

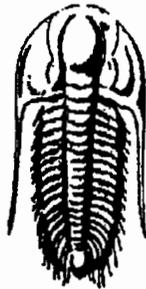
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KCC WICHITA



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur, Ks

Shirley Trust #3-29

Start Date: 2002.12.31 @ 23:10:10

End Date: 2003.01.01 @ 03:56:09

Job Ticket #: 15223 DST #: 1

15039 209290000

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur, Ks

DST # 1

2002.12.31

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CONFIDENTIAL

ORIGINAL

79956



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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

Shirley Trust #3-29
29-2-26 Decatur, Ks
Job Ticket: 15223 DST#: 1
Test Start: 2002.12.31 @ 23:10:10

ATTN: Murfin Drilling Co

GENERAL INFORMATION:

Formation:
Deviated: No Whipstock ft (KB)
Time Tool Opened: 01:40:00
Time Test Ended: 03:56:09

KCC

FEB 28 2003

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 15

Interval: 3431.00 ft (KB) To 3471.00 ft (KB) (TVD)
Total Depth: 3471.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

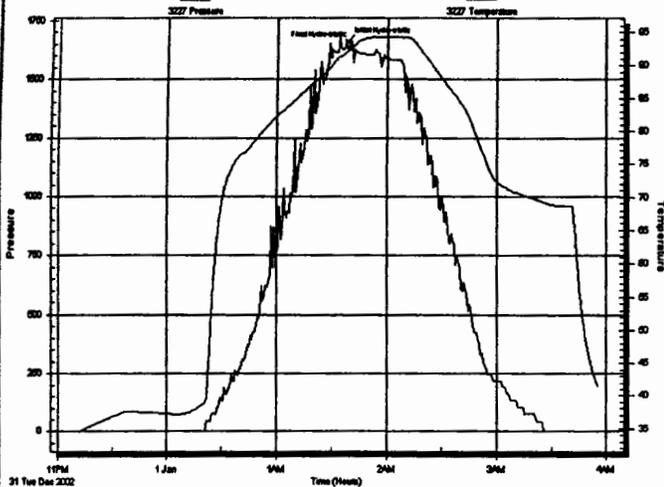
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Reference Elevations: 2609.00 ft (KB)
2604.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 3227	Inside				
Press@RunDepth:	psig @	3432.00 ft (KB)	Capacity:	7000.00 psig	
Start Date:	2002.12.31	End Date:	2003.01.01	Last Calib.:	1899.12.30
Start Time:	23:10:10	End Time:	03:56:09	Time On Btm:	2003.01.01 @ 01:37:54
				Time Off Btm:	2003.01.01 @ 01:40:39

TEST COMMENT: Packer failuer @ open , pull & reset tool , failed again , T.O.H. w/tool 6' of fill on bottom

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1658.94	91.93	Initial Hydro-static
3	1639.47	92.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	mud 100%m	1.48

Gas Rates

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

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ORIGINAL



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

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

Shirley Trust #3-29

29-2-26 Decatur, Ks

Job Ticket: 15223

DST#: 1

ATTN: Murfin Drilling Co

Test Start: 2002.12.31 @ 23:10:10

Tool Information

Drill Pipe:	Length: 2936.00 ft	Diameter: 3.80 inches	Volume: 41.18 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 72000.00 lb
		<u>Total Volume: 43.58 bbl</u>		Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3431.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

KCC
FEB 28 2003
CONFIDENTIAL

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

C.O. Sub	1.00			3405.00	
S.I. Tool	5.00			3410.00	
HMV	5.00			3415.00	
Jars	5.00			3420.00	
Safety Joint	2.00			3422.00	
Packer	5.00			3427.00	27.00 Bottom Of Top Packer
Packer	4.00			3431.00	
Stubb	1.00			3432.00	
Recorder	0.00	3227	Inside	3432.00	
Perforations	34.00			3466.00	
Recorder	0.00	11057	Outside	3466.00	
Bullnose	5.00			3471.00	40.00 Bottom Packers & Anchor

Total Tool Length: 67.00

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15223

DST#: 1

ATTN: Murfin Drilling Co

Test Start: 2002.12.31 @ 23:10:10

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:	50.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	6.36 in ³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
300.00	mud 100% _m	1.475

Total Length: 300.00 ft Total Volume: 1.475 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

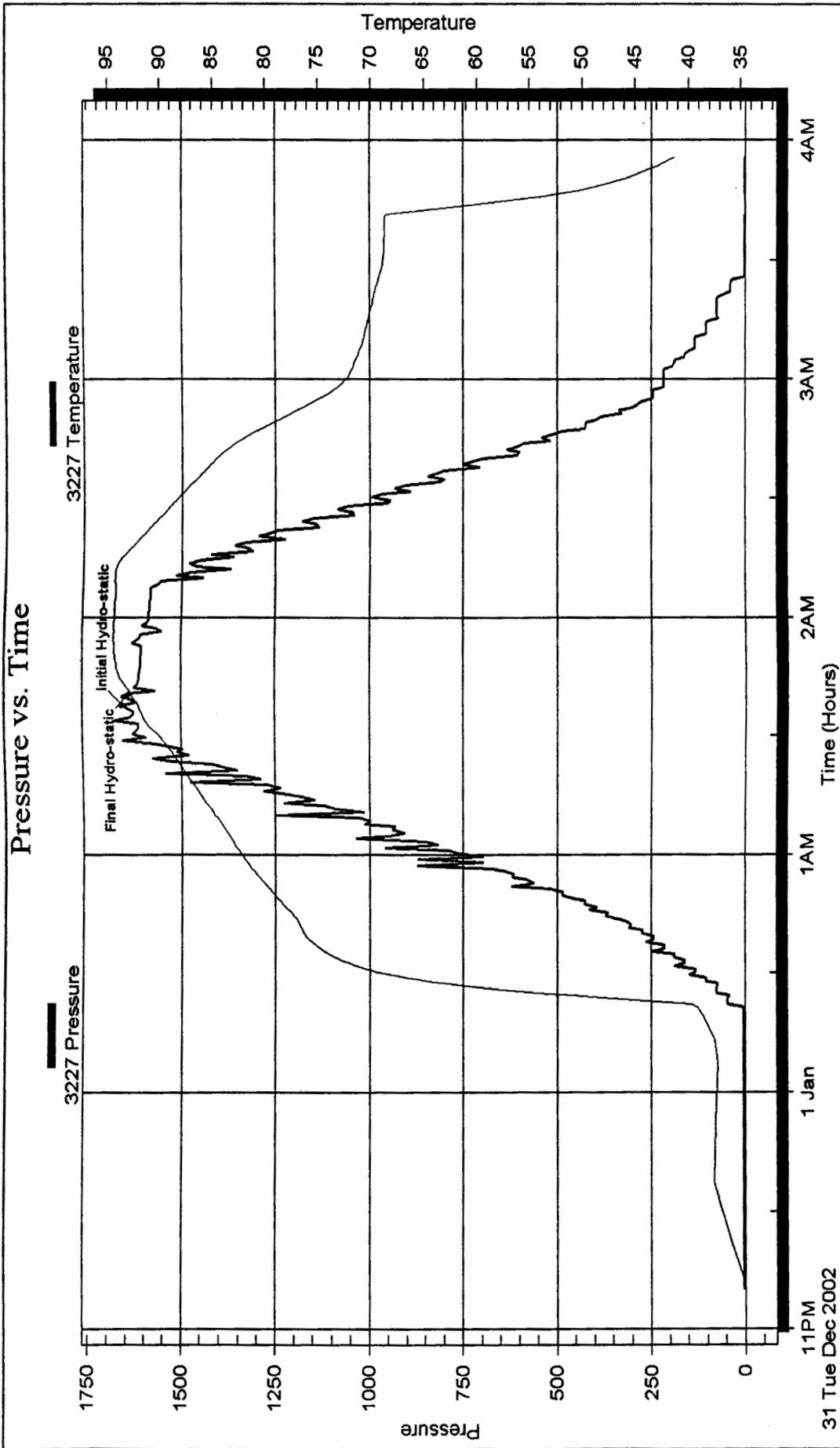
Serial #: 3227

Inside

Murfin Drilling Co

29-2-26 Decatur, Ks

DST Test Number: 1



RELEASED
FROM
CONFIDENTIAL



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur, Ks

Shirley Trust #3-29

Start Date: 2003.01.01 @ 04:08:09

End Date: 2003.01.01 @ 08:41:38

Job Ticket #: 15224 DST #: 2

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur, Ks

DST # 2

2003.01.01

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

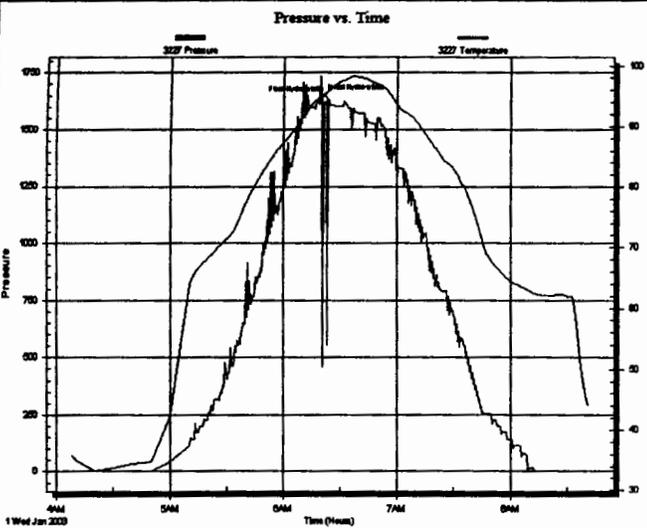
Shirley Trust #3-29
29-2-26 Decatur, Ks
Job Ticket: 15224 DST#: 2
Test Start: 2003.01.01 @ 04:08:09

GENERAL INFORMATION:

Formation:
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole
Time Tool Opened: Tester: Shane McBride
Time Test Ended: 08:41:38 Unit No: 15
Interval: 3375.00 ft (KB) To 3471.00 ft (KB) (TVD) Reference Elevations: 2609.00 ft (KB)
Total Depth: 3471.00 ft (KB) (TVD) 2604.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 3227 Inside
Press@RunDepth: psig @ 3376.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2003.01.01 End Date: 2003.01.01 Last Calib.: 1899.12.30
Start Time: 04:08:09 End Time: 08:41:38 Time On Btm: 2003.01.01 @ 06:19:38
Time Off Btm: 2003.01.01 @ 06:24:08

TEST COMMENT: Packer failuer @ open , pull & reset tool , failed again , T.O.H.w /tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1635.62	94.97	Initial Hydro-static
5	1626.75	95.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	mud 100%m	1.48

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15224

DST#: 2

ATTN: Murfin Drilling Co

Test Start: 2003.01.01 @ 04:08:09

Tool Information

Drill Pipe:	Length: 2870.00 ft	Diameter: 3.80 inches	Volume: 40.26 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 42.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3375.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	96.00 ft			
Tool Length:	123.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3349.00	
S.I Tool	5.00			3354.00	
HMV	5.00			3359.00	
Jars	5.00			3364.00	
Safety Joint	2.00			3366.00	
Packer	5.00			3371.00	27.00 Bottom Of Top Packer
Packer	4.00			3375.00	
Stubb	1.00			3376.00	
Recorder	0.00	3227	Inside	3376.00	
Perforations	25.00			3401.00	
C.O. Sub	1.00			3402.00	
drillpipe	63.00			3465.00	
C.O. Sub	1.00			3466.00	
Recorder	0.00	11057	Outside	3466.00	
Bullnose	5.00			3471.00	96.00 Bottom Packers & Anchor

Total Tool Length: 123.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15224

DST#: 2

ATTN: Murfin Drilling Co

Test Start: 2003.01.01 @ 04:08:09

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:	50.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	6.35 in ³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
300.00	mud 100% _m	1.475

Total Length: 300.00 ft Total Volume: 1.475 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

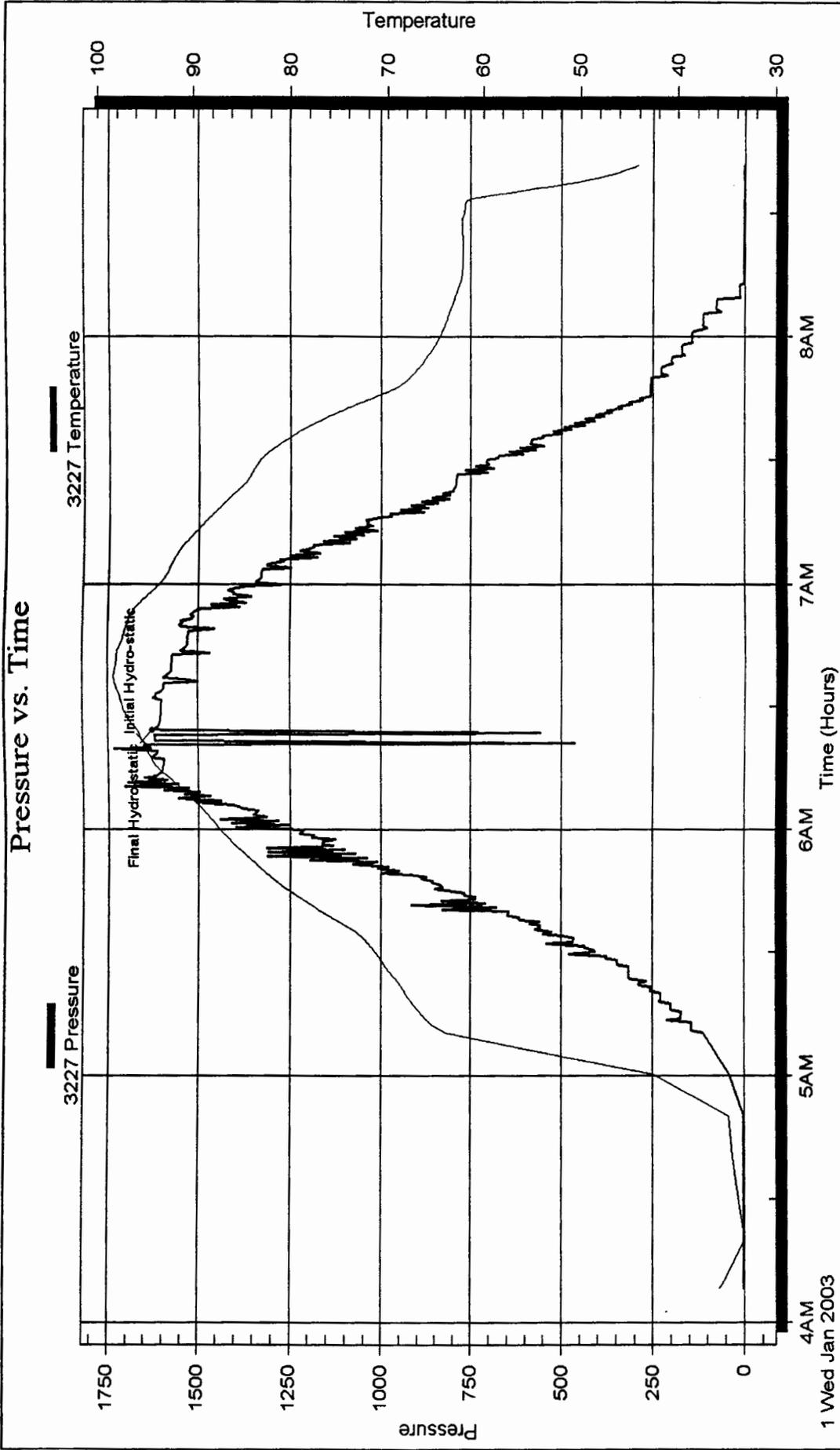
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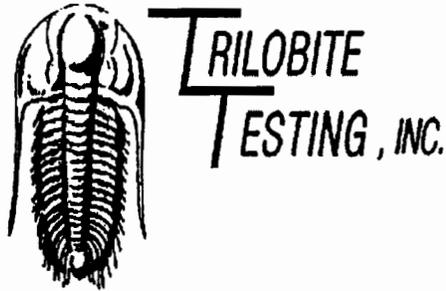
Inside Murfin Drilling Co

29-2-26 Decatur, Ks

DST Test Number: 2

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur, Ks

Shirley Trust #3-29

Start Date: 2003.01.01 @ 16:04:32

End Date: 2003.01.02 @ 00:09:16

Job Ticket #: 15225 DST #: 3

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur, Ks

DST # 3

Toronto, & "A"

2003.01.01

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
250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

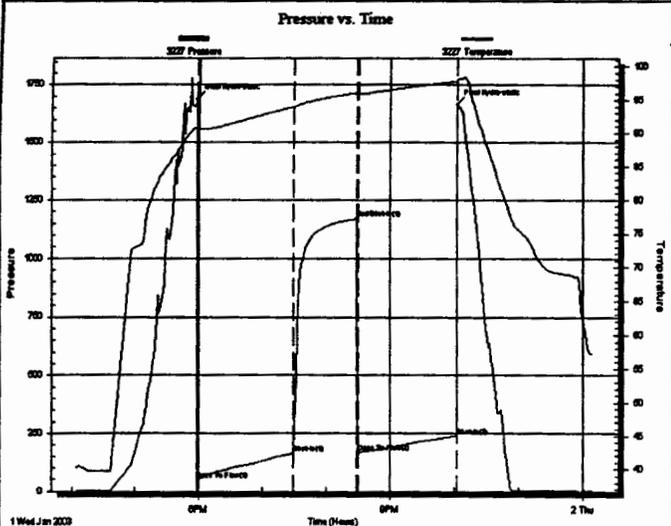
Shirley Trust #3-29
29-2-26 Decatur, Ks
Job Ticket: 15225 DST#: 3
Test Start: 2003.01.01 @ 16:04:32

GENERAL INFORMATION:

Formation: **Toronto, & "A"**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 17:58:31
Time Test Ended: 00:09:16
Test Type: **Conventional Bottom Hole**
Tester: **Shane McBride**
Unit No: **15**
Interval: **3450.00 ft (KB) To 3516.00 ft (KB) (TVD)**
Reference Elevations: **2609.00 ft (KB)**
Total Depth: **3516.00 ft (KB) (TVD)** **2604.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair** **KB to GR/CF: 5.00 ft**

Serial #: **3227** **Inside**
Press@RunDepth: **162.82 psig @ 3451.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2003.01.01** End Date: **2003.01.02** Last Calib.: **1899.12.30**
Start Time: **16:04:32** End Time: **00:09:16** Time On Btm: **2003.01.01 @ 17:58:01**
Time Off Btm: **2003.01.01 @ 22:02:31**

TEST COMMENT: 1/2" in @ open built to 1 3/4" in.
No return return blow in 5 min. built to 1" in.
1/2" in @ open, died back to 1/4" in
Return in 2 min built to 1 1/4" in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.30	90.82	Initial Hydro-static
1	45.84	90.69	Open To Flow (1)
92	162.82	93.96	Shut-in(1)
151	1170.43	96.06	End Shut-in(1)
152	167.39	95.99	Open To Flow (2)
244	239.22	97.82	Shut-in(2)
245	1666.47	98.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	free oil 100%	0.00
125.00	s o & w c m 7% o 15% w 78% m	0.61
299.00	s o & m c w 4% o 81% w 15% m	1.47

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15225 DST#: 3

ATTN: Murfin Drilling Co

Test Start: 2003.01.01 @ 16:04:32

Tool Information

Drill Pipe:	Length: 2972.00 ft	Diameter: 3.80 inches	Volume: 41.69 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 44.09 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3450.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	86.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

C.O. Sub	1.00			3431.00	
S.I Tool	5.00			3436.00	
HMV	5.00			3441.00	
Packer	5.00			3446.00	20.00 Bottom Of Top Packer
Packer	4.00			3450.00	
Stubb	1.00			3451.00	
Recorder	0.00	3227	Inside	3451.00	
Perforations	27.00			3478.00	
C.O. Sub	1.00			3479.00	
drillpipe	31.00			3510.00	
C.O. Sub	1.00			3511.00	
Recorder	0.00	11057	Outside	3511.00	
Bullnose	5.00			3516.00	66.00 Bottom Packers & Anchor

Total Tool Length: 86.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

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

Shirley Trust #3-29

29-2-26 Decatur, Ks

Job Ticket: 15225

DST#: 3

ATTN: Murfin Drilling Co

Test Start: 2003.01.01 @ 16:04:32

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: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.97 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	free oil 100%o	0.005
125.00	s o & w c m 7%o 15%w 78%m	0.615
299.00	s o & m c w 4%o 81%w 15%m	1.470

Total Length: 425.00 ft Total Volume: 2.090 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

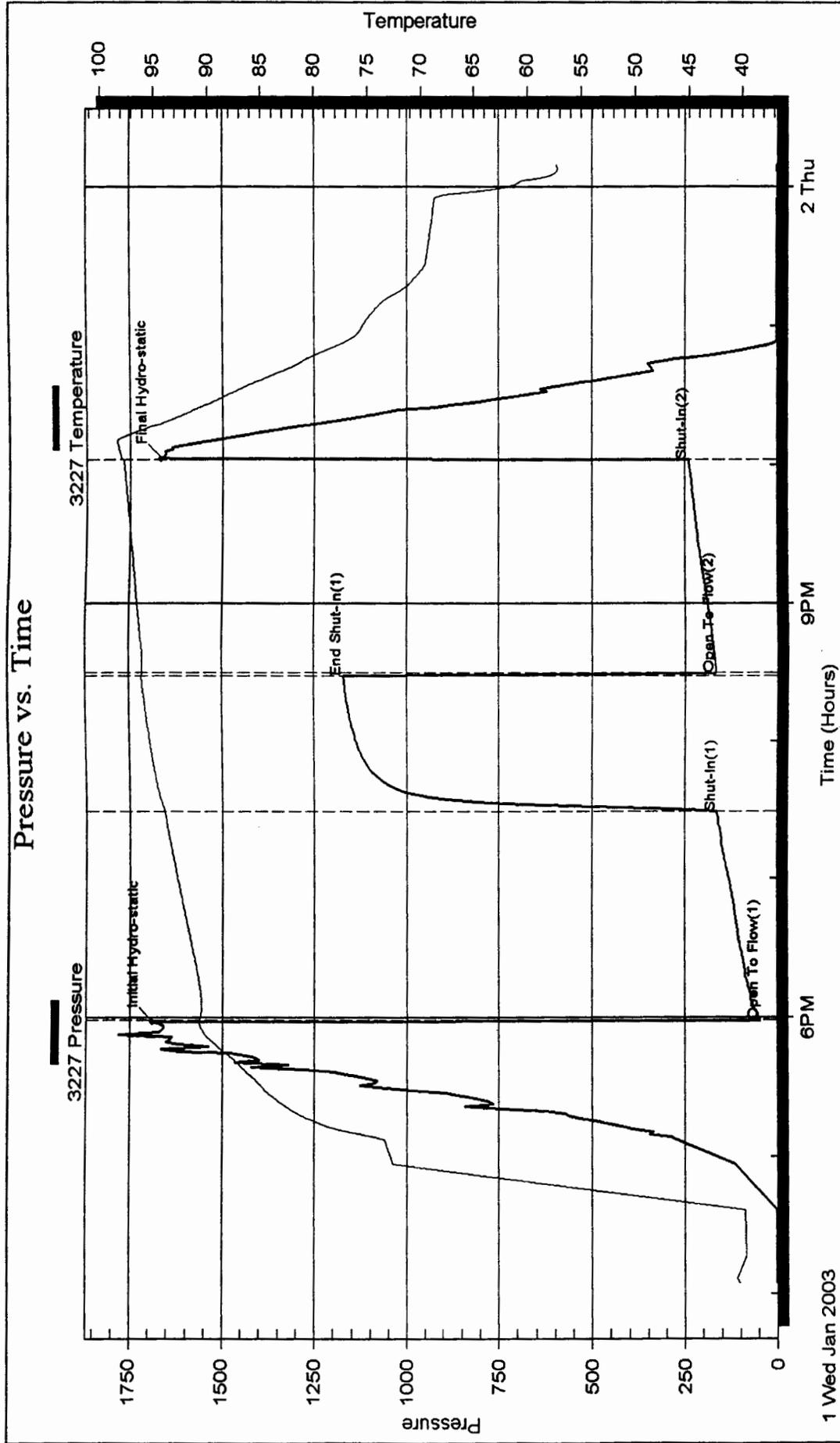
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur, Ks

Shirley Trust #3-29

Start Date: 2003.01.02 @ 07:26:48

End Date: 2003.01.02 @ 15:50:17

Job Ticket #: 15251 DST #: 4

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur, Ks

DST # 4

"B" pollnow

2003.01.02

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRIOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur, Ks

Job Ticket: 15251 DST#: 4

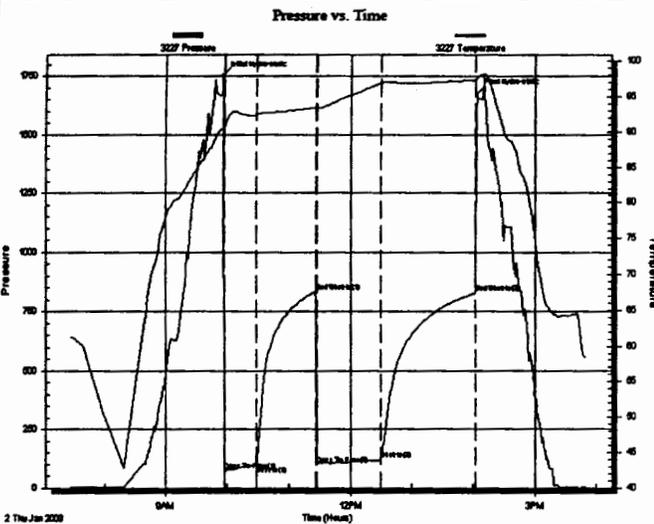
Test Start: 2003.01.02 @ 07:26:48

GENERAL INFORMATION:

Formation: "B" pollnow
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:57:17
 Time Test Ended: 15:50:17
 Interval: 3504.00 ft (KB) To 3527.00 ft (KB) (TVD)
 Total Depth: 3527.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Shane McBride
 Unit No: 15
 Reference Elevations: 2609.00 ft (KB)
 2604.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 3227 Inside
 Press@RunDepth: 119.20 psig @ 3505.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2003.01.02 End Date: 2003.01.02 Last Calib.: 1899.12.30
 Start Time: 07:26:48 End Time: 15:50:17 Time On Btm: 2003.01.02 @ 09:55:32
 Time Off Btm: 2003.01.02 @ 14:03:32

TEST COMMENT: Side tool 2' to bottom, mud in hole fell 30', 3" in. blow @ open built to 4 1/4" in
 No return
 1/4" in @ open built to 1" in.
 No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1753.14	90.45	Initial Hydro-static
2	72.68	90.61	Open To Flow (1)
33	93.25	92.35	Shut-In(1)
91	835.26	93.47	End Shut-In(1)
92	100.02	93.43	Open To Flow (2)
155	119.20	96.88	Shut-In(2)
247	828.17	97.38	End Shut-In(2)
248	1676.32	97.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	free oil 100%o	0.07
190.00	o c m 10%o 90% m	0.93

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15251 DST#: 4

ATTN: Murfin Drilling Co

Test Start: 2003.01.02 @ 07:26:48

Tool Information

Drill Pipe:	Length: 3026.00 ft	Diameter: 3.80 inches	Volume: 42.45 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 44.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3504.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

C.O. Sub	1.00			3485.00	
S.I. Tool	5.00			3490.00	
HMV	5.00			3495.00	
Packer	5.00			3500.00	20.00 Bottom Of Top Packer
Packer	4.00			3504.00	
Stubb	1.00			3505.00	
Recorder	0.00	3227	Inside	3505.00	
Perforations	17.00			3522.00	
Recorder	0.00	11057	Outside	3522.00	
Bullnose	5.00			3527.00	23.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15251 DST#: 4

ATTN: Murfin Drilling Co

Test Start: 2003.01.02 @ 07:26:48

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: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2400.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	free oil 100%o	0.074
190.00	o c m 10%o 90%m	0.934

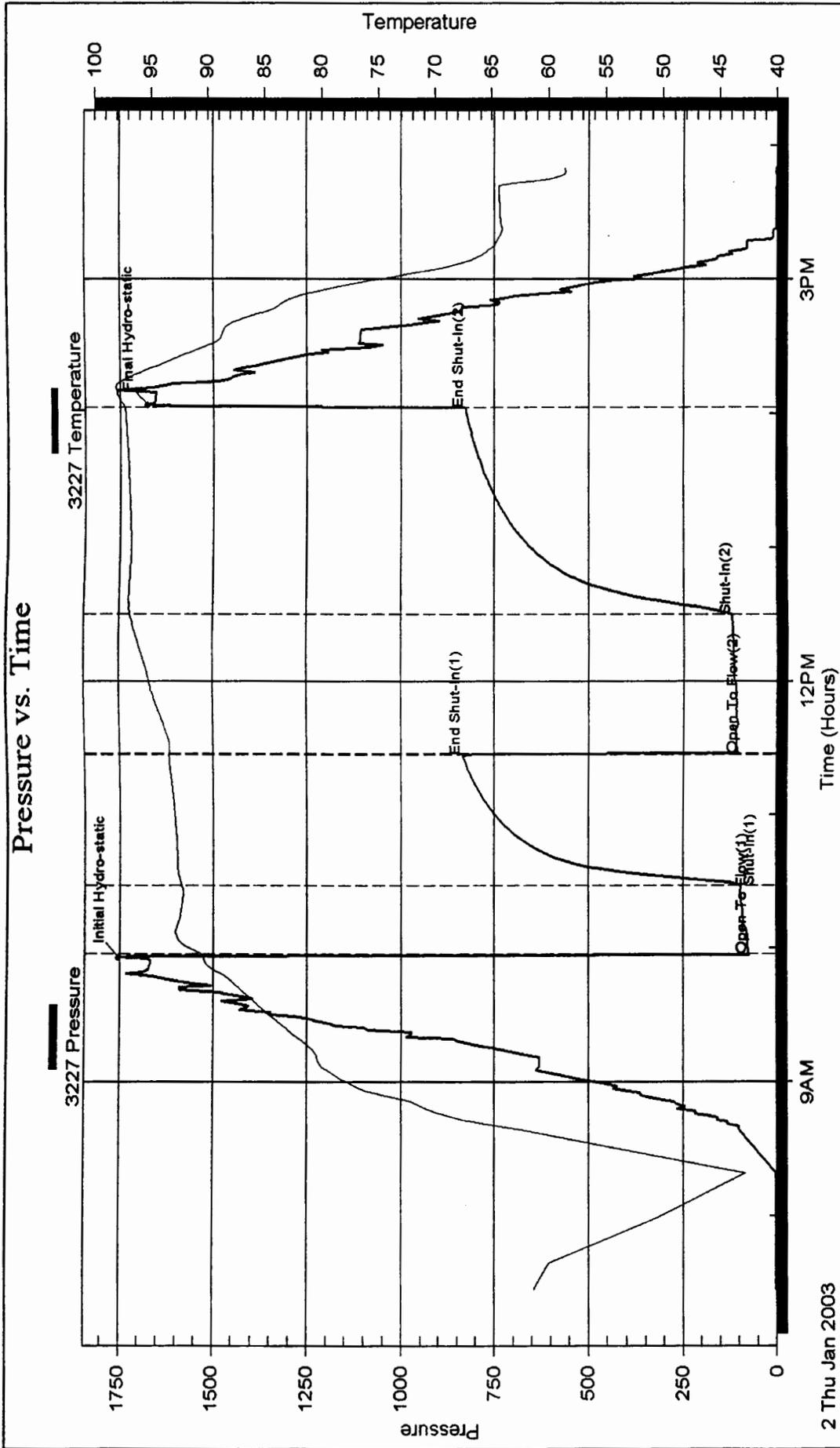
Total Length: 205.00 ft Total Volume: 1.008 bbl

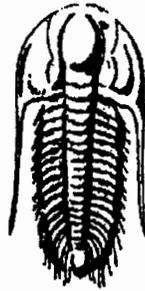
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur,Ks

Shirley Trust #3-29

Start Date: 2003.01.03 @ 02:39:09

End Date: 2003.01.03 @ 10:36:08

Job Ticket #: 15252 DST #: 5

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur,Ks

DST # 5

KC

2003.01.03

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

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

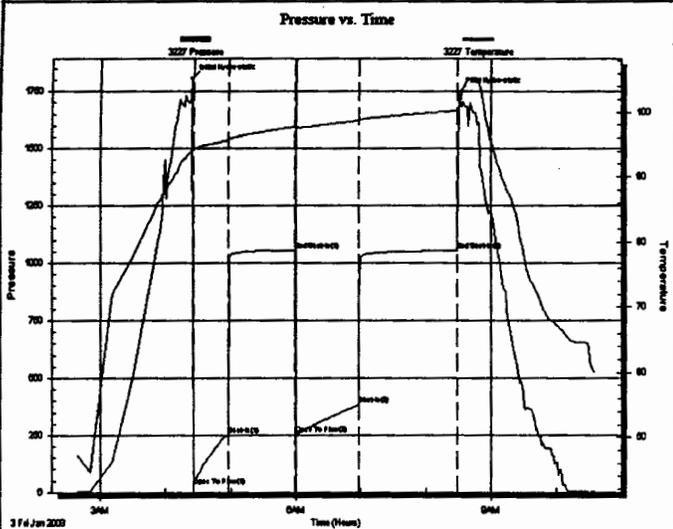
Shirley Trust #3-29
29-2-26 Decatur, Ks
Job Ticket: 15252 DST#: 5
Test Start: 2003.01.03 @ 02:39:09

GENERAL INFORMATION:

Formation: **KC**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 04:25:23
Time Test Ended: 10:36:08
Interval: **3544.00 ft (KB) To 3590.00 ft (KB) (TVD)**
Total Depth: **3590.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Shane McBride**
Unit No: **15**
Reference Elevations: **2609.00 ft (KB)**
2604.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: **3227** Inside
Press@RunDepth: **385.00 psig @ 3545.00 ft (KB)**
Start Date: **2003.01.03** End Date: **2003.01.03**
Start Time: **02:39:09** End Time: **10:36:08**
Capacity: **7000.00 psig**
Last Calib.: **1899.12.30**
Time On Btm: **2003.01.03 @ 04:24:08**
Time Off Btm: **2003.01.03 @ 08:30:23**

TEST COMMENT: B.O.B in 14 min.
1/4" in. return died in 17 min.
1/2" in @ open built to 8" in.
1/2" in return died in 30 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1805.74	93.97	Initial Hydro-static
2	26.48	94.05	Open To Flow (1)
34	248.80	95.67	Shut-In(1)
95	1055.86	97.74	End Shut-In(1)
96	252.12	97.69	Open To Flow (2)
154	385.00	98.68	Shut-In(2)
246	1053.63	100.27	End Shut-In(2)
247	1744.33	100.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
588.00	water 100%w	3.80
180.00	s o % m c w 10%o 20%m 70%w	2.52
10.00	free oil 100%o	0.14

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15252

DST#: 5

ATTN: Murfin Drilling Co

Test Start: 2003.01.03 @ 02:39:09

Tool Information

Drill Pipe:	Length: 3056.00 ft	Diameter: 3.80 inches	Volume: 42.87 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 45.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3544.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3525.00	
S.I Tool	5.00			3530.00	
HMV	5.00			3535.00	
Packer	5.00			3540.00	20.00 Bottom Of Top Packer
Packer	4.00			3544.00	
Stubb	1.00			3545.00	
Recorder	0.00	3227	Inside	3545.00	
Perforations	7.00			3552.00	
C.O. Sub	1.00			3553.00	
drillpipe	31.00			3584.00	
C.O. Sub	1.00			3585.00	
Recorder	0.00	11057	Outside	3585.00	
Bullnose	5.00			3590.00	46.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15252

DST#: 5

ATTN: Murfin Drilling Co

Test Start: 2003.01.03 @ 02:39:09

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:		deg API:	
Mud Weight:	9.00 lb/gal	Cushion Length:		Water Salinity:		ppm:	
Viscosity:	59.00 sec/qt	Cushion Volume:					
Water Loss:	5.58 in ³	Gas Cushion Type:					
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:					
Salinity:	2000.00 ppm						
Filter Cake:	2.00 inches						

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
588.00	water 100%w	3.803
180.00	s o % m c w 10%o 20%m 70%w	2.525
10.00	free oil 100%o	0.140

Total Length: 778.00 ft Total Volume: 6.468 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

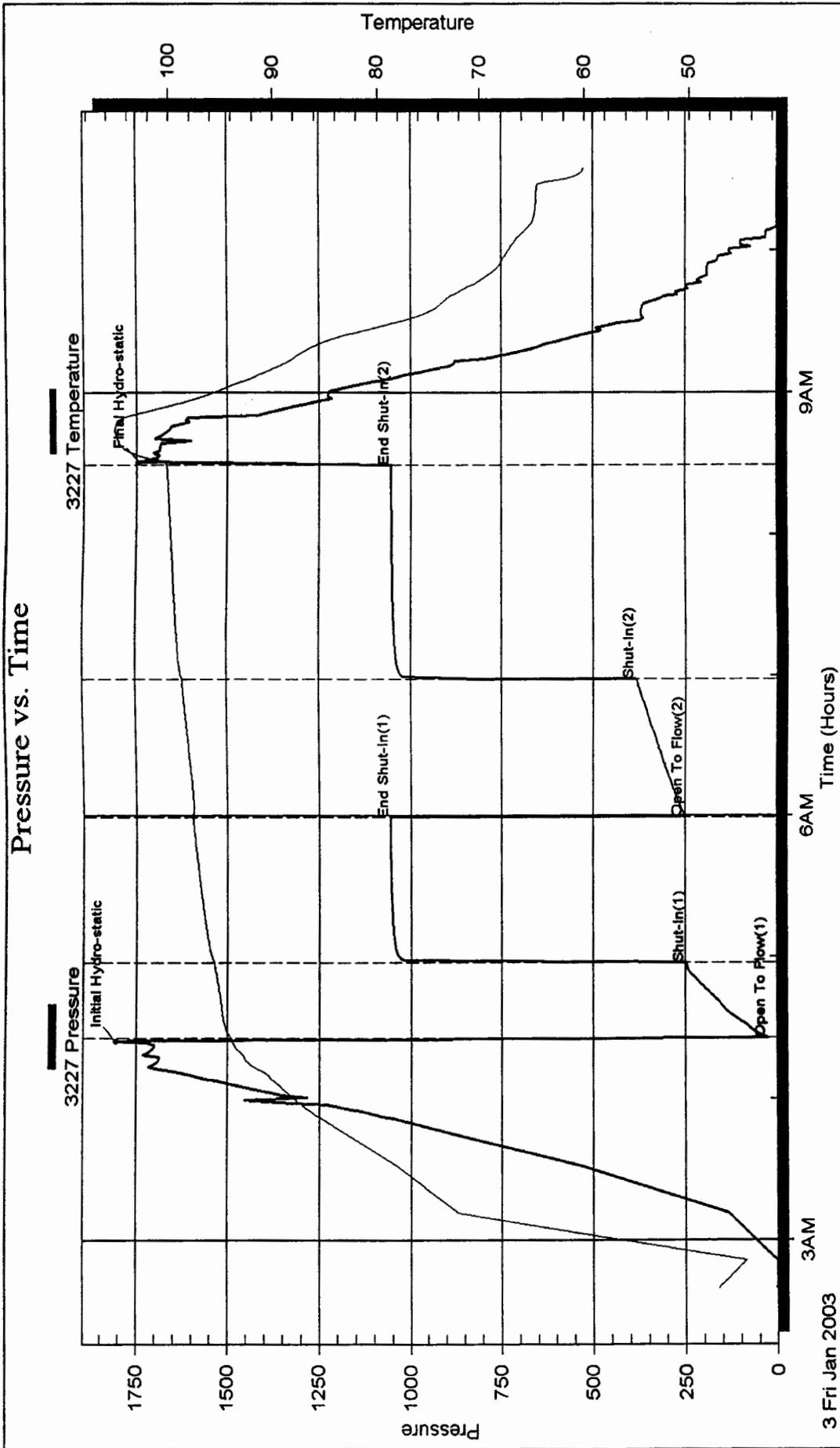
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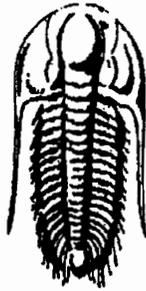
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur,Ks

Shirley Trust #3-29

Start Date: 2003.01.03 @ 11:51:17

End Date: 2003.01.03 @ 19:07:46

Job Ticket #: 15253 DST #: 6

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur,Ks

DST # 6

G

2003.01.03

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

Shirley Trust #3-29

29-2-26 Decatur, Ks

Job Ticket: 15253 DST#: 6

Test Start: 2003.01.03 @ 11:51:17

ATTN: Murfin Drilling Co

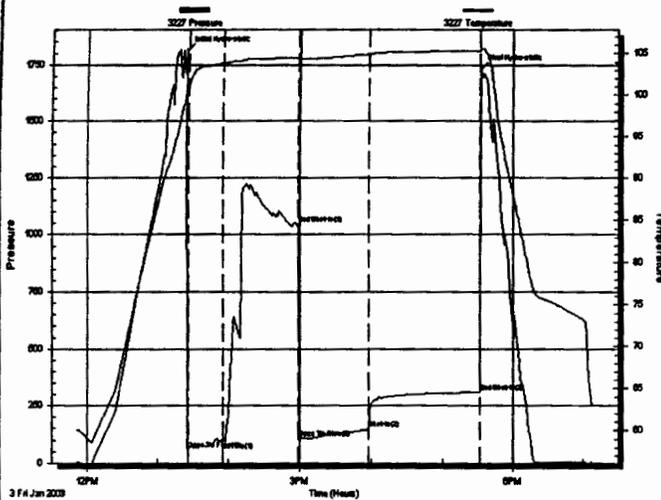
GENERAL INFORMATION:

Formation: **G**
 Deviated: **No** Whipstock: ft (KB)
 Time Tool Opened: 13:25:46
 Time Test Ended: 19:07:46
 Interval: **3555.00 ft (KB) To 3590.00 ft (KB) (TVD)**
 Total Depth: **3590.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole**
 Tester: **Shane McBride**
 Unit No: **15**
 Reference Elevations: **2609.00 ft (KB)**
2604.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: **3227** Inside
 Press@RunDepth: **146.42 psig @ 3556.00 ft (KB)** Capacity: **7000.00 psig**
 Start Date: **2003.01.03** End Date: **2003.01.03** Last Calib.: **1899.12.30**
 Start Time: **11:51:17** End Time: **19:07:46** Time On Btm: **2003.01.03 @ 13:24:31**
 Time Off Btm: **2003.01.03 @ 17:32:46**

TEST COMMENT: 1/2" @ open built to 10" in
 1/4" in return died in 15 min
 1/4" @ open built to 4 1/2" in
 1/4" in return died in 15 min.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.18	100.42	Initial Hydro-static
2	59.98	101.03	Open To Flow (1)
31	94.03	103.81	Shut-In(1)
94	1046.40	104.48	End Shut-In(1)
95	108.77	104.38	Open To Flow (2)
153	146.42	104.89	Shut-In(2)
248	308.94	105.30	End Shut-In(2)
249	1728.69	105.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
200.00	c g o 20%g 80%o	0.98
110.00	s o & g c m 15%o 25%g 60%m	0.54

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15253

DST#: 6

ATTN: Murfin Drilling Co

Test Start: 2003.01.03 @ 11:51:17

Tool Information

Drill Pipe:	Length: 3060.00 ft	Diameter: 3.80 inches	Volume: 42.92 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 77000.00 lb
			<u>Total Volume: 45.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3555.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3536.00	
S.I. Tool	5.00			3541.00	
HMV	5.00			3546.00	
Packer	5.00			3551.00	20.00 Bottom Of Top Packer
Packer	4.00			3555.00	
Stubb	1.00			3556.00	
Recorder	0.00	3227	Inside	3556.00	
Perforations	29.00			3585.00	
Recorder	0.00	11057	Outside	3585.00	
Bullnose	5.00			3590.00	35.00 Bottom Packers & Anchor
Total Tool Length:	55.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15253

DST#: 6

ATTN: Murfin Drilling Co

Test Start: 2003.01.03 @ 11:51:17

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: 61.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
200.00	c g o 20%g 80%o	0.984
110.00	s o & g c m 15%o 25%g 60%m	0.541

Total Length: 310.00 ft Total Volume: 1.525 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

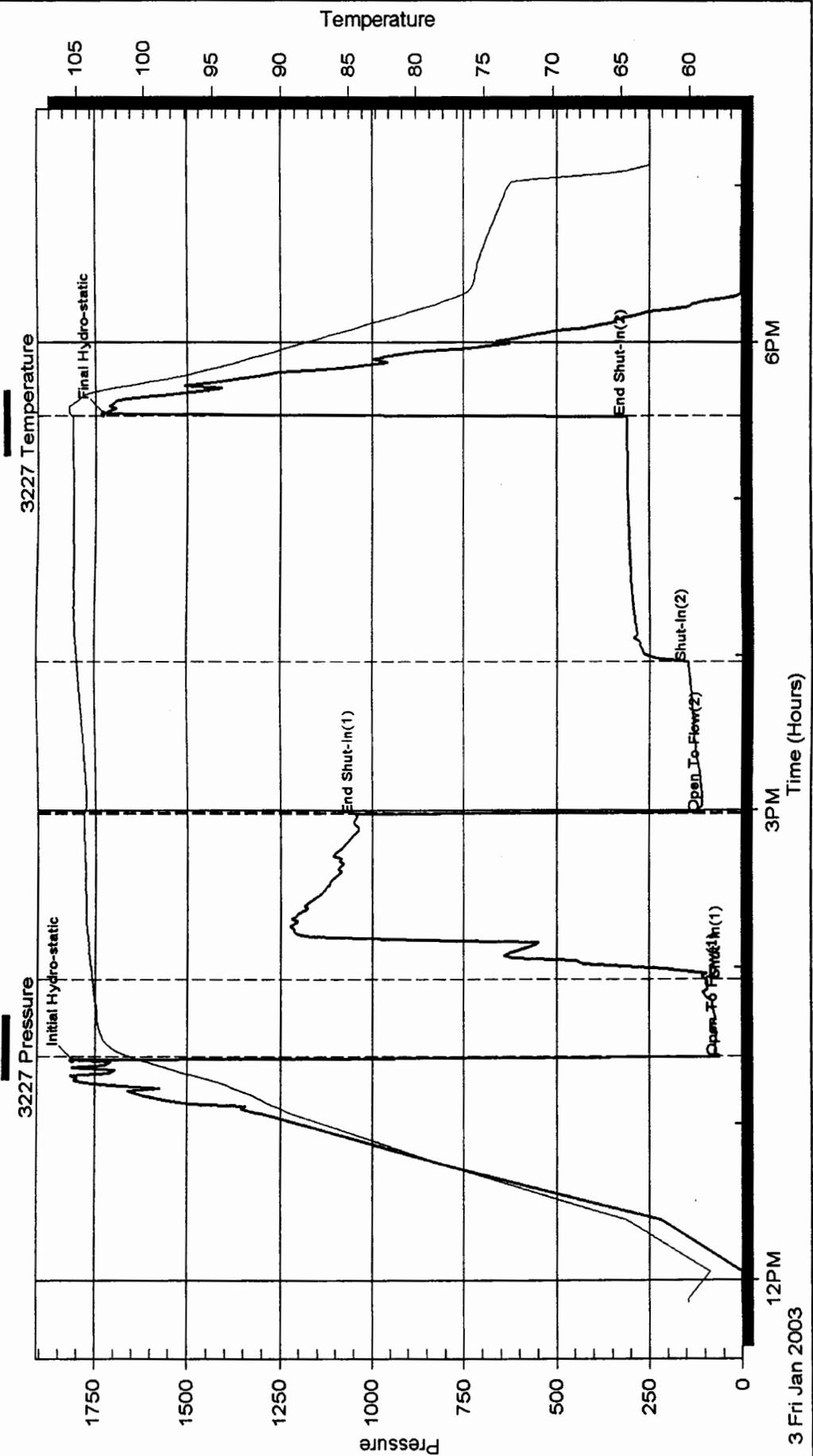
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



3 Fri Jan 2003 12PM

3PM Time (Hours)

6PM



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co**

250 N. Water Ste 300
Wichita, KS 67202

ATTN: Murfin Drilling Co

29-2-26 Decatur,Ks

Shirley Trust #3-29

Start Date: 2003.01.04 @ 06:08:05

End Date: 2003.01.04 @ 15:07:19

Job Ticket #: 15254 DST #: 7

Murfin Drilling Co

Shirley Trust #3-29

29-2-26 Decatur,Ks

DST # 7

H-BKC

2003.01.04

Trilobite Testing, Inc

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

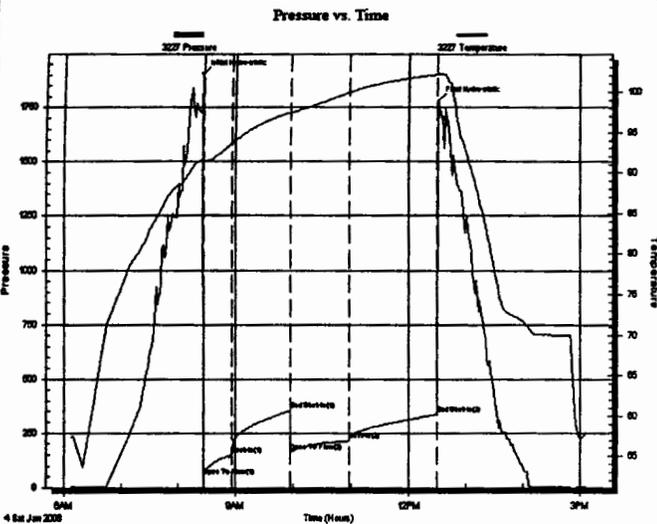
Shirley Trust #3-29
29-2-26 Decatur, Ks
Job Ticket: 15254 DST#: 7
Test Start: 2003.01.04 @ 06:08:05

GENERAL INFORMATION:

Formation: **H- BKC**
 Deviated: **No Whipstock** ft (KB)
 Time Tool Opened: 08:26:34
 Time Test Ended: 15:07:19
 Interval: **3585.00 ft (KB) To 3700.00 ft (KB) (TVD)**
 Total Depth: **3700.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole**
 Tester: **Shane McBride**
 Unit No: **15**
 Reference Elevations: **2609.00 ft (KB)**
2604.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: **3227** Inside
 Press@RunDepth: **213.75 psig @ 3586.00 ft (KB)** Capacity: **7000.00 psig**
 Start Date: **2003.01.04** End Date: **2003.01.04** Last Calib.: **1899.12.30**
 Start Time: **06:08:05** End Time: **15:07:19** Time On Btm: **2003.01.04 @ 08:25:49**
 Time Off Btm: **2003.01.04 @ 12:31:19**

TEST COMMENT: B.O.B in 15 min.
 1/4" in return blow died in 20 min.
 1/2" in @ open built to 4 1/2" in.
 1/4" in return blow died in 20 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1903.57	91.67	Initial Hydro-static
1	49.87	91.61	Open To Flow (1)
31	150.40	93.58	Shut-In(1)
92	354.90	97.44	End Shut-In(1)
92	163.72	97.44	Open To Flow (2)
153	213.75	99.92	Shut-In(2)
245	338.02	102.11	End Shut-In(2)
246	1778.38	102.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
190.00	m c g o 30% m 25% o 45% o	0.93
310.00	c g o 20% g 80% o	1.63

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: Murfin Drilling Co

Shirley Trust #3-29
29-2-26 Decatur, Ks
Job Ticket: 15254 DST#:7
Test Start: 2003.01.04 @ 06:08:05

Tool Information

Drill Pipe:	Length: 3090.00 ft	Diameter: 3.80 inches	Volume: 43.34 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: 30000.00 lb
Drill Collar:	Length: 488.00 ft	Diameter: 2.25 inches	Volume: 2.40 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 45.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3585.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	115.00 ft			
Tool Length:	135.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3566.00	
S.I. Tool	5.00			3571.00	
HMV	5.00			3576.00	
Packer	5.00			3581.00	20.00 Bottom Of Top Packer
Packer	4.00			3585.00	
Stubb	1.00			3586.00	
Recorder	0.00	3227	Inside	3586.00	
Perforations	14.00			3600.00	
C.O. Sub	1.00			3601.00	
drillpipe	93.00			3694.00	
C.O. Sub	1.00			3695.00	
Recorder	0.00	11057	Outside	3695.00	
Bullnose	5.00			3700.00	115.00 Bottom Packers & Anchor

Total Tool Length: 135.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co

Shirley Trust #3-29

250 N. Water Ste 300
Wichita, KS 67202

29-2-26 Decatur, Ks

Job Ticket: 15254 DST#: 7

ATTN: Murfin Drilling Co

Test Start: 2003.01.04 @ 06:08:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil Apt	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2300.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
190.00	m c g o 30% m 25% o 45% o	0.934
310.00	c g o 20% g 80% o	1.634

Total Length: 500.00 ft Total Volume: 2.568 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time

