



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste300
Wichita KS 67202

ATTN: Wes Hansen

22 30S 22W Clark KS

FVB#1-22

Start Date: 2006.04.22 @ 13:36:56

End Date: 2006.04.22 @ 23:53:26

Job Ticket #: 24087 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste300
Wichita KS 67202

ATTN: Wes Hansen

FVB#1-22

22 30S 22W Clark KS

Job Ticket: 24087

DST#: 1

Test Start: 2006.04.22 @ 13:36:56

GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:26:11

Time Test Ended: 23:53:26

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 23

Interval: 5262.00 ft (KB) To 5323.00 ft (KB) (TVD)

Total Depth: 5323.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2362.00 ft (KB)

2351.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6771

Inside

Press@RunDepth: 65.07 psig @ 5263.00 ft (KB)

Start Date: 2006.04.22 End Date: 2006.04.22

Start Time: 13:37:01 End Time: 23:53:26

Capacity: 7000.00 psig

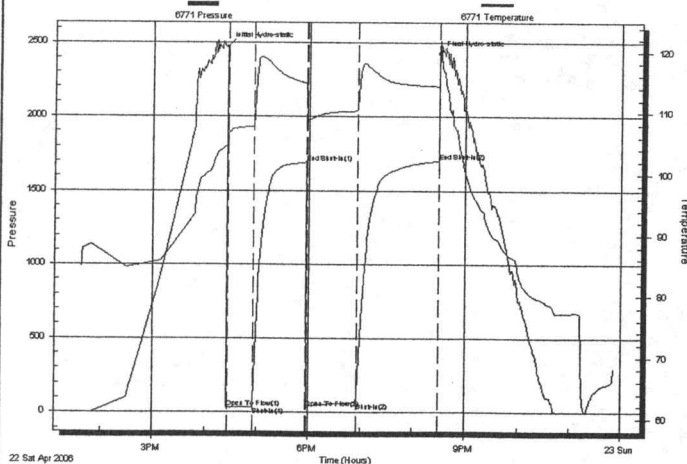
Last Calib.: 2006.04.22

Time On Btm: 2006.04.22 @ 16:25:11

Time Off Btm: 2006.04.22 @ 20:29:10

TEST COMMENT: IF Strong blow BOB in 75 secs GTS in 19"(see gas flow report)
ISI No blow
FF Strong blow (see gas flow report)
FSI No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2475.94	104.61	Initial Hydro-static
1	29.92	105.17	Open To Flow (1)
31	36.78	107.71	Shut-In(1)
92	1690.26	114.81	End Shut-In(1)
93	30.69	109.05	Open To Flow (2)
151	65.07	110.29	Shut-In(2)
244	1700.10	114.36	End Shut-In(2)
244	2426.66	114.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	GCM 10%G 90%M	0.37

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	5.00	30.78
Last Gas Rate	0.25	27.00	65.68
Max. Gas Rate	0.25	27.00	65.68



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc

FVB#1-22

250 N Water Ste300
Wichita KS 67202

22 30S 22W Clark KS

Job Ticket: 24087

DST#: 1

ATTN: Wes Hansen

Test Start: 2006.04.22 @ 13:36:56

Tool Information

Drill Pipe:	Length: 5082.00 ft	Diameter: 3.80 inches	Volume: 71.29 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 78000.00 lb
		Total Volume: 72.20 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	5262.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	61.00 ft			
Tool Length:	88.00 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			5236.00		
Shut In Tool	5.00			5241.00		
Hydraulic tool	5.00			5246.00		
Jars	5.00			5251.00		
Safety Joint	2.00			5253.00		
Packer	4.00			5257.00	27.00	Bottom Of Top Packer
Packer	5.00			5262.00		
Stubb	1.00			5263.00		
Recorder	0.00	6771	Inside	5263.00		
Perforations	2.00			5265.00		
Change Over Sub	1.00			5266.00		
Blank Spacing	31.00			5297.00		
Change Over Sub	1.00			5298.00		
Change Over Sub	0.00			5298.00		
Perforations	20.00			5318.00		
Recorder	0.00	13222	Outside	5318.00		
Bullnose	5.00			5323.00	61.00	Bottom Packers & Anchor
Total Tool Length:		88.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

FVB#1-22

250 N Water Ste300
Wichita KS 67202

22 30S 22W Clark KS

Job Ticket: 24087

DST#: 1

ATTN: Wes Hansen

Test Start: 2006.04.22 @ 13:36:56

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 8.79 in³

Resistivity: 0.00 ohm.m

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

deg API

Water Salinity:

3000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	GCM 10%G 90%M	0.369

Total Length: 75.00 ft

Total Volume: 0.369 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: gp-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

Murfin Drilling Co Inc

FVB#1-22

250 N Water Ste300
Wichita KS 67202

22 30S 22W Clark KS

Job Ticket: 24087

DST#: 1

ATTN: Wes Hansen

Test Start: 2006.04.22 @ 13:36:56

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
1	30	0.25	5.00	30.78
1	30	0.25	5.00	30.78
2	10	0.25	16.00	48.23
2	20	0.25	20.00	54.57
2	30	0.25	23.00	59.33
2	40	0.25	25.00	62.50
2	50	0.25	27.00	65.68

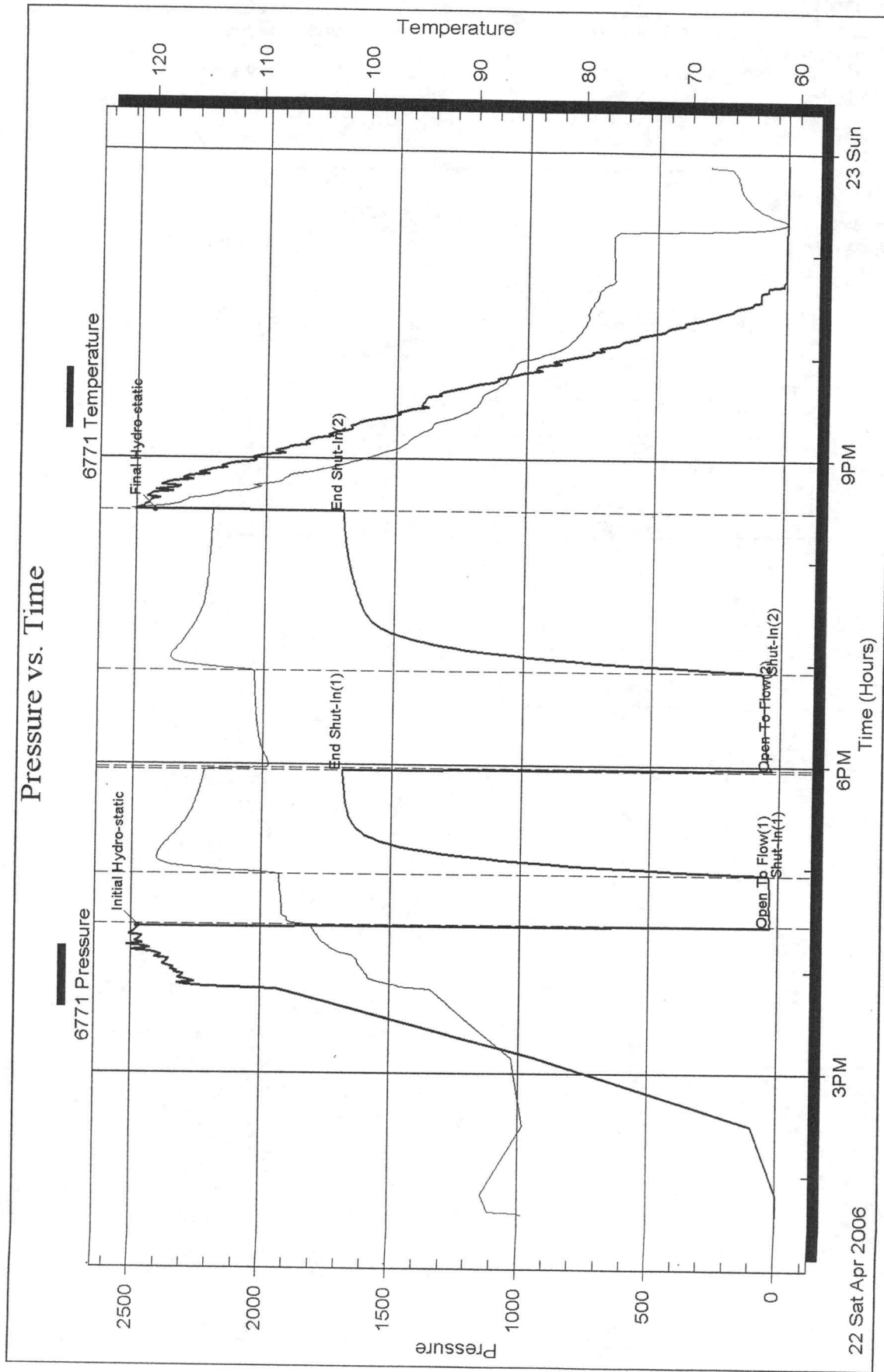
Serial #: 6771

Inside

Murfin Drilling Co Inc

22 30S 22W Clark KS

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 24087

Printed: 2006.04.26 @ 12:20:47 Page 6



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste300
Wichita KS 67202

ATTN: Wes Hansen

22 30S 22W Clark KS

FVB#1-22

Start Date: 2006.04.23 @ 18:34:32

End Date: 2006.04.24 @ 05:24:17

Job Ticket #: 24088 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc

250 N Water Ste300
Wichita KS 67202

ATTN: Wes Hansen

FVB#1-22

22 30S 22W Clark KS

Job Ticket: 24088

DST#: 2

Test Start: 2006.04.23 @ 18:34:32

GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:52:47

Time Test Ended: 05:24:17

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 23

Interval: **5323.00 ft (KB) To 5355.00 ft (KB) (TVD)**

Total Depth: 5355.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2362.00 ft (KB)

2351.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6771 Inside

Press@RunDepth: 23.00 psig @ 5324.00 ft (KB)

Start Date: 2006.04.23

End Date:

2006.04.24

Start Time: 18:34:37

End Time:

05:24:17

Capacity: 7000.00 psig

Last Calib.: 2006.04.24

Time On Btm: 2006.04.23 @ 21:52:17

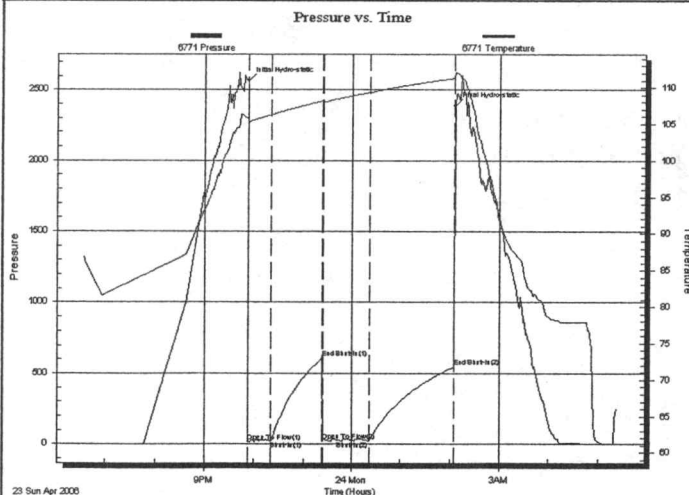
Time Off Btm: 2006.04.24 @ 02:05:31

TEST COMMENT: IF Strong blow BOB in 14"

ISI No blow

FF Fair to strong blow BOB in 18"

FSI No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2565.25	105.79	Initial Hydro-static
1	15.41	105.23	Open To Flow (1)
28	19.48	106.25	Shut-In(1)
92	608.33	108.19	End Shut-In(1)
92	25.44	108.02	Open To Flow (2)
149	23.00	109.34	Shut-In(2)
253	545.38	111.33	End Shut-In(2)
254	2386.55	112.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOCM 1%O 99%M	0.30
25.00	HM	0.33
0.00	550 ft.of 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

250 N Water Ste300
Wichita KS 67202

ATTN: Wes Hansen

FVB#1-22

22 30S 22W Clark KS

Job Ticket: 24088

DST#: 2

Test Start: 2006.04.23 @ 18:34:32

Tool Information

Drill Pipe:	Length: 5265.00 ft	Diameter: 3.80 inches	Volume: 73.85 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 62.00 ft	Diameter: 2.25 inches	Volume: 0.30 bbl	Weight to Pull Loose: 71000.00 lb
		Total Volume: 74.15 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	5323.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	59.00 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			5297.00	
Shut In Tool	5.00			5302.00	
Hydraulic tool	5.00			5307.00	
Jars	5.00			5312.00	
Safety Joint	2.00			5314.00	
Packer	4.00			5318.00	27.00 Bottom Of Top Packer
Packer	5.00			5323.00	
Stubb	1.00			5324.00	
Recorder	0.00	6771	Inside	5324.00	
Perforations	26.00			5350.00	
Recorder	0.00	13222	Outside	5350.00	
Bullnose	5.00			5355.00	32.00 Bottom Packers & Anchor

Total Tool Length: 59.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc

FVB#1-22

250 N Water Ste300
Wichita KS 67202

22 30S 22W Clark KS

Job Ticket: 24088

DST#: 2

ATTN: Wes Hansen

Test Start: 2006.04.23 @ 18:34:32

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 44.00 sec/qt

Water Loss: 8.79 in³

Resistivity: 0.00 ohm.m

Salinity: 7000.00 ppm

Filter Cake: 0.20 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

deg API

Water Salinity:

7000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	SOCM 1%O 99%M	0.295
25.00	HM	0.332
0.00	550 ft.of GIP	0.000

Total Length:

85.00 ft

Total Volume:

0.627 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Murfin Drilling Co Inc

FVB#1-22

250 N Water Ste300
Wichita KS 67202

22 30S 22W Clark KS

Job Ticket: 24088

DST#: 2

ATTN: Wes Hansen

Test Start: 2006.04.23 @ 18:34:32

Gas Rates Information

Temperature: 59 deg C

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
		0.00	0.00	0.00

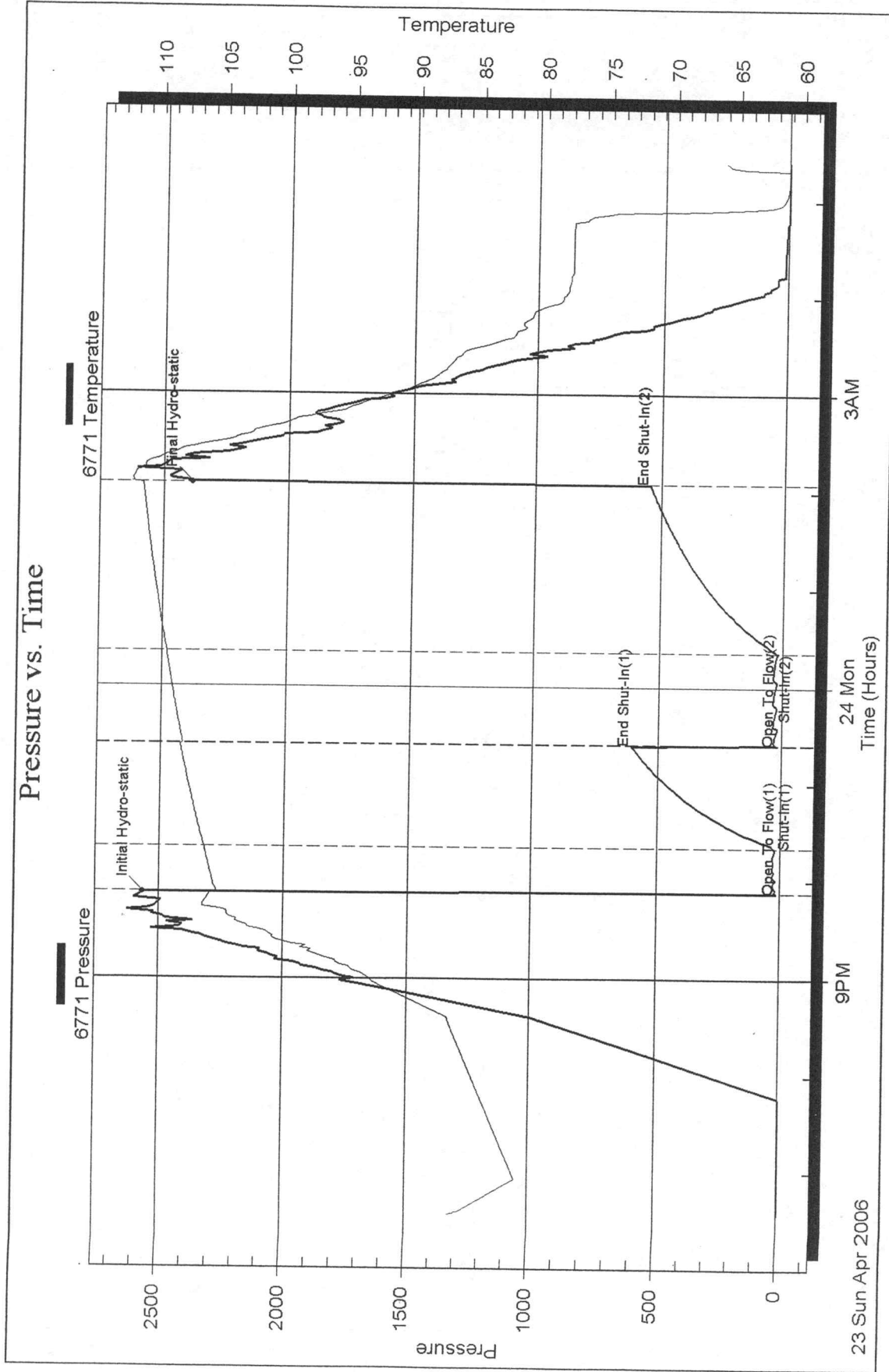
Serial #: 6771

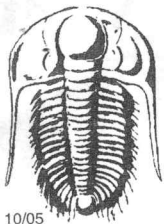
Inside

Murfin Drilling Co Inc

22 30S 22W Clark KS

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 24087

Test Ticket

Well Name & No. FVB #1-22 Test No. 1 Date 4-22-06
 Company Murfin Drilling Co Inc. Zone Tested Miss.
 Address 250 N. Water, Ste. 300, Wichita Ks 67202 Elevation 2362 KB 2351 GL
 Co. Rep / Geo. Wes Hansen Rig Murfin #2
 Location: Sec. 22 Twp. 30 S Rge. 22 W Co. Clark State Ks.
 Comment: _____ Release date / time: _____

Interval Tested 5262 - 5323' Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 64,000
 Anchor Length 61' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 78,000
 Top Packer Depth 5257' Tool Weight 2100#
 Bottom Packer Depth 5262' Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 5323' Wt. Pipe Run None Drill Collar Run 185
 Mud Wt. 9.1 LCM 3# Vis. 47 WL 8.8 cc Drill Pipe Size 4 1/2" Ft. Run 5082
 Blow Description IF: Strong Blow B.O.B. in 75 sec. FF: Strong blow. (see gas flow report) ISI: No blow.
FF: Strong blow. (see gas flow report) FSI: No blow.

Recovery - Total Feet 75 GIP yes Ft. in DC 75 Ft. in DP 0
 Rec. 75 Feet of GCM 10 %gas %oil %water 90 %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 BHT _____ °F Gravity N/A °API D @ cc °F Corrected Gravity N/A °API
 RW N.C. @ 2 °F Chlorides 3,000 ppm Recovery _____ Chlorides 3,000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2492</u>	<u>2492</u> PSI	<u>6771</u>	<u>✓ 1200</u>
(B) First Initial Flow Pressure		<u>30</u> PSI	<u>5263</u>	<u>✓ 250</u>
(C) First Final Flow Pressure		<u>37</u> PSI	<u>13222</u>	<u>✓ 75</u>
(D) Initial Shut-In Pressure		<u>1690</u> PSI	<u>5318</u>	
(E) Second Initial Flow Pressure		<u>31</u> PSI		
(F) Second Final Flow Pressure		<u>65</u> PSI		
(G) Final Shut-In Pressure		<u>1700</u> PSI	<u>Initial Opening</u>	
(Q) Final Hydrostatic Mud		<u>2485</u> PSI	<u>Initial Shut-In</u>	

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

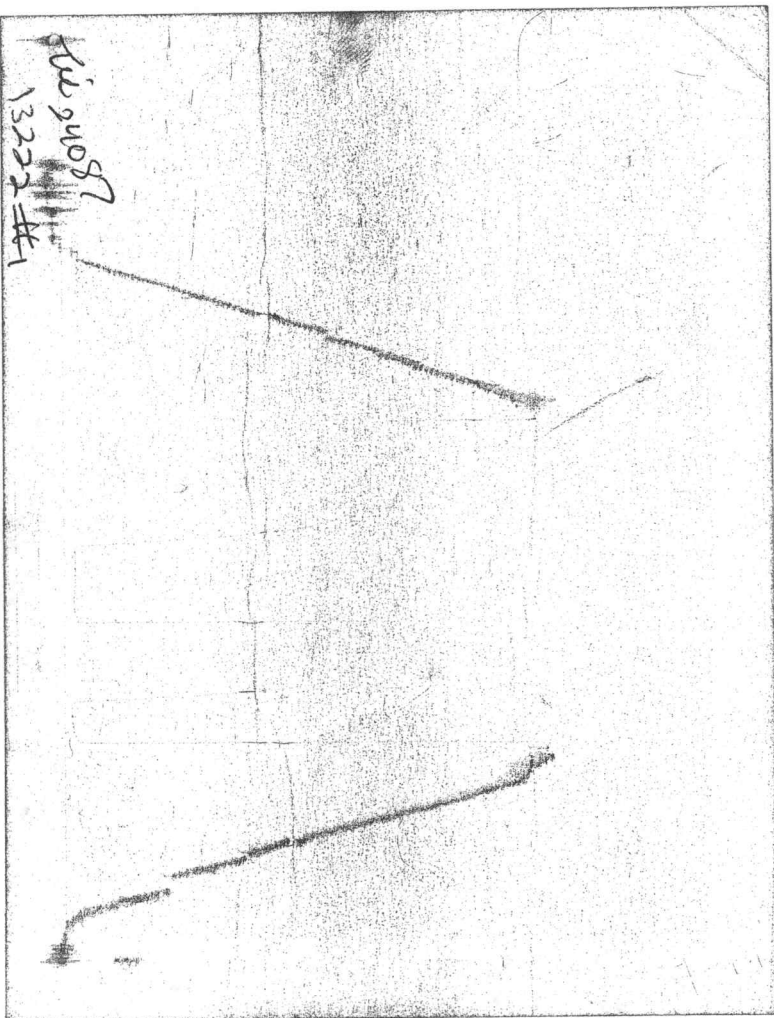
Approved By Wes Hansen

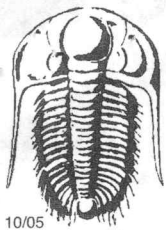
Our Representative Carmy P. ...

Recorder No. 6771 Test ✓ 1200
 (depth) 5263 Jars ✓ 250
 Recorder No. 13222 Safety Jt. ✓ 75
 (depth) 5318 Circ Sub _____
 Recorder No. _____ Sampler _____
 (depth) _____ Straddle _____
 Initial Opening 30 Ext. Packer _____
 Initial Shut-In 60 Shale Packer _____
 Final Flow 60 Ruined Packer _____
 Final Shut-In 90 Mileage 168
 T-On Location 0928 Sub Total: 1693.7
 T-Started 1336 Std. By: 305 200.00
 T-Open 1626 Acc. Chg: 37.5
 T-Pulled 2030 Other: _____
 T-Out 2353 Total: 1931.0

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 24088

Test Ticket

Well Name & No. FUB #1-22 Test No. 2 Date 4-23-06
Company Murphy Drilling Co. Inc. Zone Tested Miss.
Address 250 N. Water, Ste. 300, Wichita KS 67202 Elevation 2362 KB 2351 GL
Co. Rep / Geo. Wes Hansen Rig Murphy Drilling #2
Location: Sec. 22 Twp. 30 S Rge. 22 W Co. Clark State KS
Comment: _____ Release date / time: _____

Interval Tested 5323 - 5355' Initial Str Wt./Lbs. 60,000 Unseated Str Wt./Lbs. 62,000
Anchor Length 32' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 71,000
Top Packer Depth 5218' Tool Weight 2100#
Bottom Packer Depth 5323' Hole Size 7 7/8" Rubber Size 6 3/4"
Total Depth 5355' Wt. Pipe Run None Drill Collar Run 62
Mud Wt. 9.0 LCM 3# Vis. 44 WL 8.8cc Drill Pipe Size 4 1/2" Ft. Run 5265
Blow Description IF: Strong blow. B.O.B. in 14 mins. IS: No blow.

FF: Fair to strong blow. B.O.B. in 18 mins. FS: No blow.

Recovery - Total Feet 85 GIP SSO Ft. in DC 62 Ft. in DP 23
Rec. 25 Feet of Heavy Mud %gas %oil %water %mud
Rec. 60 Feet of SOCM %gas 1 %oil %water 99 %mud
Rec. _____ Feet of _____ %gas %oil %water %mud
Rec. _____ Feet of _____ %gas %oil %water %mud
Rec. _____ Feet of _____ %gas %oil %water %mud
BHT 111 °F Gravity N/A °API D @ _____ °F Corrected Gravity N/A °API
RW N/C @ _____ °F Chlorides 7,000 ppm Recovery _____ Chlorides 7,000 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud		<u>2601</u> PSI	Recorder No.	<u>6771</u>	Test <u>1200</u> °
(B) First Initial Flow Pressure		<u>15</u> PSI	(depth)	<u>5324'</u>	Jars <u>250</u> °
(C) First Final Flow Pressure		<u>19</u> PSI	Recorder No.	<u>13222</u>	Safety Jt. <u>75</u> °
(D) Initial Shut-In Pressure		<u>608</u> PSI	(depth)	<u>5350'</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>25</u> PSI	Recorder No.	<u>---</u>	Sampler _____
(F) Second Final Flow Pressure		<u>23</u> PSI	(depth)	<u>---</u>	Straddle _____
(G) Final Shut-In Pressure		<u>545</u> PSI	Initial Opening	<u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>2515</u> PSI	Initial Shut-In	<u>60</u>	Shale Packer _____
			Final Flow	<u>60</u>	Ruined Packer _____
			Final Shut-In	<u>90</u>	Mileage <u>135</u> ✓ <u>168.75</u>
			T-On Location	<u>1740</u>	Sub Total: <u>1693.75</u>
			T-Started	<u>1834</u>	Std. By <u>150</u> ✓ <u>75</u> °
			T-Open	<u>2152</u>	Acc. Chg: _____
			T-Pulled	<u>0200</u>	Other: _____
			T-Out	<u>0524</u>	Total: <u>1768.75</u>

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Wes Hansen
Our Representative Craig Swartz

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.

