

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

8/25/12

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

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: _____

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 #: D-30630
- ENHR Permit #: _____
- GSW Permit #: _____

<u>04/28/10</u>	<u>05/04/10</u>	<u>7/12/10</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 065-23639-0000

Spot Description: _____

NW SW NE SE Sec. 29 Twp. 10 S. R. 21 East West

1830 Feet from North / South Line of Section

1110 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

County: Graham

Lease Name: Joan Well #: 1-29 SWD

Field Name: Wildcat

Producing Formation: Cedar Hills

Elevation: Ground: 2184 Kelly Bushing: 2189

Total Depth: 3900 Plug Back Total Depth: 1651

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: 1685

feet depth to: Surface w/ 235 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: 08/25/10

KCC Office Use ONLY

Letter of Confidentiality Received

Date: 8/25/10 - 8/25/12

Confidential Release Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT I II III Approved by: Dg Date: 8/27/10

Operator Name: Murfin Drilling Company, Inc. Lease Name: Joan Well #: 1-29 SWD
 Sec. 29 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 Wireline 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: right;"> KCC AUG 25 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
Production		5 1/2	15.5#	1685	SMD	235	

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 checked="" type="checkbox"/> Plug Back TD	3660-3790	60/40 poz, 4% gel	25	
<input type="checkbox"/> Plug Off Zone	2070-2200	60/40 poz, 4% gel	25	

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
2	1350 - 1400		
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		AUG 25 2010	
		KCC WICHITA	

TUBING RECORD: Size: <u>2-3/8</u> Set At: <u>1318</u> Packer At: <u>1318</u> Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>07/22/10</u>	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input checked="" type="checkbox"/> Other (Explain) <u>Disposing Water</u>
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 checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>1350-1400</u>
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Joan #1-29 1750 FSL 1050 FEL Sec. 29-T10S-R21W 2189' KB							Aubrey #1-20 1550 FSL 330 FWL Sec. 20-T10S-R21W 2242' KB	
Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref	Log Tops	Datum
Cedar Hill				1152	-1402			
Anhydrite	1663	+526	+4	1658	+521	-1	1720	+522
B/Anhydrite	1707	+482	+6	1707	+482	+6	1766	+476
Topeka	3227	-1038	-4	3226	-1037	-3	3276	-1034
Lecompton	3339	-1150	-7	3336	-1147	-4	3385	-1143
Heebner	3438	-1249	-7	3436	-1247	-5	3484	-1242
Toronto	3460	-1271	-5	3458	-1269	-3	3508	-1266
Lansing	3476	-1287	-6	3473	-1284	-3	3523	-1281
Stark	3669	-1480	-5	3667	-1478	-3	3717	-1475
BKC	3712	-1523	-11	3712	-1523	-11	3754	-1512
Cong	3773	-1584	-14	3771	-1582	-12	3812	-1570
Arbuckle	3816	-1627	-3	3810	-1621	+3	3866	-1624
RTD	3900						3960	
LTD				3902			3962	

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August 25, 2010

Kansas Corporation Commission
Conservation Division
130 S Market, Room 2078
Wichita, Ks 67202

Re: **Confidential Filing: ACO-1**
API #15-065-23639-0000
Joan 1-29 SWD

To Whom It May Concern:

We are requesting the above referenced well to be held confidential for the maximum of two years.
Let me know if you need any further information on this.

Sincerely,

A handwritten signature in black ink, appearing to read "Elisabeth Heibel". The signature is fluid and cursive, with a large initial "E" and "H".

Elisabeth Heibel

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AUG 25 2010
KCC WICHITA



PO BOX 31 Russell, KS 67665

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

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

*operator pay
 mdc.
 BR*

INVOICE

Invoice Number: 122522
 Invoice Date: Apr 28, 2010
 Page: 1

*act.
 Ling
 Ron*

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Customer ID	Well Name# or Customer P.O.	Payment Terms	
Murfin	Joan #1-29	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-01	Russell	Apr 28, 2010	5/28/10

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	Unit Eq	W T	No.	Amount	Description
03600	00840		3651	4430.55 (1505.18)	Component S. (Sg.) <i>OKM</i>

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 23, 2010

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

1505.18
2925.37



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



Invoice

DATE	INVOICE #
5/5/2010	17474

BILL TO
Murfin Drilling Co Inc P. O. Box 130 Hill City, KS 67642-0130
USED FOR
APPROVAL

- Acidizing
- Cement
- Tool Rental

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TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-29	Joan	Graham	Murfin Drilling	SWD	Development	Plug Back/Long...	Nick
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				45	Miles	5.00	225.00
578D-L	Pump Charge - Long String - 1689 Feet				1	Job	1,400.00	1,400.00
580	Additional Hours (Plug Back)				3	Hours	200.00	600.00
281	Mud Flush				500	Gallon(s)	1.00	500.00T
290	D-Air				3	Gallon(s)	35.00	105.00T
402-5	5 1/2" Centralizer				4	Each	55.00	220.00T
403-5	5 1/2" Cement Basket				2	Each	200.00	400.00T
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
325	Standard Cement				235	Sacks	12.00	2,820.00T
328-4	60/40 Pozmix (4% Gel)				95		9.75	926.25T
276	Flocele				125	Lb(s)	1.50	187.50T
581D	Service Charge Cement				330	Sacks	1.50	495.00
583D	Drayage				698.5	Ton Miles	1.00	698.50
	Subtotal							9,077.25
	Sales Tax Graham County						6.55%	370.65
We Appreciate Your Business!							Total	\$9,447.90



CHARGE TO: *Murfin Drly*

ADDRESS

CITY, STATE, ZIP CODE

KOC
APR 25 2008
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TICKET
17474

PAGE	OF
1	7

SERVICE LOCATIONS 1. <i>Hays, Ks</i> 2. <i>Ness City, Ks</i> 3. 4.	WELL/PROJECT NO. <i>#1-29</i>	LEASE <i>Sean</i>	COUNTY/PARISH <i>Graham</i>	STATE <i>Ks</i>	CITY	DATE <i>5-5-10</i>	OWNER <i>SQM</i>
	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <i>Murfin Drly #</i>	RIG NAME/NO.	SHIPPED <i>VAT</i>	DELIVERED TO <i>Location</i>	ORDER NO.	
	WELL TYPE	WELL CATEGORY <i>SKD Development</i>	JOB PURPOSE <i>Play Back/Longstring</i>	WELL PERMIT NO.	WELL LOCATION		
REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE <i>#111</i>	45		mi		5.00	225.00
578		1			Pump Charge (Longstring)	1	1689			1400.00	1400.00
580		1			adapters (Plug backs)	3		hrs		200.00	600.00
281		1			Mud Flush	500		gal		1.00	500.00
290		1			O-Air	3		gal		35.00	105.00
402		1			Centralizers	4	5 1/2			55.00	220.00
403		1			Baskets	2				200.00	400.00
406		1			L.D. Plug & Baffle	1				225.00	225.00
407		1			Insert Float Shoe w/fill	1				275.00	275.00

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

X *John Lee*
DATE SIGNED *5-6-10* TIME SIGNED *0130*
 A.M.
 P.M.

REMIT PAYMENT TO:

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE		
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				PAGE TOTAL 1	3950.00
WE UNDERSTOOD AND MET YOUR NEEDS?				page 2	5127.25
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				subtotals	9077.25
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				Graham TAX 6.55%	370.65
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL	9447.90
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					

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

SWIFT OPERATOR *Mike Kishner* APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

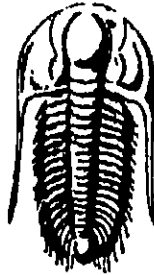
DATE 5-5-10 PAGE NO. 1

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
Murkin D. 1g		#1-29		Soon		Plug 5000 Longstring		17474	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
	1800								onloc setup Trk
									4 1/2" D.P. x 16.60 # x 22 7/8" hole 1st Plug @ 3290' 70bl slurry 2nd Plug @ 2200' " "
									1st Plug
	1910	4.5	0						Start wtr
			10/0						Start Cement 25 sks 60/40 2 4% gel
			7/0						Start wtr
			3/0						start mud
	1925		45						Balanced
									2nd Plug
	2010	4.5	0						start wtr
			10/0						Start Cat 25 sks 60/40 2 4% gel
			7/0						Start water
			3/0						start mud
	2020		25						Balanced
									Longstring
									T.C.C. @ 2070
									5 1/2" x 15.5 # x 1689' x 20'
									Cent 1, 2, 4, 17
									Back 2, 16
	2230								start FE
	2355								Break circ
									Plug RH + MH
	0037	4.5	0					250	Start Mud flush 50 gal
	0040	5.5	12/0					350	Start Cement
	0057	5.5	88/0					350	Raise weight
	0100	5.5	17/0					350	Raise weight
	0101		7						End Cement
									wash P&L / Drop LD Plug
	0104	6.5	0					150	Start Displacement
		5	2					175	circ. cement
	0112		40					500/100	Land Plug
									Release pressure
									1-Float Held

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circ 80 sks to pit
Josh Luster

Thank you
Nick, Josh, and Shane



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita KS 67202

ATTN: David Doyel

29 10 21 Graham KS

Joan # 1-29

Start Date: 2010.05.02 @ 14:08:45

End Date: 2010.05.02 @ 22:55:45

Job Ticket #: 38677 DST #: 1

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AUG 25 2010
KCC WICHITA

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

Murfin Drilling Co Inc

Joan # 1-29

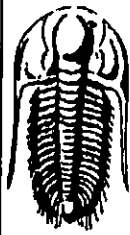
29 10 21 Graham KS

DST # 1

A-D

LKC

2010.05.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 NWtr Ste 300
Wichita KS 67202
ATTN: David Doyel

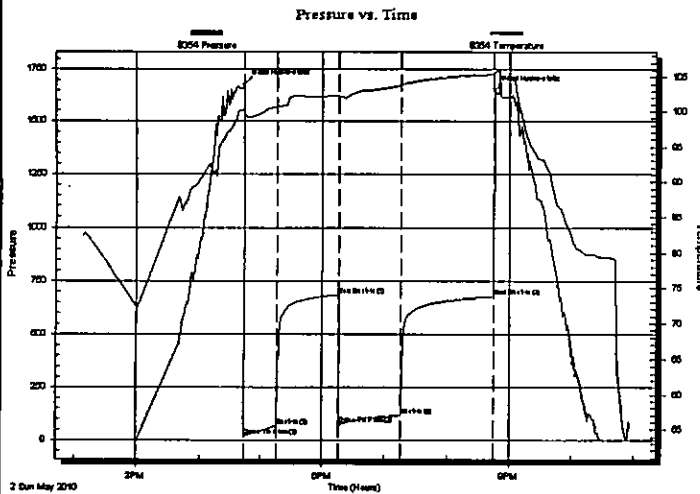
Joan # 1-29
29 10 21 Graham KS
Job Ticket: 38677 DST#: 1
Test Start: 2010.05.02 @ 14:08:45

GENERAL INFORMATION:

Formation: A-D LKC
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:44:30
Time Test Ended: 22:55:45
Interval: 3468.00 ft (KB) To 3541.00 ft (KB) (TVD)
Total Depth: 3541.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 38
Reference Elevations: 2189.00 ft (KB)
2184.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8354 Inside
Press@RunDepth: 114.89 psig @ 3471.00 ft (KB)
Start Date: 2010.05.02 End Date: 2010.05.02
Start Time: 14:08:46 End Time: 22:55:45
Capacity: 8000.00 psig
Last Calib.: 2010.05.02
Time On Btm: 2010.05.02 @ 16:43:45
Time Off Btm: 2010.05.02 @ 20:45:45

TEST COMMENT: IF-Weak building to 13/4"
FF-Weak building to 1/2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1680.25	100.13	Initial Hydro-static
1	18.51	99.27	Open To Flow (1)
32	64.64	100.56	Shut-In(1)
92	682.77	102.36	End Shut-In(1)
93	72.29	102.17	Open To Flow (2)
152	114.89	103.82	Shut-In(2)
242	673.77	105.41	End Shut-In(2)
242	1656.89	105.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
211.00	Drig Mud	1.31

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Joan # 1-29

250 N Wtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38677

DST#: 1

ATTN: David Doyel

Test Start: 2010.05.02 @ 14:08:45

Tool Information

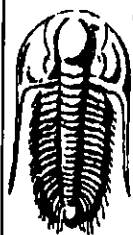
Drill Pipe:	Length: 3265.00 ft	Diameter: 3.80 inches	Volume: 45.80 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 181.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 46.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	1.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3468.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.00 ft			
Tool Length:	96.00 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			3446.00	
Shut In Tool	5.00			3451.00	
Hydraulic tool	5.00			3456.00	
Safety Joint	3.00			3459.00	
Packer	5.00			3464.00	23.00 Bottom-Of Top Packer
Packer	4.00			3468.00	
Stubb	1.00			3469.00	
Perforations	1.00			3470.00	
Change Over Sub	1.00			3471.00	
Recorder	0.00	8354	Inside	3471.00	
Recorder	0.00	8520	Outside	3471.00	
Drill Pipe	62.00			3533.00	
Change Over Sub	1.00			3534.00	
Perforations	4.00			3538.00	
Bullnose	3.00			3541.00	73.00 Bottom Packers & Anchor

Total Tool Length: 96.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Wtr Ste 300
Wichita KS 67202
ATTN: David Doyel

Joan # 1-29
29 10 21 Graham KS
Job Ticket: 38677 DST#: 1
Test Start: 2010.05.02 @ 14:08:45

Mud and Cushion Information

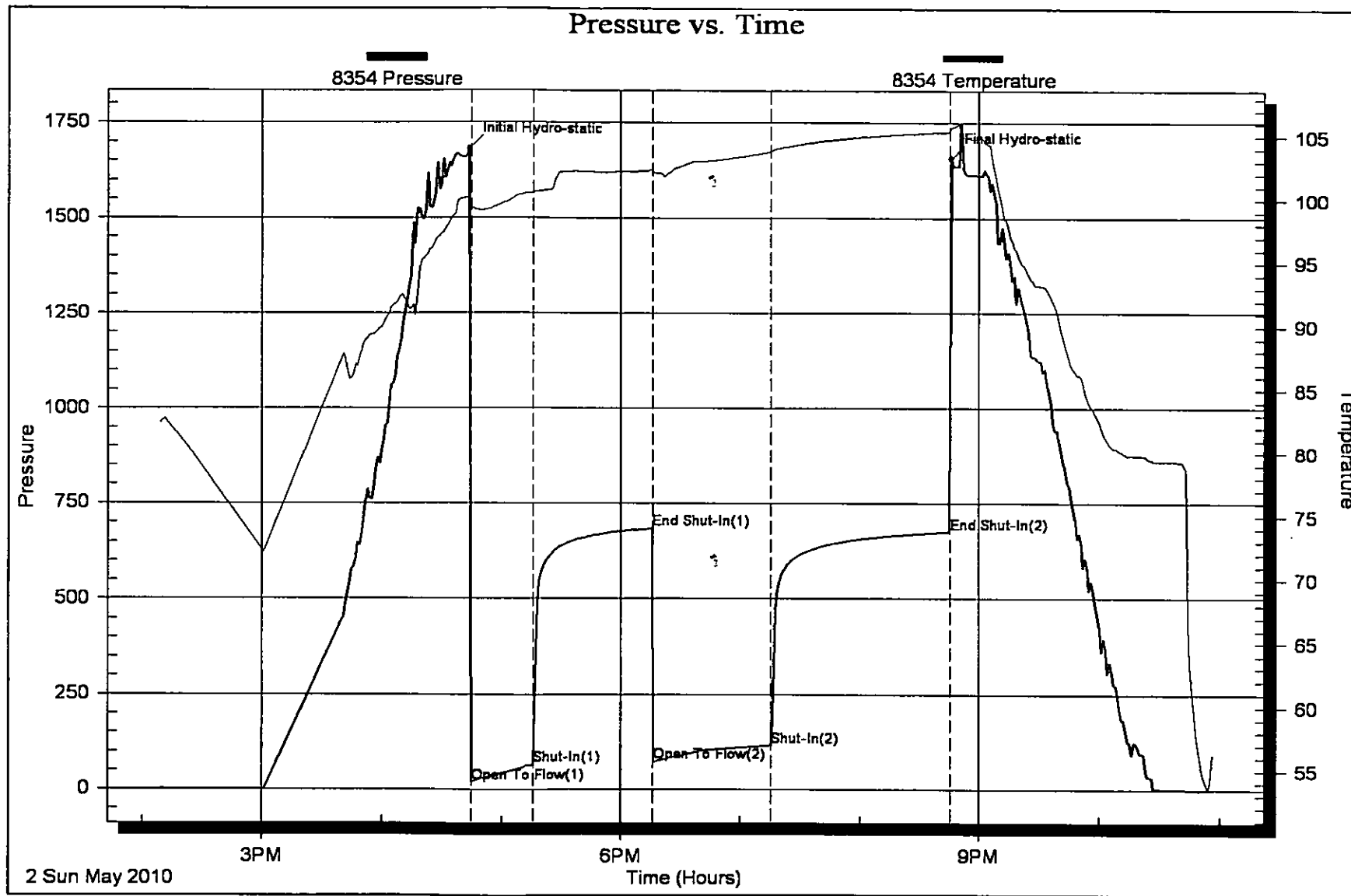
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.17 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1600.00 ppm			
Filter Cake: inches			

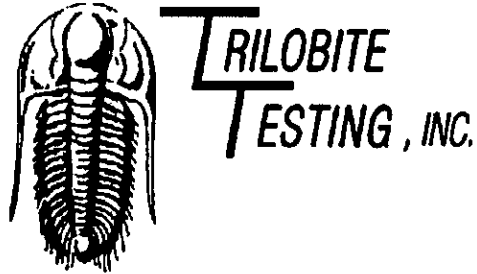
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
211.00	Drig Mud	1.311

Total Length: 211.00 ft Total Volume: 1.311 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita KS 67202

ATTN: David Doyel

29 10 21 Graham KS

Joan # 1-29

Start Date: 2010.05.03 @ 08:43:49

End Date: 2010.05.03 @ 16:37:19

Job Ticket #: 38678 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

Joan # 1-29

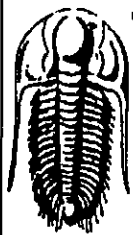
29 10 21 Graham KS

DST # 2

E-H

LKC

2010.05.03



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

Joan # 1-29

250 N Wtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38678

DST#: 2

ATTN: David Doyel

Test Start: 2010.05.03 @ 08:43:49

GENERAL INFORMATION:

Formation: E-H LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:32:34

Time Test Ended: 16:37:19

Interval: 3543.00 ft (KB) To 3630.00 ft (KB) (TVD)

Total Depth: 3630.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Reference Elevations: 2189.00 ft (KB)

2184.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8354

Inside

Press@RunDepth: 592.62 psig @ 3546.00 ft (KB)

Start Date: 2010.05.03

End Date:

2010.05.03

Start Time: 08:43:50

End Time:

16:37:19

Capacity: 8000.00 psig

Last Calib.: 2010.05.03

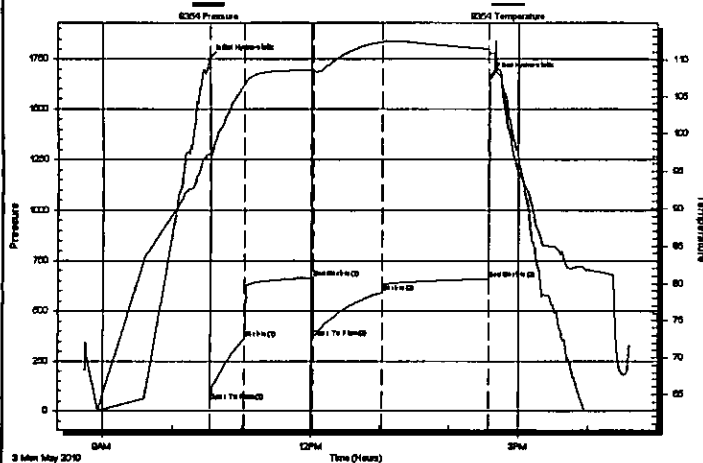
Time On Btm: 2010.05.03 @ 10:31:04

Time Off Btm: 2010.05.03 @ 14:35:04

TEST COMMENT: IF-Strong B-B in 4 min

FF-Strong B-B in 6 min

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1751.45	97.27	Initial Hydro-static
2	49.21	96.78	Open To Flow (1)
31	365.08	106.47	Shut-In(1)
91	665.51	108.52	End Shut-In(1)
91	370.51	108.41	Open To Flow (2)
152	592.62	112.29	Shut-In(2)
244	660.37	111.38	End Shut-In(2)
244	1667.98	110.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1299.00	Wtr	16.57
1.00	CO	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Joan # 1-29

250 N Wtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38678

DST#: 2

ATTN: David Doyel

Test Start: 2010.05.03 @ 08:43:49

Tool Information

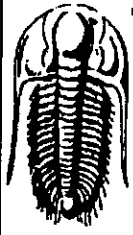
Drill Pipe:	Length: 3360.00 ft	Diameter: 3.80 inches	Volume: 47.13 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 181.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 48.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3543.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	87.00 ft			
Tool Length:	110.00 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			3521.00	
Shut In Tool	5.00			3526.00	
Hydraulic tool	5.00			3531.00	
Safety Joint	3.00			3534.00	
Packer	5.00			3539.00	23.00 Bottom Of Top Packer
Packer	4.00			3543.00	
Stubb	1.00			3544.00	
Perforations	1.00			3545.00	
Change Over Sub	1.00			3546.00	
Recorder	0.00	8354	Inside	3546.00	
Recorder	0.00	8520	Outside	3546.00	
Drill Pipe	62.00			3608.00	
Change Over Sub	1.00			3609.00	
Perforations	18.00			3627.00	
Bullnose	3.00			3630.00	87.00 Bottom Packers & Anchor

Total Tool Length: 110.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Wtr Ste 300
Wichita KS 67202
ATTN: David Doyel

Joan # 1-29
29 10 21 Graham KS
Job Ticket: 38678 DST#: 2
Test Start: 2010.05.03 @ 08:43:49

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: 150000 ppm	
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.18 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3400.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

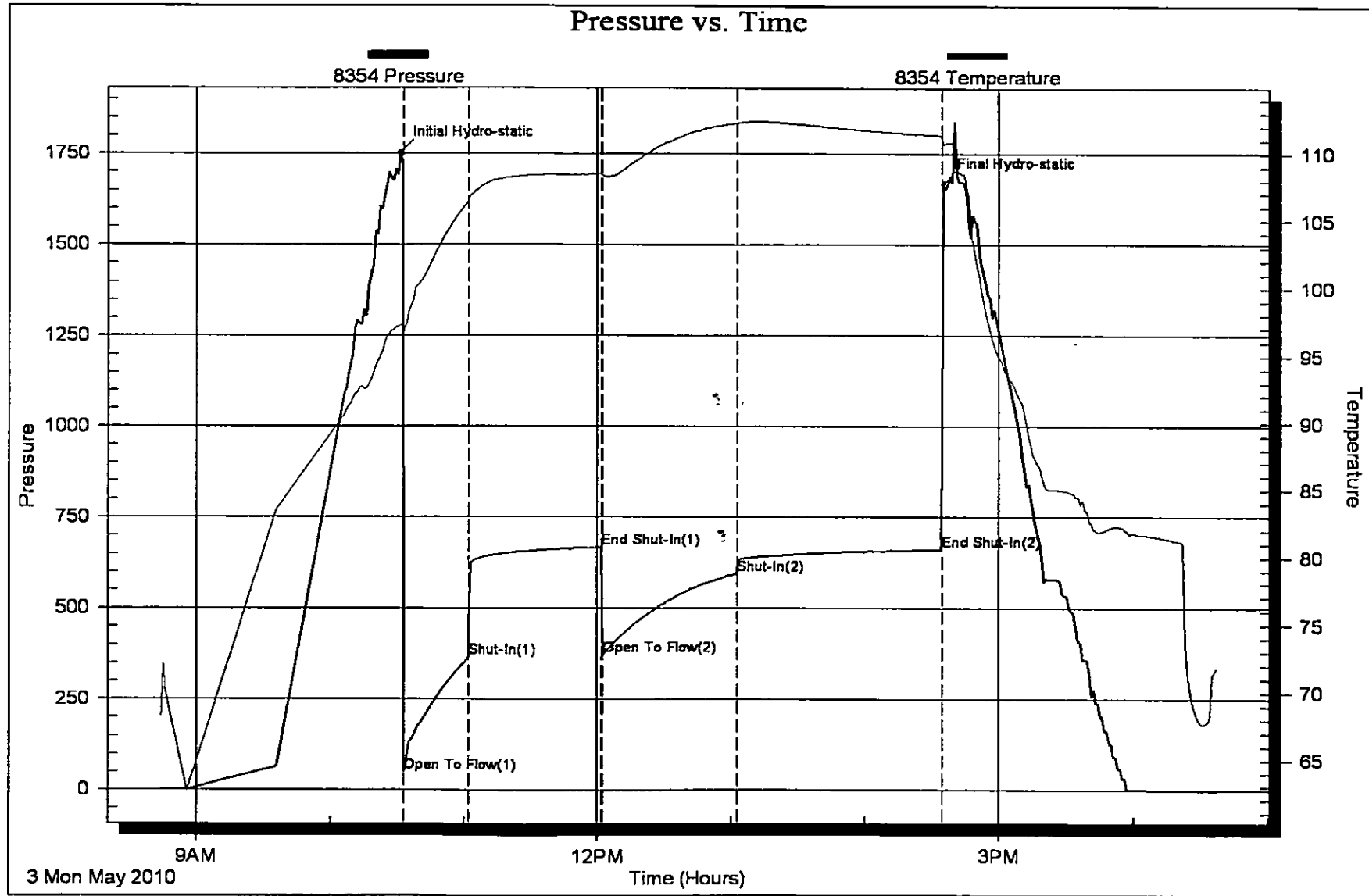
Length ft	Description	Volume bbl
1299.00	Wtr	16.573
1.00	CO	0.014

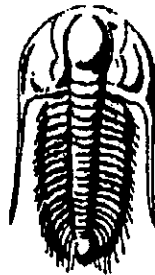
Total Length: 1300.00 ft Total Volume: 16.587 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Rw .05 @ 84 = 150000ppm





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita KS 67202

ATTN: David Doyel

29 10 21 Graham KS

Joan # 1-29

Start Date: 2010.05.04 @ 03:00:56

End Date: 2010.05.04 @ 10:50:56

Job Ticket #: 38679 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

Joan # 1-29

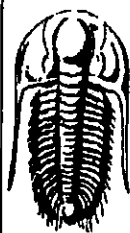
29 10 21 Graham KS

DST # 3

I-L

LKC

2010.05.04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfyn Drilling Co Inc

Joan # 1-29

250 N Wtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38679

DST#: 3

ATTN: David Doyel

Test Start: 2010.05.04 @ 03:00:56

GENERAL INFORMATION:

Formation: I-L LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:52:41

Time Test Ended: 10:50:56

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: 3626.00 ft (KB) To 3708.00 ft (KB) (TVD)

Total Depth: 3708.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2189.00 ft (KB)

2184.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8354

Inside

Press@RunDepth: 73.12 psig @ 3629.00 ft (KB)

Start Date: 2010.05.04

End Date:

2010.05.04

Start Time: 03:00:57

End Time:

10:50:56

Capacity: 8000.00 psig

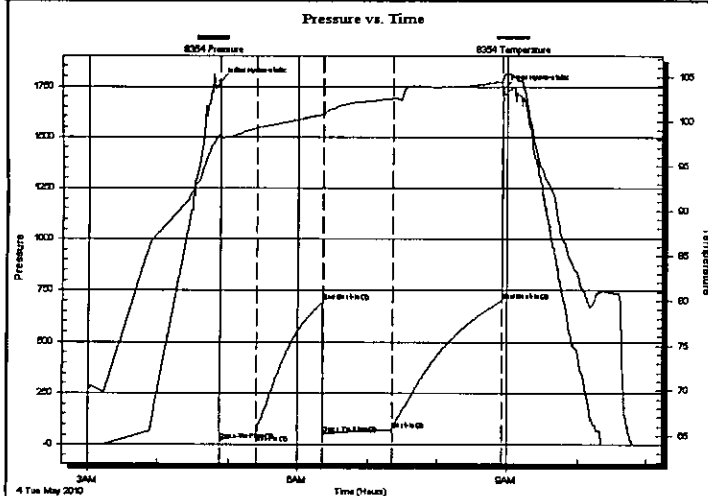
Last Calib.: 2010.05.04

Time On Btm: 2010.05.04 @ 04:52:26

Time Off Btm: 2010.05.04 @ 08:56:26

TEST COMMENT: IF-Weak building to 1 1/4"

FF- Weak steady surface blow



PRESSURE SUMMARY

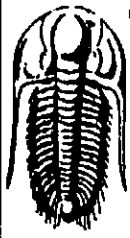
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.19	98.46	Initial Hydro-static
1	19.81	97.98	Open To Flow (1)
32	47.64	99.28	Shut-In(1)
90	693.92	100.70	End Shut-In(1)
90	52.26	100.54	Open To Flow (2)
150	73.12	102.57	Shut-In(2)
244	701.93	104.46	End Shut-In(2)
244	1739.40	104.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Drig Mud	0.59

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 Wtr Ste 300
Wichita KS 67202
ATTN: David Doyel

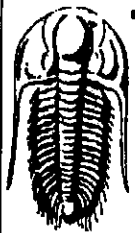
Joan # 1-29
29 10 21 Graham KS
Job Ticket: 38679 DST#: 3
Test Start: 2010.05.04 @ 03:00:56

Tool Information

Drill Pipe:	Length: 3455.00 ft	Diameter: 3.80 inches	Volume: 48.46 bbl	Tool Weight: 2300.00 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: 181.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 49.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3626.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 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			3604.00	
Shut In Tool	5.00			3609.00	
Hydraulic tool	5.00			3614.00	
Safety Joint	3.00			3617.00	
Packer	5.00			3622.00	23.00 Bottom Of Top Packer
Packer	4.00			3626.00	
Stubb	1.00			3627.00	
Perforations	1.00			3628.00	
Change Over Sub	1.00			3629.00	
Recorder	0.00	8354	Inside	3629.00	
Recorder	0.00	8520	Outside	3629.00	
Drill Pipe	62.00			3691.00	
Change Over Sub	1.00			3692.00	
Perforations	13.00			3705.00	
Bullnose	3.00			3708.00	82.00 Bottom Packers & Anchor
Total Tool Length:	105.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Joan # 1-29

250 NWtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38679

DST#: 3

ATTN: David Doyel

Test Start: 2010.05.04 @ 03:00:56

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:

bbf

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
120.00	Drig Mud	0.590

Total Length: 120.00 ft

Total Volume: 0.590 bbf

Num Fluid Samples: 0

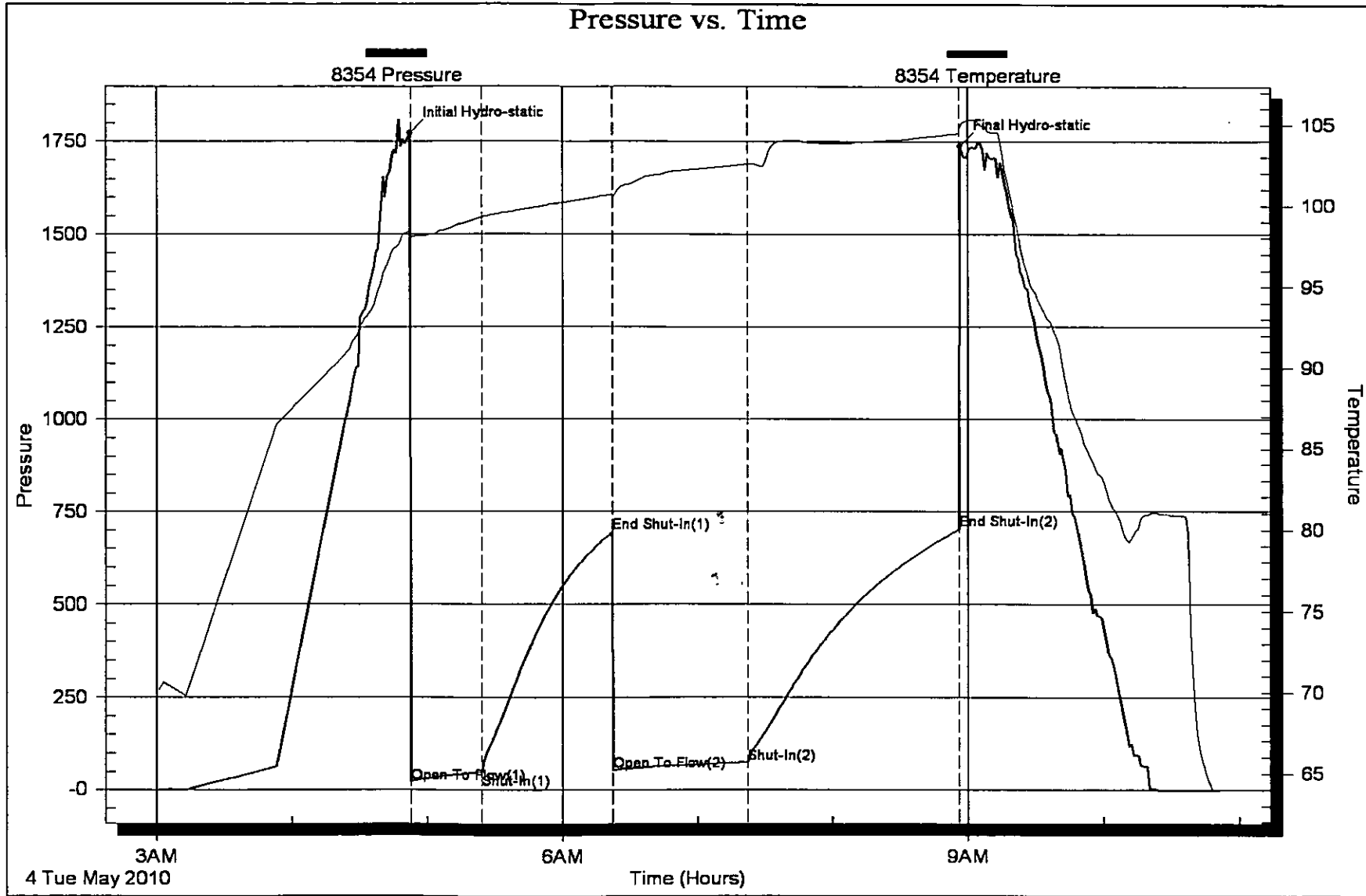
Num Gas Bombs: 0

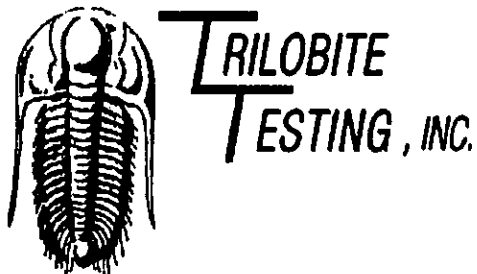
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Wtr Ste 300
Wichita KS 67202

ATTN: David Doyel

29 10 21 Graham KS

Joan # 1-29

Start Date: 2010.05.05 @ 09:23:15

End Date: 2010.05.05 @ 15:31:15

Job Ticket #: 38680 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling Co Inc

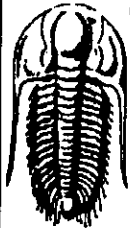
Joan # 1-29

29 10 21 Graham KS

DST # 4

Arbuckle

2010.05.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 NWtr Ste 300
Wichita KS 67202
ATTN: David Doyel

Joan # 1-29
29 10 21 Graham KS
Job Ticket: 38680 DST#: 4
Test Start: 2010.05.05 @ 09:23:15

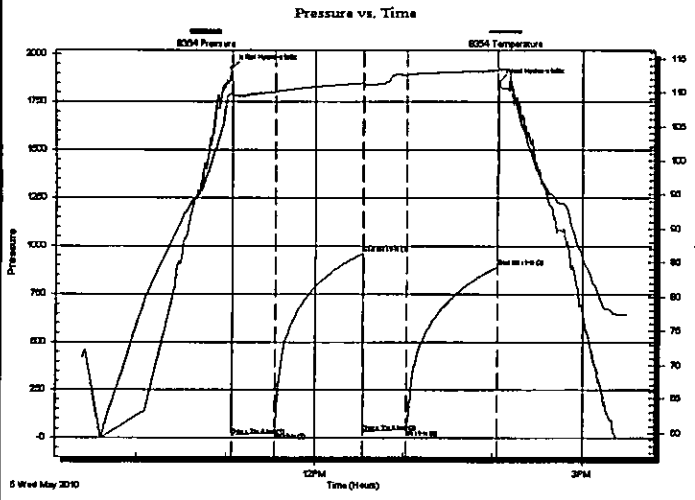
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: **No** Whipstock: ft (KB)
 Time Tool Opened: 11:04:00
 Time Test Ended: 15:31:15
 Interval: **3816.00 ft (KB) To 3840.00 ft (KB) (TVD)**
 Total Depth: **3900.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Straddle**
 Tester: **Dan Bangle**
 Unit No: **38**
 Reference Elevations: **2189.00 ft (KB)**
2184.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: 8354 **Inside**
 Press@RunDepth: **46.34 psig @ 3817.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2010.05.05** End Date: **2010.05.05** Last Calib.: **2010.05.05**
 Start Time: **09:23:16** End Time: **15:31:15** Time On Btm: **2010.05.05 @ 11:03:00**
 Time Off Btm: **2010.05.05 @ 14:03:45**

TEST COMMENT: IF-Weak building to 3/4"
 FF-Weak steady surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1924.93	109.92	Initial Hydro-static
1	13.27	109.17	Open To Flow (1)
30	30.21	110.08	Shut-In(1)
89	958.78	111.37	End Shut-In(1)
90	32.38	111.10	Open To Flow (2)
119	46.34	112.62	Shut-In(2)
180	891.66	113.23	End Shut-In(2)
181	1854.45	113.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Drig Mud	0.32

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

Joan # 1-29

250 N Wtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38680

DST#: 4

ATTN: David Doyel

Test Start: 2010.05.05 @ 09:23:15

Tool Information

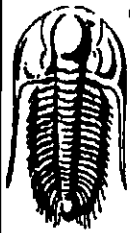
Drill Pipe:	Length: 3615.00 ft	Diameter: 3.80 inches	Volume: 50.71 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 181.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 51.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3816.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	3840.00 ft			
Interval between Packers:	24.00 ft			
Tool Length:	107.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3794.00	
Shut In Tool	5.00			3799.00	
Hydraulic tool	5.00			3804.00	
Safety Joint	3.00			3807.00	
Packer	5.00			3812.00	23.00 Bottom Of Top Packer
Packer	4.00			3816.00	
Stubb	1.00			3817.00	
Recorder	0.00	8354	Inside	3817.00	
Recorder	0.00	8520	Outside	3817.00	
Perforations	19.00			3836.00	
Blank Off Sub	1.00			3837.00	
Blank Spacing	3.00			3840.00	24.00 Tool Interval
Packer	2.00			3842.00	
Stubb	1.00			3843.00	
Recorder	0.00	8653	Outside	3843.00	
Perforations	20.00			3863.00	
Change Over Sub	1.00			3864.00	
Drill Pipe	32.00			3896.00	
Change Over Sub	1.00			3897.00	
Bullnose	3.00			3900.00	60.00 Bottom Packers & Anchor

Total Tool Length: 107.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

Joan # 1-29

250 N Wtr Ste 300
Wichita KS 67202

29 10 21 Graham KS

Job Ticket: 38680

DST#: 4

ATTN: David Doyel

Test Start: 2010.05.05 @ 09:23:15

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: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Drig Mud	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

