

GENERAL INFORMATION:

Formation: **LKC E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:42:58
Time Test Ended: 08:24:58
Interval: **4110.00 ft (KB) To 4143.00 ft (KB) (TVD)**
Total Depth: **4143.00 ft (KB) (TVD)**
Hole Diameter: **7.85 inches** Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Ray Schwager
Unit No: 42
Reference Elevations: 3053.00 ft (KB)
3048.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6625 Inside
Press@RunDepth: 188.17 psig @ 4115.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.01 End Date: 2011.01.02 Last Calib.: 2011.01.02
Start Time: 23:39:03 End Time: 08:24:58 Time On Btm: 2011.01.02 @ 02:39:28
Time Off Btm: 2011.01.02 @ 05:50:57

TEST COMMENT: IFF- w k bl thru-out 1/4"bl
ISIP-no bl
FFP-surface bl thru-out
FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1981.41	100.25	Initial Hydro-static
4	25.19	100.00	Open To Flow (1)
34	122.67	108.37	Shut-In(1)
93	1210.75	109.40	End Shut-In(1)
94	128.10	109.19	Open To Flow (2)
124	188.17	111.70	Shut-In(2)
187	1206.85	114.63	End Shut-In(2)
192	1968.41	113.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	Water	2.27
90.00	MW 25%M75%W	1.26

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS
Job Ticket: 41659 DST#: 1
Test Start: 2011.01.01 @ 23:39:03

Tool Information

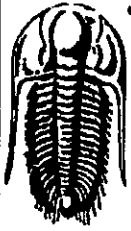
Drill Pipe:	Length: 3995.00 ft	Diameter: 3.80 inches	Volume: 56.04 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 56.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4110.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	54.00 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			4090.00	
Shut In Tool	5.00			4095.00	
Hydraulic tool	5.00			4100.00	
Packer	5.00			4105.00	21.00 Bottom Of Top Packer
Packer	5.00			4110.00	
Stubb	1.00			4111.00	
Perforations	4.00			4115.00	
Recorder	0.00	6625	inside	4115.00	
Recorder	0.00	8700	Outside	4115.00	
Perforations	25.00			4140.00	
Bullnose	3.00			4143.00	33.00 Bottom Packers & Anchor

Total Tool Length: 54.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS
Job Ticket: 41659 **DST#: 1**
Test Start: 2011.01.01 @ 23:39:03

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:	52000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.27 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	Water	2.273
90.00	MW 25%/M75%W	1.262

Total Length: 330.00 ft Total Volume: 3.535 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .2 @ 50F

Serial #: 6625

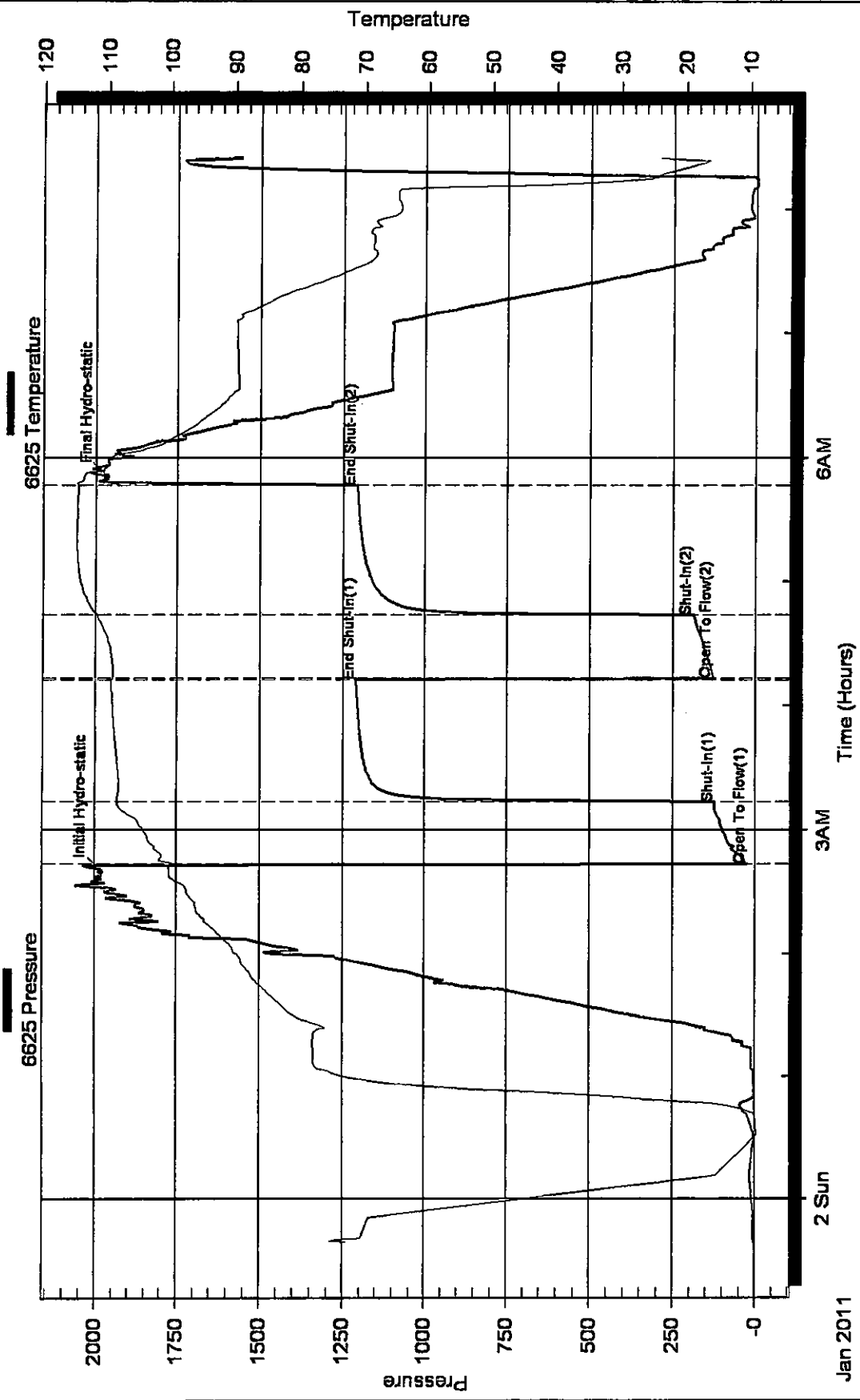
Inside

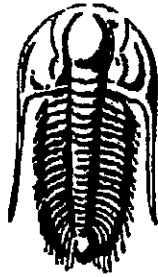
Murfin Drilling Co Inc

1-13s-33w Logan KS

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water
Ste 300
Wichita KS 67202-1216

ATTN: Scott Robinson

1-13s-33w Logan KS

DFT #3-1

Start Date: 2011.01.02 @ 23:39:00

End Date: 2011.01.03 @ 09:08:25

Job Ticket #: 41660 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

DFT #3-1

1-13s-33w Logan KS

DST # 2

LKC H-1

2011.01.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

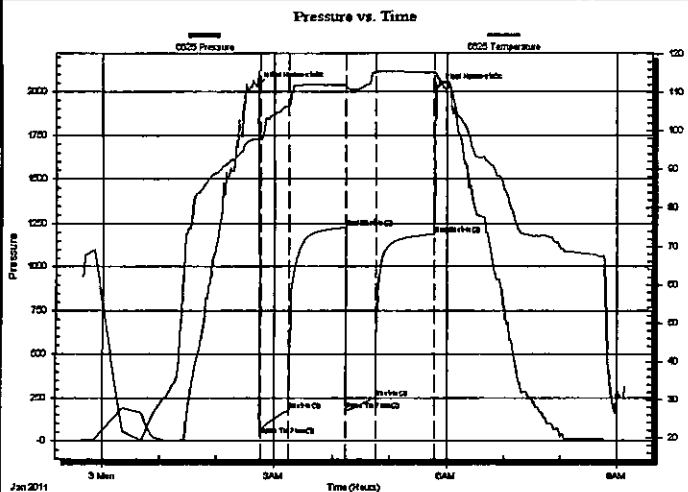
DFT #3-1
1-13s-33w Logan KS
Job Ticket: 41660 **DST#: 2**
Test Start: 2011.01.02 @ 23:39:00

GENERAL INFORMATION:

Formation: **LKC H-I**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:45:25
Time Test Ended: 09:08:25
Interval: **4178.00 ft (KB) To 4244.00 ft (KB) (TVD)**
Total Depth: **4244.00 ft (KB) (TVD)**
Hole Diameter: **7.85 inches** Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Ray Schwager
Unit No: 42
Reference Elevations: 3053.00 ft (KB)
3048.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6625 **Inside**
Press@RunDepth: 249.19 psig @ 4183.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.02 End Date: 2011.01.03 Last Calib.: 2011.01.03
Start Time: 23:39:00 End Time: 09:08:25 Time On Btm: 2011.01.03 @ 02:41:55
Time Off Btm: 2011.01.03 @ 05:50:24

TEST COMMENT: IFF-w k to strg in 8 min
ISIP-surface bl bk
FFP-w k to strg in 15min
FSIP-surface bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2033.62	97.85	Initial Hydro-static
4	37.77	97.74	Open To Flow (1)
34	176.81	106.57	Shut-In(1)
93	1227.26	111.90	End Shut-In(1)
93	178.04	111.62	Open To Flow (2)
124	249.19	115.21	Shut-In(2)
186	1190.07	115.12	End Shut-In(2)
189	2023.77	113.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	O&GCW 20%G10%O70%W	0.15
215.00	GMO 10%G10%M80%O	2.20
258.00	GMO 10%G25%M65%O	3.62
62.00	CO	0.87
0.00	110'GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS
Job Ticket: 41660 **DST#: 2**
Test Start: 2011.01.02 @ 23:39:00

Tool Information

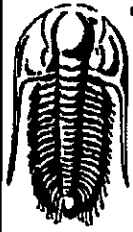
Drill Pipe:	Length: 4057.00 ft	Diameter: 3.80 inches	Volume: 56.91 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 65000.00 lb
			Total Volume: 57.50 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4178.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	87.00 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			4158.00	
Shut In Tool	5.00			4163.00	
Hydraulic tool	5.00			4168.00	
Packer	5.00			4173.00	21.00 Bottom Of Top Packer
Packer	5.00			4178.00	
Stubb	1.00			4179.00	
Perforations	4.00			4183.00	
Recorder	0.00	6625	Inside	4183.00	
Recorder	0.00	8700	Outside	4183.00	
Blank Spacing	33.00			4216.00	
Perforations	25.00			4241.00	
Bullnose	3.00			4244.00	66.00 Bottom Packers & Anchor

Total Tool Length: 87.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS
Job Ticket: 41660 DST#: 2
Test Start: 2011.01.02 @ 23:39:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil Apt:	31 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	45000 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.69 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	O&GCW 20%G10%O70%W	0.148
215.00	GMO 10%G10%M80%O	2.196
258.00	GMO 10%G25%M65%O	3.619
62.00	CO	0.870
0.00	110'GIP	0.000

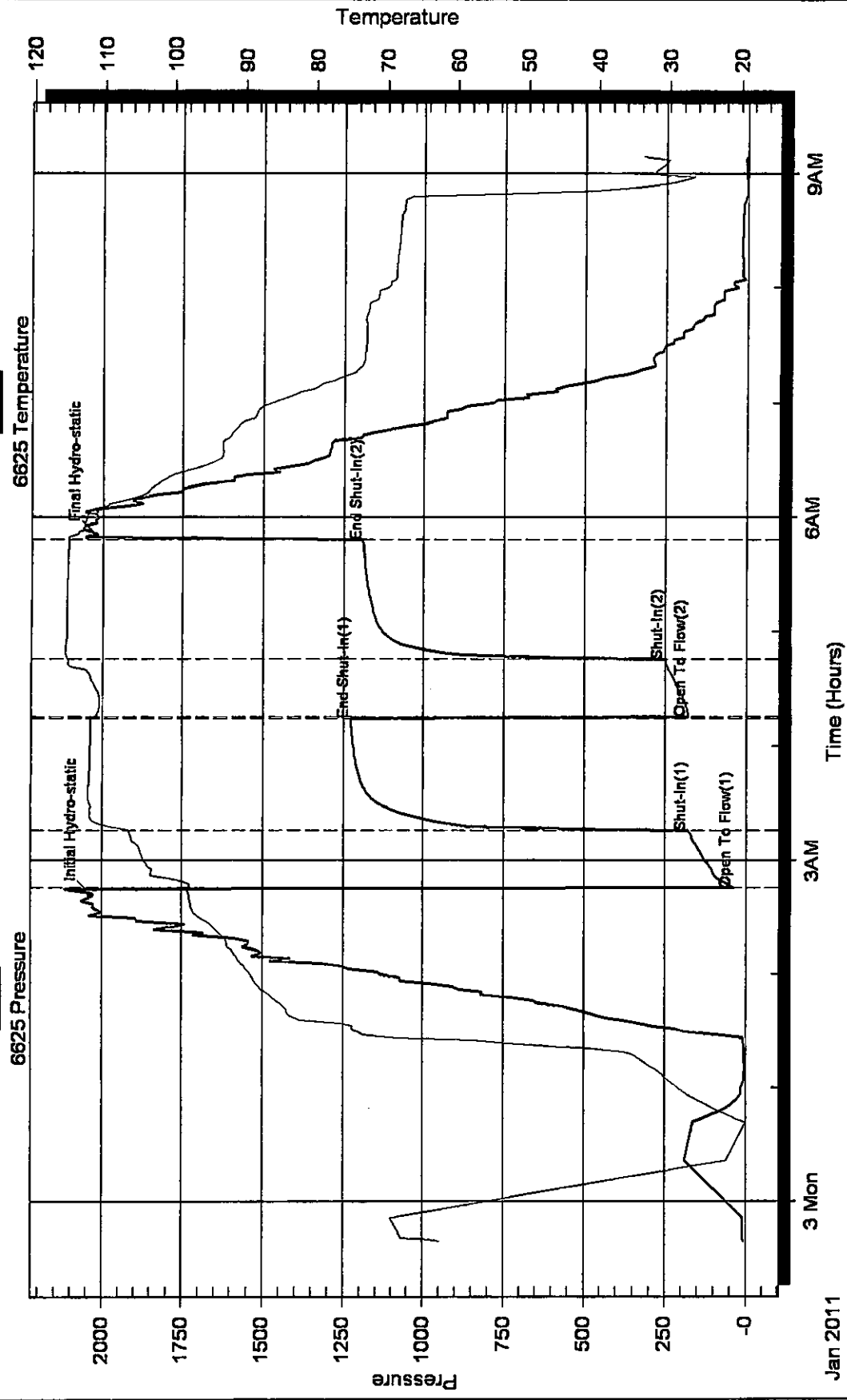
Total Length: 565.00 ft Total Volume: 6.833 bbl

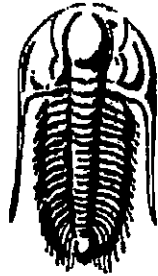
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .27@47F

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water
Ste 300
Wichita KS 67202-1216

ATTN: Scott Robinson

1-13s-33w Logan KS

DFT #3-1

Start Date: 2011.01.03 @ 19:15:49

End Date: 2011.01.04 @ 03:55:14

Job Ticket #: 41661 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

DFT #3-1

1-13s-33w Logan KS

DST # 3

LKC JJK

2011.01.03



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

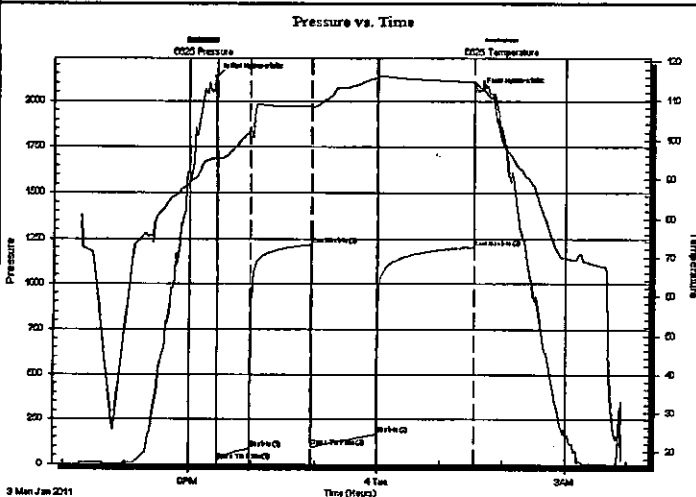
DFT #3-1
1-13s-33w Logan KS
Job Ticket: 41661 **DST#: 3**
Test Start: 2011.01.03 @ 19:15:49

GENERAL INFORMATION:

Formation: **LKC J-K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:26:44
 Time Test Ended: 03:55:14
 Interval: **4243.00 ft (KB) To 4302.00 ft (KB) (TVD)**
 Total Depth: **4302.00 ft (KB) (TVD)**
 Hole Diameter: **7.85 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: **3053.00 ft (KB)**
3048.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: **6625** Inside
 Press@RunDepth: **167.26 psig @ 4247.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2011.01.03** End Date: **2011.01.04** Last Calib.: **2011.01.04**
 Start Time: **19:15:49** End Time: **03:55:14** Time On Btm: **2011.01.03 @ 21:25:44**
 Time Off Btm: **2011.01.04 @ 01:37:43**

TEST COMMENT: IFF-w k to a fr bl 1/2" to 5 1/2" bl
 ISIP-no bl
 FFP-w k to a fr bl, surface to 4" bl
 FSIP-no bl



PRESSURE SUMMARY

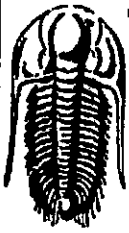
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2130.78	95.45	Initial Hydro-static
1	21.21	95.15	Open To Flow (1)
33	89.92	102.27	Shut-in(1)
91	1215.49	108.58	End Shut-in(1)
91	96.98	108.32	Open To Flow (2)
154	167.26	115.81	Shut-in(2)
247	1203.90	114.62	End Shut-in(2)
252	2052.53	113.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
325.00	MW 15%M85%W w/show of oil	3.47

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS
Job Ticket: 41661 **DST#: 3**
Test Start: 2011.01.03 @ 19:15:49

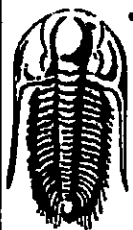
Tool Information

Drill Pipe:	Length: 4120.00 ft	Diameter: 3.80 inches	Volume: 57.79 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 58.38 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4243.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	80.00 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			4223.00	
Shut In Tool	5.00			4228.00	
Hydraulic tool	5.00			4233.00	
Packer	5.00			4238.00	21.00 Bottom Of Top Packer
Packer	5.00			4243.00	
Stubb	1.00			4244.00	
Perforations	3.00			4247.00	
Recorder	0.00	6625	Inside	4247.00	
Recorder	0.00	8700	Outside	4247.00	
Blank Spacing	33.00			4280.00	
Perforations	19.00			4299.00	
Bullnose	3.00			4302.00	59.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS

Job Ticket: 41661 **DST#: 3**
Test Start: 2011.01.03 @ 19:15:49

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:	75000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.33 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5800.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
325.00	MW 15%M85%W w/show of oil	3.466

Total Length: 325.00ft Total Volume: 3.466 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .14 @ 50F

Serial #: 6625

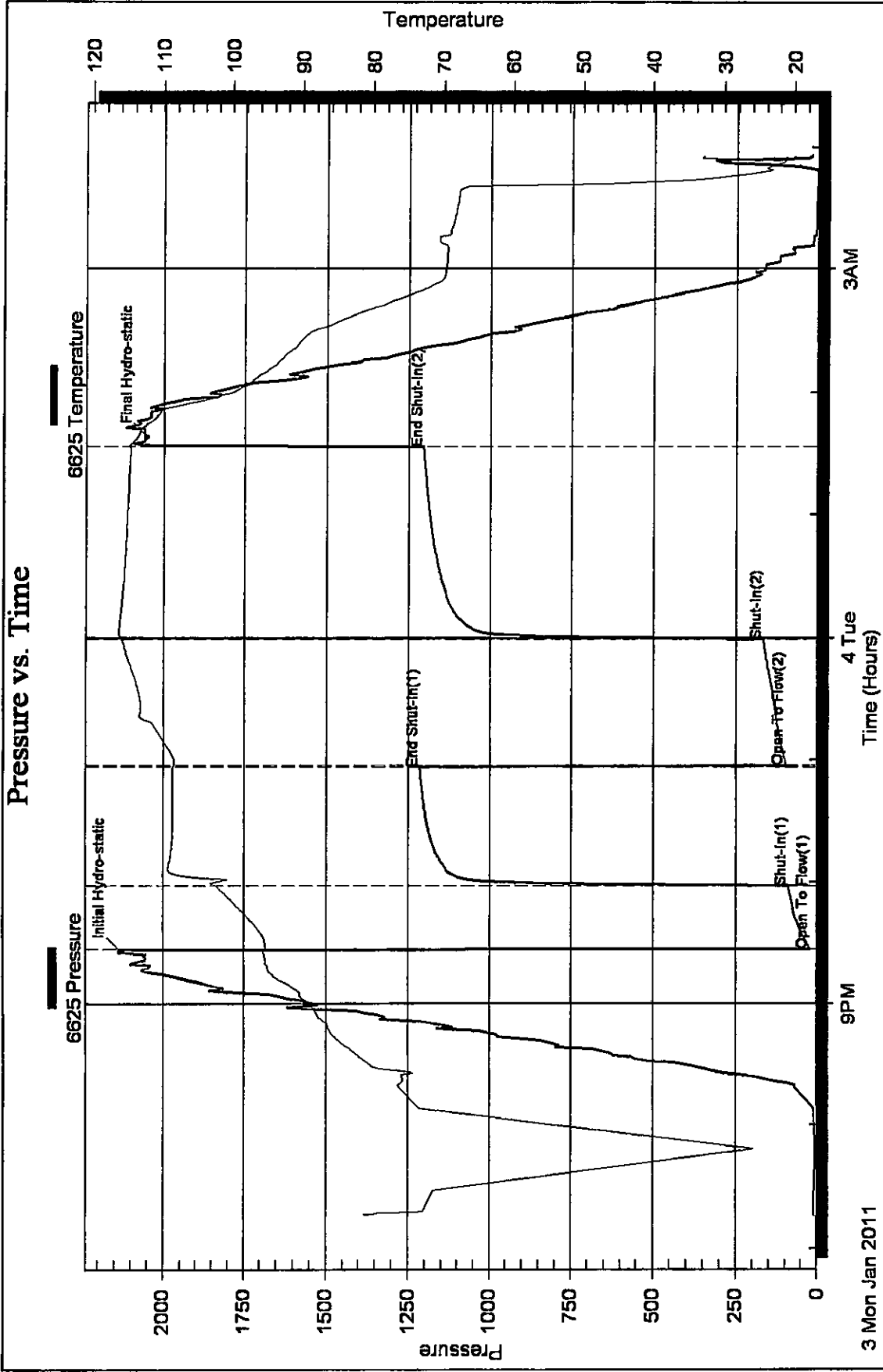
Inside

Murfin Drilling Co Inc

1-13s-33w Logan KS

DST Test Number: 3

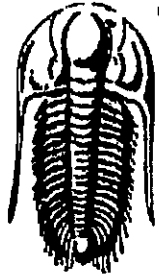
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 41661

Printed: 2011.01.13 @ 11:33:09 Page 5



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N. Water
Ste 300
Wichita KS 67202-1216

ATTN: Scott Robinson

1-13s-33w Logan KS

DFT #3-1

Start Date: 2011.01.05 @ 04:58:00

End Date: 2011.01.05 @ 14:58:00

Job Ticket #: 041197 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

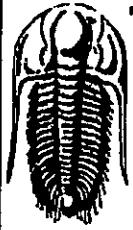
DFT #3-1

1-13s-33w Logan KS

DST # 4

Marn Pawnee

2011.01.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS

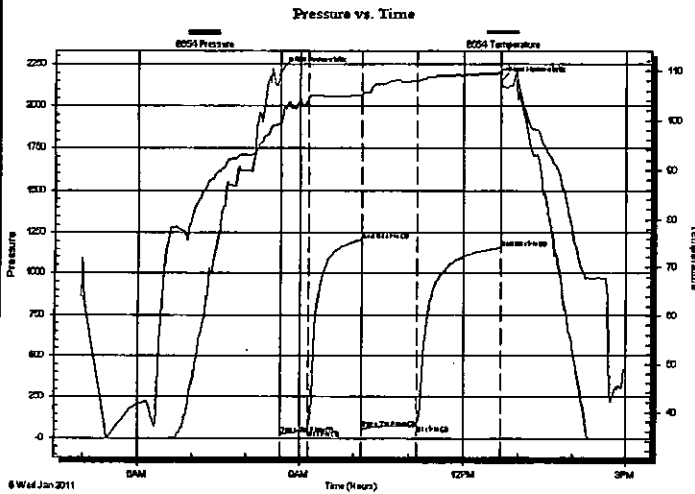
Job Ticket: 041197 DST#: 4
Test Start: 2011.01.05 @ 04:58:00

GENERAL INFORMATION:

Formation: Marm -Pawnee
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:38:45
Time Test Ended: 14:58:00
Interval: 4388.00 ft (KB) To 4500.00 ft (KB) (TVD)
Total Depth: 4500.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair
Reference Elevations: 3053.00 ft (KB)
3048.00 ft (CF)
KB to GR/CF: 5.00 ft
Test Type: Conventional Bottom Hole
Tester: Bradley Walter
Unit No: 28

Serial #: 8654 Inside
Press@RunDepth: 81.06 psig @ 4401.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.01.05 End Date: 2011.01.05 Last Calib.: 2011.01.05
Start Time: 04:58:05 End Time: 14:58:00 Time On Btm: 2011.01.05 @ 08:38:30
Time Off Btm: 2011.01.05 @ 12:41:30

TEST COMMENT: IF: 2 inch blow .
1st surface blow @ 30 minutes
FF: 2 inch blow .
FSI No return.



PRESSURE SUMMARY

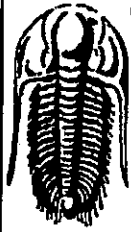
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2211.62	99.74	Initial Hydro-static
1	21.78	98.99	Open To Flow (1)
31	49.51	104.03	Shut-In(1)
90	1205.87	105.19	End Shut-In(1)
90	56.65	104.92	Open To Flow (2)
150	81.06	108.10	Shut-In(2)
242	1153.20	109.61	End Shut-In(2)
243	2153.47	110.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
143.00	OCM5%O 95%M	0.91

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc
250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

DFT #3-1
1-13s-33w Logan KS
Job Ticket: 041197 **DST#: 4**
Test Start: 2011.01.05 @ 04:58:00

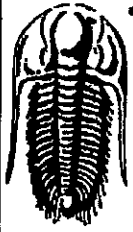
Tool Information

Drill Pipe:	Length: 4279.00 ft	Diameter: 3.80 inches	Volume: 60.02 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: 30000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 64000.00 lb
			Total Volume: 60.61 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4388.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	112.00 ft			
Tool Length:	133.00 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			4368.00	
Shut In Tool	5.00			4373.00	
Hydraulic tool	5.00			4378.00	
Packer	5.00			4383.00	21.00 Bottom Of Top Packer
Packer	5.00			4388.00	
Stubb	1.00			4389.00	
Perforations	12.00			4401.00	
Recorder	0.00	8654	Inside	4401.00	
Recorder	0.00	8360	Outside	4401.00	
Change Over Sub	1.00			4402.00	
Drill Pipe	94.00			4496.00	
Change Over Sub	1.00			4497.00	
Bullnose	3.00			4500.00	112.00 Bottom Packers & Anchor

Total Tool Length: 133.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

DFT #3-1

250 N. Water
Ste 300
Wichita KS 67202-1216
ATTN: Scott Robinson

1-13s-33w Logan KS
Job Ticket: 041197 **DST#: 4**
Test Start: 2011.01.05 @ 04:58:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6200.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
143.00	OCM 5%O 95%M	0.913

Total Length: 143.00 ft Total Volume: 0.913 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8654

Inside

Murfin Drilling Co Inc

1-13s-33w Logan KS

DST Test Number: 4

Pressure vs. Time

