

**TRILOBITE
TESTING, INC.**

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OCT 16 2002
KCC WICHITA

DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg Co, Inc.**

250 N. Water Ste 300
Wichita, Ks. 67202

KCC
OCT 14 2002
CONFIDENTIAL

ATTN: Scott Robinson

25-11-20-Ellis-Ks

Rusco-Davis # 4-25

Start Date: 2002.08.17 @ 18:25:10

End Date: 2002.08.18 @ 01:38:39

Job Ticket #: 16322 DST #: 1

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

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilg Co, Inc.

 250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16322

DST#: 1

Test Start: 2002.08.17 @ 18:25:10

GENERAL INFORMATION:

Formation: Oread

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:06:09

Time Test Ended: 01:38:39

Test Type: Conventional Straddle

Tester: Dan Bangle

Unit No: 21

Interval: 3278.00 ft (KB) To 3294.00 ft (KB) (TVD)

Total Depth: 3346.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2081.00 ft (KB)

2076.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 2357

Inside

Press@RunDepth: 143.77 psig @ 3279.01 ft (KB)

Start Date: 2002.08.17

End Date:

2002.08.18

Start Time: 18:25:10

End Time:

01:38:39

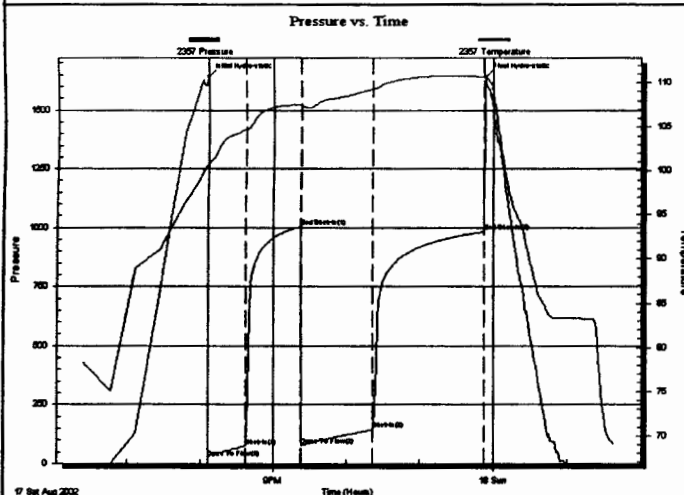
Capacity: 7000.00 psig

Last Calib.: 2002.08.18

Time On Btm: 2002.08.17 @ 20:05:39

Time Off Btm: 2002.08.17 @ 23:53:39

TEST COMMENT: F-Strong BOB in 7 min
 IS-Weak building to 1"
 FF-Strong BOB in 7 min
 FSI-Weak building to 3"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1641.61	100.75	Initial Hydro-static
1	22.59	100.82	Open To Flow (1)
32	74.56	104.70	Shut-In(1)
77	1003.14	107.57	End Shut-In(1)
78	78.26	107.49	Open To Flow (2)
136	143.77	109.27	Shut-In(2)
227	982.65	110.70	End Shut-In(2)
228	1640.41	110.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
42.00	HIMCO 70%o 30%rn	0.21
380.00	CGsy O 20%g 80%o	4.92
754.00	GIP	10.58

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drig Co, Inc.

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16322

DST#: 1

Test Start: 2002.08.17 @ 18:25:10

Tool Information

Drill Pipe:	Length: 3182.00 ft	Diameter: 3.80 inches	Volume: 44.64 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 87.00 ft	Diameter: 2.25 inches	Volume: 0.43 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 45.07 bbl		Tool Chased 0.01 ft
Drill Pipe Above KB:	14.01 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3278.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	3294.02 ft			
Interval between Packers:	16.02 ft			
Tool Length:	91.03 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3256.00		
S.I. Tool	5.00			3261.00		
HMV	5.00			3266.00		
Safety Joint	2.00			3268.00		
Packer	5.00			3273.00	23.00	Bottom Of Top Packer
Packer	5.00			3278.00		
Stubb	1.00			3279.00		
Recorder	0.01	2357	Inside	3279.01		
Perforations	9.00			3288.01		
Recorder	0.01	13254	Outside	3288.02		
Perforations	2.00			3290.02		
Blank Off Sub	1.00			3291.02		
Extension Sub	3.00			3294.02	16.02	Tool Interval
Packer	2.00			3296.02		
Stubb	1.00			3297.02		
C.O. Sub	1.00			3298.02		
Recorder	0.01	13248	Outside	3298.03		
Blank Spacing	31.00			3329.03		
Perforations	14.00			3343.03		
Bullnose	3.00			3346.03	52.01	Bottom Packers & Anchor

Total Tool Length: 91.03

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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfine Drig Co, Inc.

Rusco-Davis # 4-25

250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Ellis-Ks

Job Ticket: 16322

DST#: 1

ATTN: Scott Robinson

Test Start: 2002.08.17 @ 18:25:10

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.14 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
42.00	HIMCO 70%o 30% m	0.206
380.00	CGsy O 20%g 80%o	4.920
754.00	GIP	10.577

Total Length: 1176.00 ft

Total Volume: 15.703 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

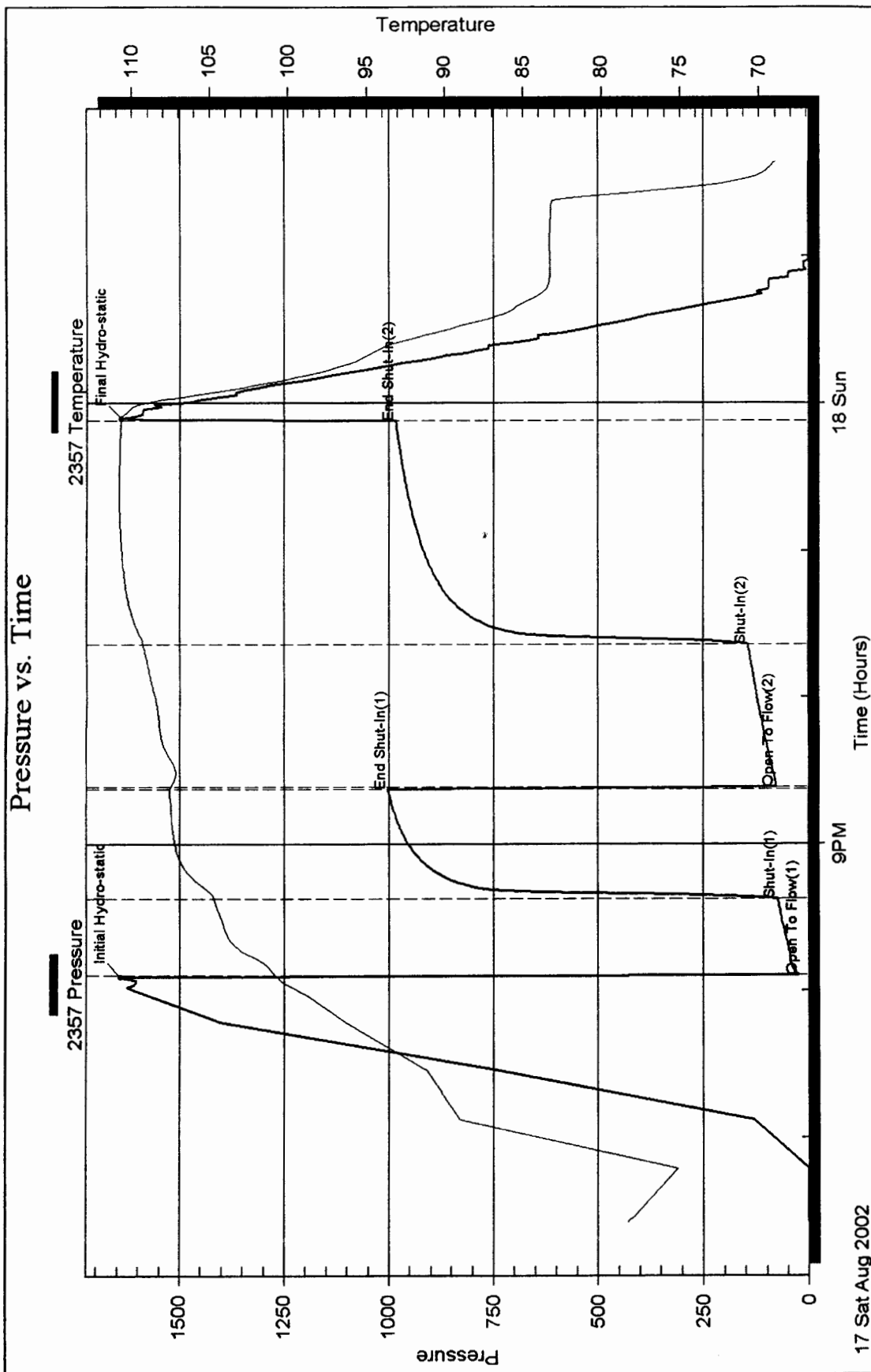
Serial #: 2357

Inside

Murfin Drig Co. Inc.

25-11-20-Ellis-Ks

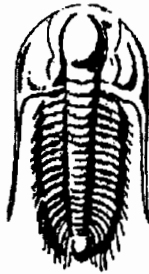
DST Test Number: 1



Triobite Testing, Inc

Ref. No: 16322

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DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg Co, Inc.**

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

25-11-20-Ellis-Ks

Rusco-Davis # 4-25

Start Date: 2002.08.18 @ 13:53:37

End Date: 2002.08.18 @ 21:23:37

Job Ticket #: 16323 DST #: 2

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DRILL STEM TEST REPORT

Murfin Drig Co, Inc.

 250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16323

DST#: 2

Test Start: 2002.08.18 @ 13:53:37

GENERAL INFORMATION:

Formation: C-DEF LK

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:28:37

Time Test Ended: 21:23:37

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3412.00 ft (KB) To 3452.00 ft (KB) (TVD)

Total Depth: 3452.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2081.00 ft (KB)

2076.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 2357

Inside

Press@RunDepth: 339.60 psig @ 3413.01 ft (KB)

Start Date: 2002.08.18

End Date:

2002.08.18

Start Time: 13:53:38

End Time:

21:23:37

Capacity: 7000.00 psig

Last Calib.: 2002.08.18

Time On Btm: 2002.08.18 @ 15:26:37

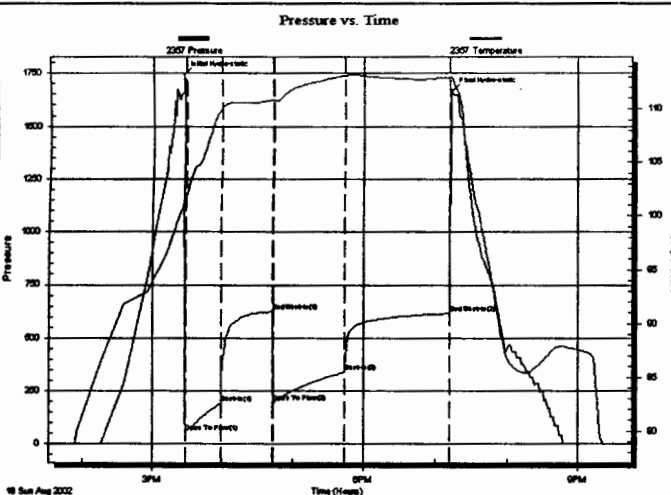
Time Off Btm: 2002.08.18 @ 19:13:37

TEST COMMENT: IF-Strong BOB in 2.5 min

IS-Strong BOB in 8 min

FF-Strong BOB in 2 min

FS-Strong BOB in 8 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.79	101.01	Initial Hydro-static
2	55.57	101.67	Open To Flow (1)
32	191.12	110.04	Shut-In (1)
76	625.05	110.86	End Shut-In (1)
77	197.91	110.80	Open To Flow (2)
137	339.60	113.07	Shut-In (2)
226	614.73	112.92	End Shut-In (2)
227	1665.48	112.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	HMC GSYO 20%g 60%o 20%m	2.69
806.00	CGSYO 20%g 80%o	11.31
1922.00	GIP	26.96

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drig Co, Inc.

Rusco-Davis # 4-25

250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Ellis-Ks

Job Ticket: 16323

DST#: 2

ATTN: Scott Robinson

Test Start: 2002.08.18 @ 13:53:37

Tool Information

Drill Pipe:	Length: 3307.00 ft	Diameter: 3.80 inches	Volume: 46.39 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 87.00 ft	Diameter: 2.25 inches	Volume: 0.43 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 46.82 bbl		Tool Chased 0.01 ft
Drill Pipe Above KB:	5.01 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3412.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.02 ft			
Tool Length:	63.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

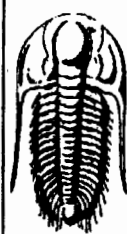
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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3390.00	
S.I. Tool	5.00			3395.00	
HMV	5.00			3400.00	
Safety Joint	2.00			3402.00	
Packer	5.00			3407.00	23.00 Bottom Of Top Packer
Packer	5.00			3412.00	
Stubb	1.00			3413.00	
Recorder	0.01	2357	Inside	3413.01	
Perforations	36.00			3449.01	
Recorder	0.01	13254	Outside	3449.02	
Bullnose	3.00			3452.02	40.02 Bottom Packers & Anchor

Total Tool Length: 63.02


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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drig Co, Inc.

Rusco-Davis # 4-25

 250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Ellis-Ks

Job Ticket: 16323

DST#: 2

ATTN: Scott Robinson

Test Start: 2002.08.18 @ 13:53:37

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

 Water Loss: 7.96 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 bbl
248.00	HMCgsyO 20%g 60%o 20%m	2.686
806.00	CGsyO 20%g 80%o	11.306
1922.00	GIP	26.961

Total Length: 2976.00 ft

Total Volume: 40.953 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

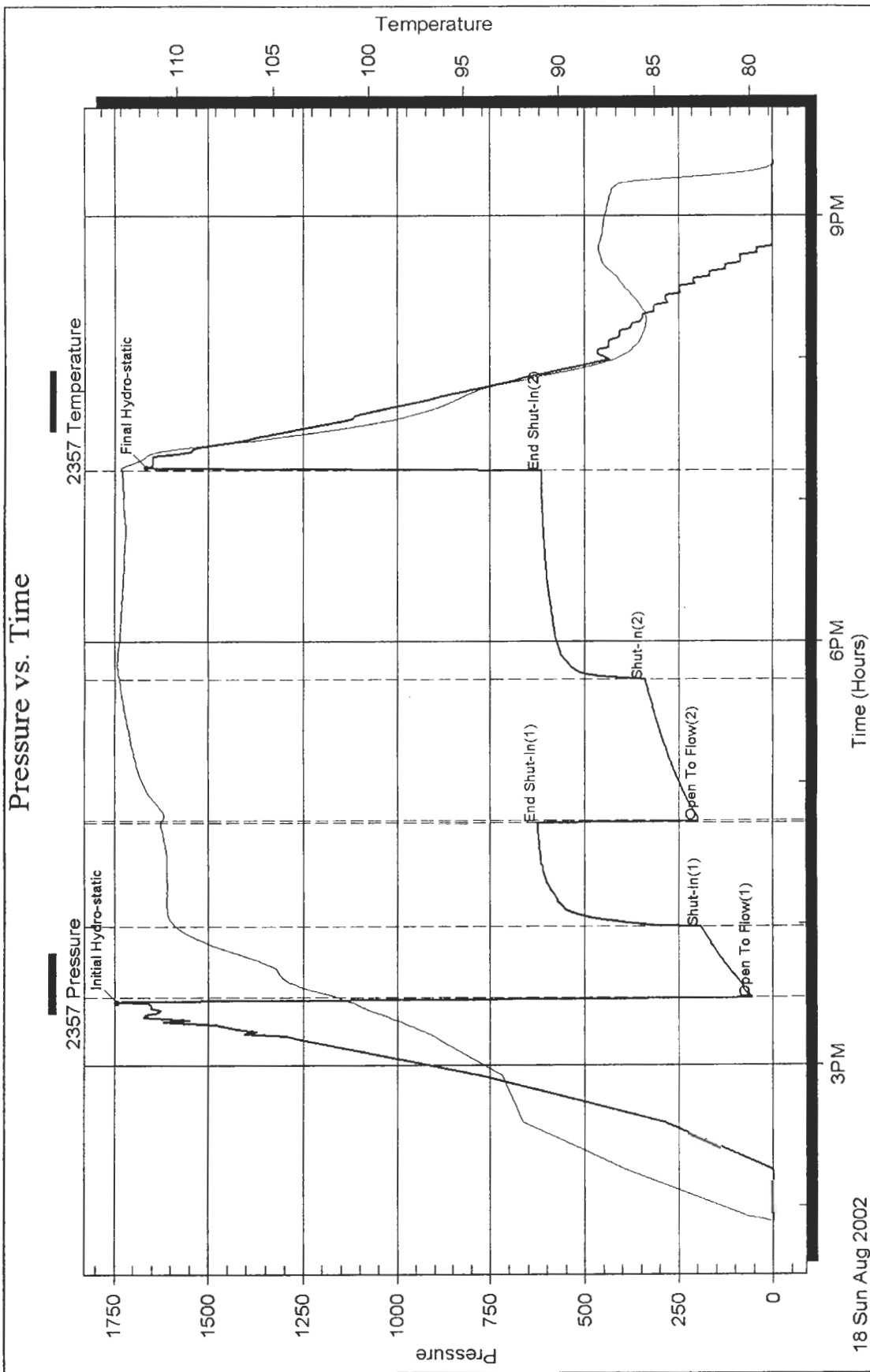
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



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DRILL STEM TEST REPORT

Prepared For: **Murfin Drilg Co, Inc.**

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

25-11-20-Ellis-Ks

Rusco-Davis # 4-25

Start Date: 2002.08.19 @ 03:31:52

End Date: 2002.08.19 @ 10:42:22

Job Ticket #: 16324 DST #: 3

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

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilg Co, Inc.

 250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16324

DST#: 3

Test Start: 2002.08.19 @ 03:31:52

GENERAL INFORMATION:

 Formation: **G**

 Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 05:06:22

Time Test Ended: 10:42:22

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

 Interval: **3453.00 ft (KB) To 3475.00 ft (KB) (TVD)**

 Total Depth: **3475.00 ft (KB) (TVD)**

 Hole Diameter: **7.88 inches** Hole Condition: **Good**

 Reference Elevations: **2081.00 ft (KB)**
2076.00 ft (CF)

 KB to GR/CF: **5.00 ft**

 Serial #: **2357**

Inside

 Press@RunDepth: **108.19 psig @ 3454.01 ft (KB)**

 Start Date: **2002.08.19**

 End Date: **2002.08.19**

 Start Time: **03:31:53**

 End Time: **10:42:22**

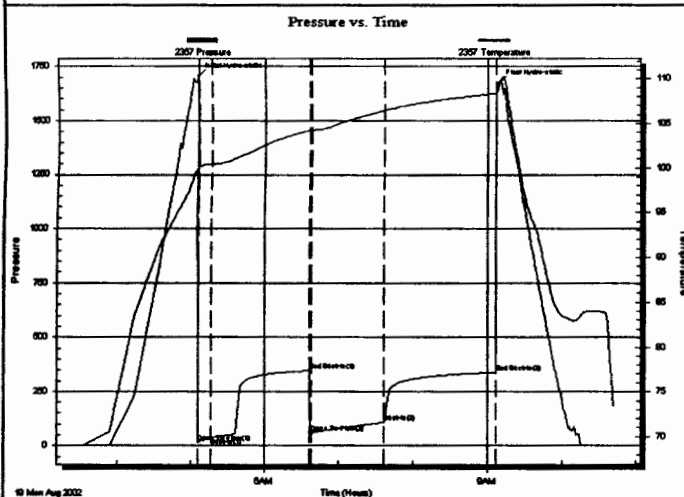
 Capacity: **7000.00 psig**

 Last Calib.: **2002.08.19**

 Time On Btm: **2002.08.19 @ 05:05:22**

 Time Off Btm: **2002.08.19 @ 09:09:22**

TEST COMMENT: IF-Strong BOB in 20 min
 IS-Weak building to 1"
 FF-Strong BOB in 15 min
 FSI-Weak steady surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1703.84	99.96	Initial Hydro-static
1	16.14	100.14	Open To Flow (1)
12	37.03	100.41	Shut-In(1)
91	345.79	104.25	End Shut-In(1)
93	60.90	104.28	Open To Flow (2)
152	108.19	106.50	Shut-In(2)
242	338.10	108.36	End Shut-In(2)
244	1673.09	109.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	Silty OCM 3%o 97% m	0.30
248.00	CGsyO 20%g 80%o	3.25
558.00	GIP	7.83

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drig Co, Inc.

Rusco-Davis # 4-25

250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Ellis-Ks

Job Ticket: 16324

DST#: 3

ATTN: Scott Robinson

Test Start: 2002.08.19 @ 03:31:52

Tool Information

Drill Pipe:	Length: 3370.00 ft	Diameter: 3.80 inches	Volume: 47.27 bbl	Tool Weight: 1200.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 87.00 ft	Diameter: 2.25 inches	Volume: 0.43 bbl	Weight to Pull Loose: lb
		Total Volume: 47.70 bbl		Tool Chased 0.01 ft
Drill Pipe Above KB:	27.01 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3453.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.02 ft			
Tool Length:	45.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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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		
Safety Joint	2.00			3443.00		
Packer	5.00			3448.00	23.00	Bottom Of Top Packer
Packer	5.00			3453.00		
Stubb	1.00			3454.00		
Recorder	0.01	2357	Inside	3454.01		
Perforations	18.00			3472.01		
Recorder	0.01	13254	Outside	3472.02		
Bullnose	3.00			3475.02	22.02	Bottom Packers & Anchor

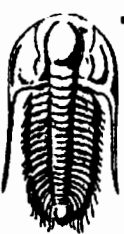
Total Tool Length: 45.02

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 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		FLUID SUMMARY
	Murfin Drig Co, Inc. 250 N. Water Ste 300 Wichita, Ks. 67202 ATTN: Scott Robinson	Rusco-Davis # 4-25 25-11-20-Ellis-Ks Job Ticket: 16324 DST#: 3 Test Start: 2002.08.19 @ 03:31:52	

Mud and Cushion Information			
Mud Type: Gel Chem	Cushion Type:	Oil API:	34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length:	Water Salinity:	ppm
Viscosity: 45.00 sec/qt	Cushion Volume:		
Water Loss: 7.97 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure:		
Salinity: 5000.00 ppm			
Filter Cake: inches			

Recovery Information		
Recovery Table		
Length ft	Description	Volume bbl
62.00	Silly OCM 3%o 97% m	0.305
248.00	CGsyO 20%g 80%o	3.251
558.00	GIP	7.827

Total Length: 868.00 ft	Total Volume: 11.383 bbl	
Num Fluid Samples: 0	Num Gas Bombs: 0	Serial #:
Laboratory Name:	Laboratory Location:	
Recovery Comments:		

DST Test Number: 3

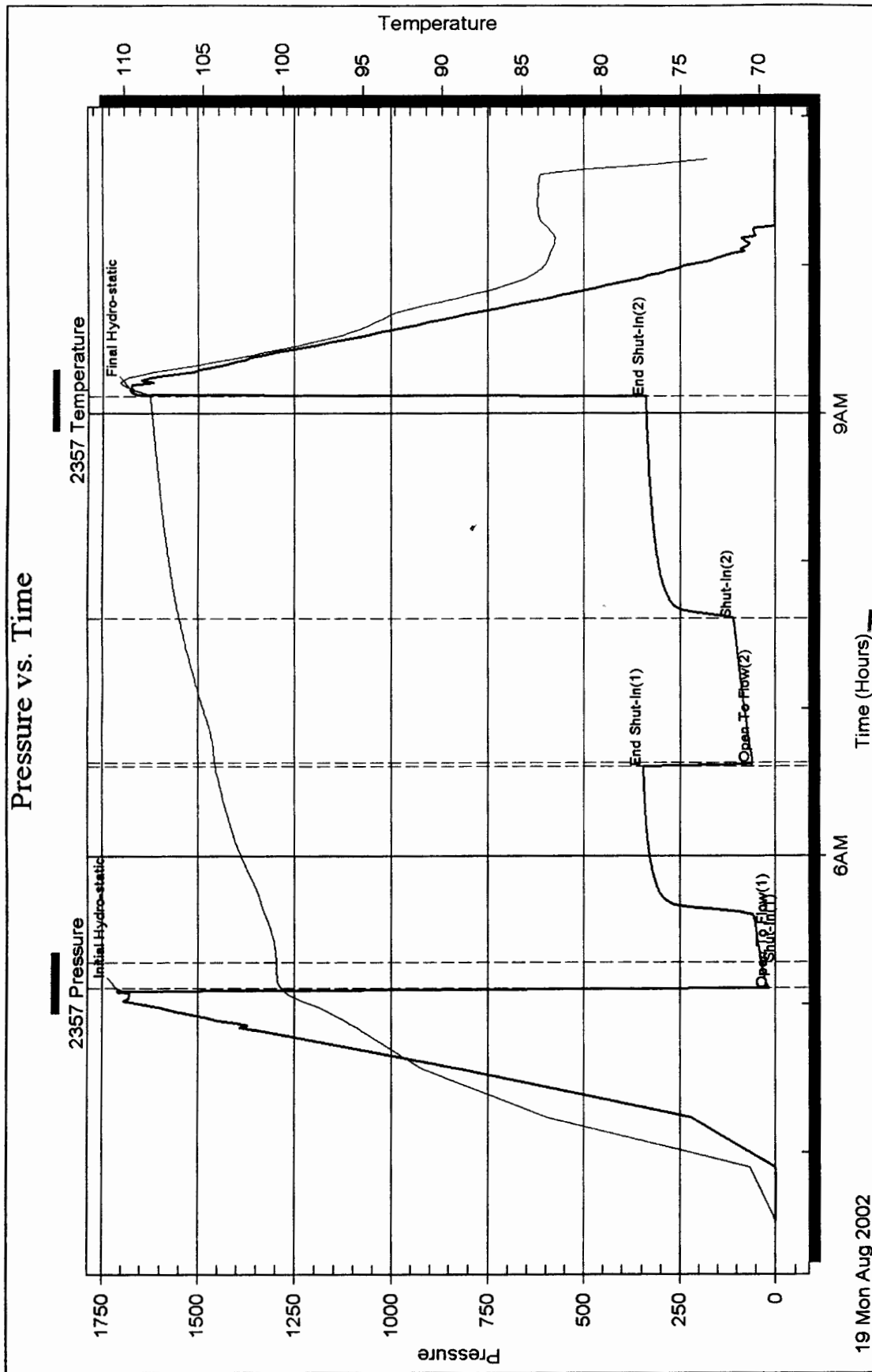
25-11-20-Blis-Ks

Murfin Drig Co, Inc.

Inside

Serial #: 2357

Pressure vs. Time



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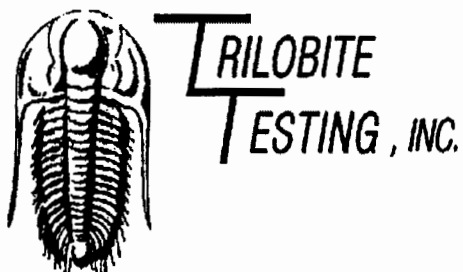
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Ref. No: 16324

Trilobite Testing, Inc



DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg Co, Inc.**

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

25-11-20-Ellis-Ks

Rusco-Davis # 4-25

Start Date: 2002.08.19 @ 23:02:56

End Date: 2002.08.20 @ 06:25:56

Job Ticket #: 16325 DST #: 4

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DRILL STEM TEST REPORT

Murfin Drig Co, Inc.

 250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16325

DST#: 4

Test Start: 2002.08.19 @ 23:02:56

GENERAL INFORMATION:

Formation: H-I-J-K LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:49:26

Time Test Ended: 06:25:56

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3486.00 ft (KB) To 3574.00 ft (KB) (TVD)

Total Depth: 3574.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2081.00 ft (KB)

2076.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 2357

Inside

Press@RunDepth: 97.95 psig @ 3489.01 ft (KB)

Start Date: 2002.08.19

End Date:

2002.08.20

Start Time: 23:02:57

End Time:

06:25:56

Capacity: 7000.00 psig

Last Calib.: 2002.08.20

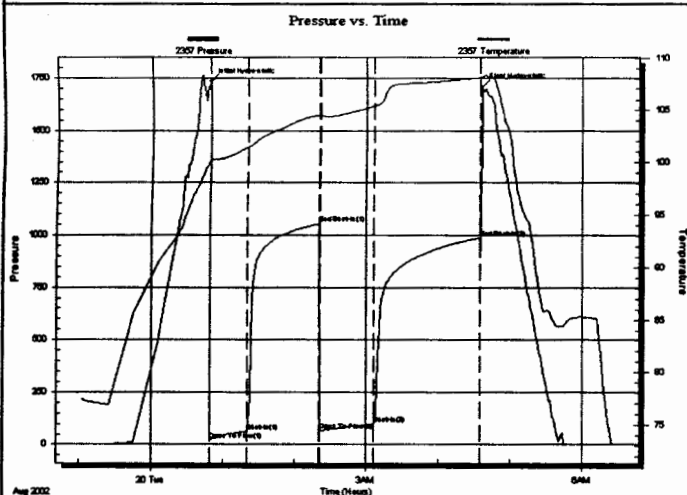
Time On Btm: 2002.08.20 @ 00:48:56

Time Off Btm: 2002.08.20 @ 04:36:26

TEST COMMENT: IF-Weak building to 7" fair blow

FF-Weak building to 3"

Times-30-60-45-90



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1734.98	100.15	Initial Hydro-static
1	21.19	100.21	Open To Flow (1)
32	63.65	101.48	Shut-In(1)
92	1053.73	104.53	End Shut-In(1)
93	68.01	104.53	Open To Flow (2)
137	97.95	105.40	Shut-In(2)
226	988.10	108.11	End Shut-In(2)
228	1709.68	108.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
156.00	HOCgsyM 10%g 30%o 60%m	1.40
30.00	CGsy O 10%g 90%o	0.42
248.00	GIP	3.48

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drig Co, Inc.

Rusco-Davis # 4-25

250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Elis-Ks

Job Ticket: 16325

DST#: 4

ATTN: Scott Robinson

Test Start: 2002.08.19 @ 23:02:56

Tool Information

Drill Pipe:	Length: 3399.00 ft	Diameter: 3.80 inches	Volume: 47.68 bbl	Tool Weight:	1100.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 87.00 ft	Diameter: 2.25 inches	Volume: 0.43 bbl	Weight to Pull Loose:	65000.00 lb
		Total Volume:	48.11 bbl	Tool Chased	0.01 ft
Drill Pipe Above KB:	23.01 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	3486.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	88.02 ft				
Tool Length:	111.02 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3464.00		
S.I. Tool	5.00			3469.00		
HMV	5.00			3474.00		
Safety Joint	2.00			3476.00		
Packer	5.00			3481.00	23.00	Bottom Of Top Packer
Packer	5.00			3486.00		
Stubb	1.00			3487.00		
Perforations	1.00			3488.00		
C.O. Sub	1.00			3489.00		
Recorder	0.01	2357	Inside	3489.01		
Blank Spacing	63.00			3552.01		
C.O. Sub	1.00			3553.01		
Recorder	0.01	13254	Outside	3553.02		
Perforations	18.00			3571.02		
Bullnose	3.00			3574.02	88.02	Bottom Packers & Anchor

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Total Tool Length: 111.02

 TRILOBITE TESTING, INC	DRILL STEM TEST REPORT		FLUID SUMMARY
	Murfin Drig Co, Inc. 250 N. Water Ste 300 Wichita, Ks. 67202 ATTN: Scott Robinson	Rusco-Davis # 4-25 25-11-20-Ellis-Ks Job Ticket: 16325 DST#: 4 Test Start: 2002.08.19 @ 23:02:56	

Mud and Cushion Information			
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 43.00 sec/qt Water Loss: 7.58 in ³ Resistivity: ohm.m Salinity: 5900.00 ppm Filter Cake: inches	Cushion Type: Cushion Length: ft Cushion Volume: bbl Gas Cushion Type: Gas Cushion Pressure: psig	Oil API: 28 deg API Water Salinity: ppm	

Recovery Information		
Recovery Table		
Length ft	Description	Volume bbl
156.00	HOCGsyM 10%g 30%o 60%m	1.396
30.00	CGsy O 10%g 90%o	0.421
248.00	GIP	3.479

Total Length: 434.00 ft	Total Volume: 5.296 bbl	
Num Fluid Samples: 0	Num Gas Bombs: 0	Serial #:
Laboratory Name:	Laboratory Location:	
Recovery Comments:		

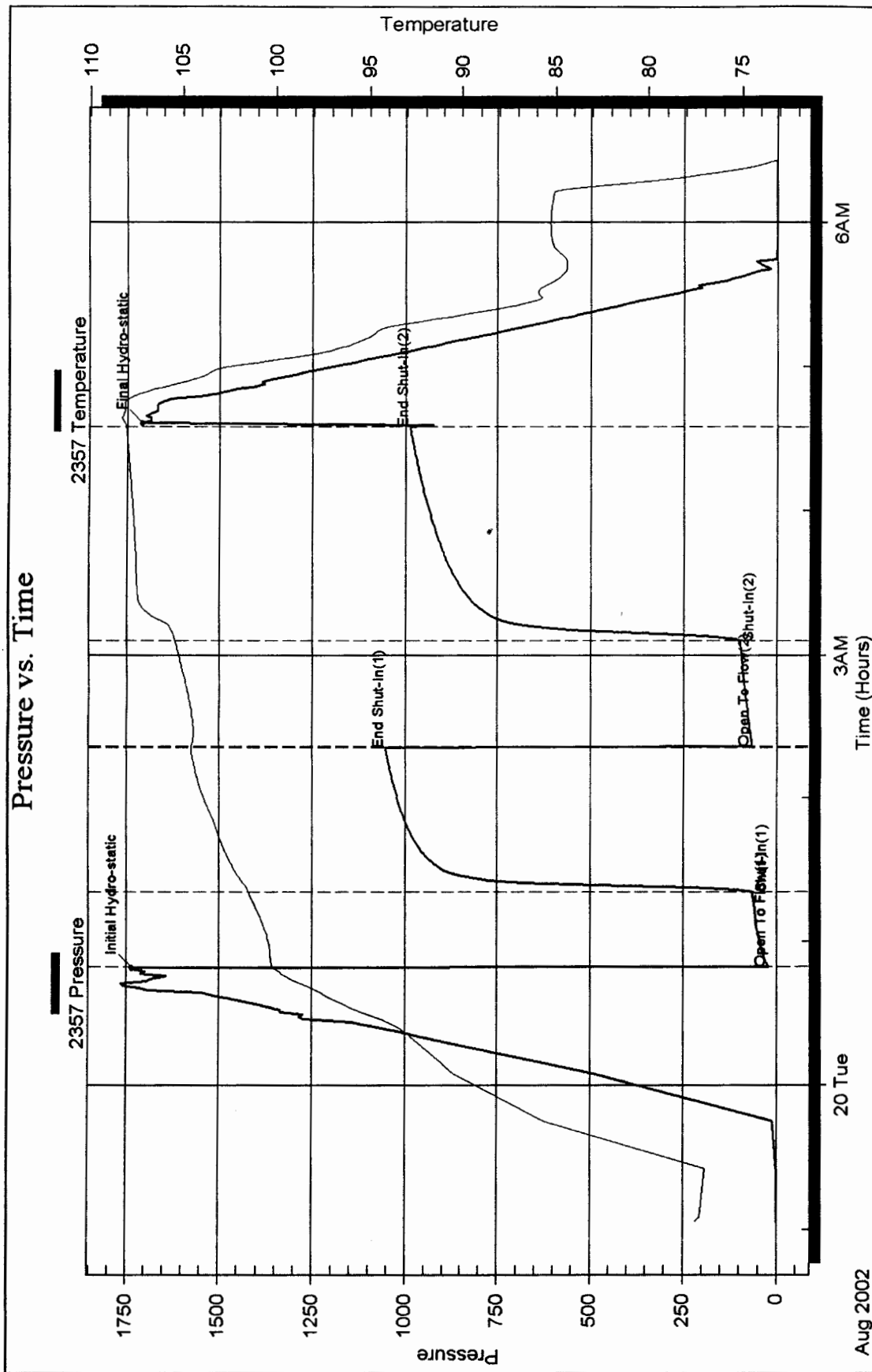
Serial #: 2357

Inside

Murfin Drig Co, Inc.

25-11-20-Ellis-Ks

DST Test Number: 4



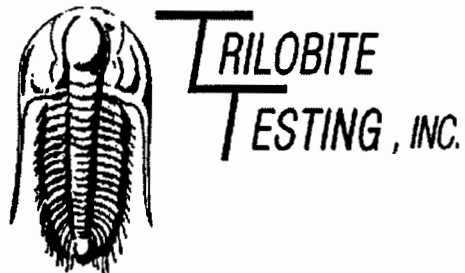
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Ref. No: 16325

Trilobite Testing, Inc

Printed: 2002.08.26 @ 14:25:56 Page 5



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilg Co, Inc.**

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

25-11-20-Ellis-Ks

Rusco-Davis # 4-25

Start Date: 2002.08.20 @ 16:57:35

End Date: 2002.08.21 @ 00:03:05

Job Ticket #: 16501 DST #: 5

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DRILL STEM TEST REPORT

Murfin Drig Co, Inc.

 250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16501

DST#: 5

Test Start: 2002.08.20 @ 16:57:35

GENERAL INFORMATION:

Formation: Arbuckle

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:17:35

Time Test Ended: 00:03:05

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3651.00 ft (KB) To 3680.00 ft (KB) (TVD)

Total Depth: 3680.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2081.00 ft (KB)

2076.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 2357

Inside

Press@RunDepth: 172.95 psig @ 3653.01 ft (KB)

Start Date: 2002.08.20

End Date:

2002.08.21

Start Time: 16:57:36

End Time:

00:03:05

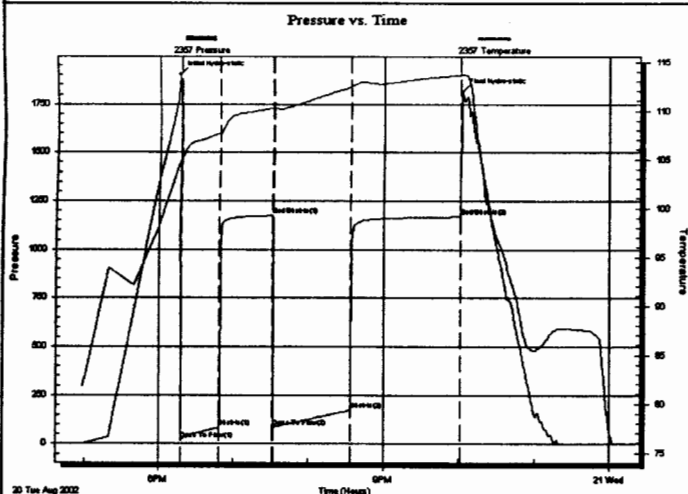
Capacity: 7000.00 psig

Last Calib.: 2002.08.21

Time On Btm: 2002.08.20 @ 18:16:05

Time Off Btm: 2002.08.20 @ 22:02:05

TEST COMMENT: IF-Strong BOB in 25 min
FF-Strong BOB in 30 min
Times-30-45-60-90



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1901.99	104.75	Initial Hydro-static
2	22.31	105.20	Open To Flow (1)
33	83.95	107.70	Shut-In(1)
76	1174.24	110.30	End Shut-In(1)
77	88.04	110.30	Open To Flow (2)
138	172.95	112.40	Shut-In(2)
225	1169.52	113.65	End Shut-In(2)
226	1810.06	113.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	OCGsyM 10%g 30%o 60%r	0.30
382.00	CGsyO 10%g 90%o	5.13
124.00	GP	1.74

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drig Co, Inc.

Rusco-Davis # 4-25

250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Ellis-Ks

Job Ticket: 16501

DST#: 5

ATTN: Scott Robinson

Test Start: 2002.08.20 @ 16:57:35

Tool Information

Drill Pipe:	Length: 3556.00 ft	Diameter: 3.80 inches	Volume: 49.88 bbl	Tool Weight:	1100.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 87.00 ft	Diameter: 2.25 inches	Volume: 0.43 bbl	Weight to Pull Loose:	65000.00 lb
		Total Volume:	50.31 bbl	Tool Chased	0.01 ft
Drill Pipe Above KB:	15.01 ft			String Weight: Initial	63000.00 lb
Depth to Top Packer:	3651.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	29.02 ft				
Tool Length:	52.02 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3629.00		
S.I. Tool	5.00			3634.00		
HMV	5.00			3639.00		
Safety Joint	2.00			3641.00		
Packer	5.00			3646.00	23.00	Bottom Of Top Packer
Packer	5.00			3651.00		
Stubb	1.00			3652.00		
Perforations	1.00			3653.00		
Recorder	0.01	2357	Inside	3653.01		
Pump	24.00			3677.01		
Recorder	0.01	13254	Outside	3677.02		
Bullnose	3.00			3680.02	29.02	Bottom Packers & Anchor

Total Tool Length: 52.02

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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drig Co, Inc.

Rusco-Davis # 4-25

 250 N. Water Ste 300
Wichita, Ks. 67202

25-11-20-Ellis-Ks

Job Ticket: 16501

DST#: 5

ATTN: Scott Robinson

Test Start: 2002.08.20 @ 16:57:35

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

30 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: 6800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	OCGsyM 10%g 30%o 60%m	0.305
382.00	CGsyO 10%g 90%o	5.131
124.00	GIP	1.739

Total Length: 568.00 ft

Total Volume: 7.175 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

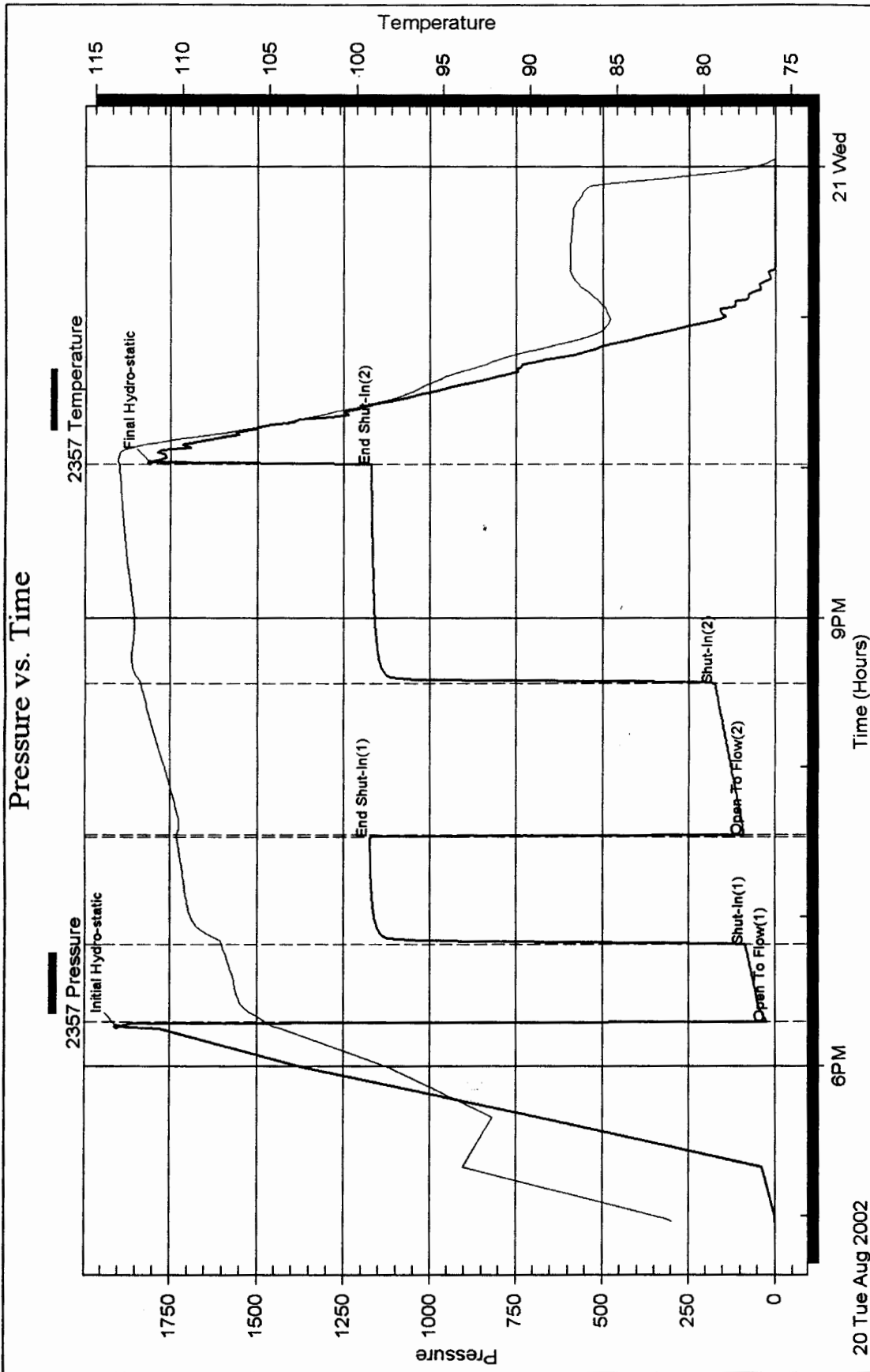
Serial #:

Laboratory Name:

Laboratory Location:

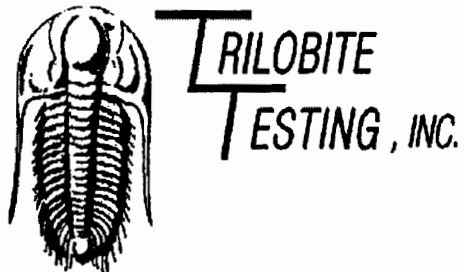
Recovery Comments:

Pressure vs. Time



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DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg Co, Inc.**

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

25-11-20-Ellis-Ks

Rusco-Davis # 4-25

Start Date: 2002.08.21 @ 07:10:22

End Date: 2002.08.21 @ 14:31:52

Job Ticket #: 16502 DST #: 6

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DRILL STEM TEST REPORT

Murfin Drlg Co, Inc.

 250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16502

DST#: 6

Test Start: 2002.08.21 @ 07:10:22

GENERAL INFORMATION:

 Formation: **Arbuckle**

 Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 08:49:22

Time Test Ended: 14:31:52

 Test Type: **Conventional Bottom Hole**

 Tester: **Dan Bangle**

 Unit No: **21**

 Interval: **3680.00 ft (KB) To 3695.00 ft (KB) (TVD)**

 Total Depth: **3695.00 ft (KB) (TVD)**

 Hole Diameter: **7.88 inches** Hole Condition: **Good**

 Reference Elevations: **2081.00 ft (KB)**
2076.00 ft (CF)

 KB to GR/CF: **5.00 ft**

 Serial #: **2357**

Inside

 Press@RunDepth: **168.65 psig @ 3681.01 ft (KB)**

 Start Date: **2002.08.21**

End Date:

2002.08.21

 Start Time: **07:10:23**

End Time:

14:31:52

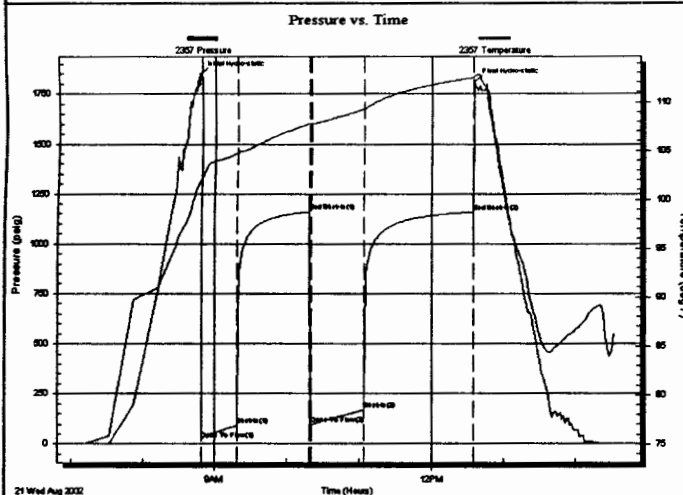
 Capacity: **7000.00 psig**

 Last Calib.: **2002.08.21**

 Time On Btm: **2002.08.21 @ 08:47:52**

 Time Off Btm: **2002.08.21 @ 12:35:52**

TEST COMMENT: **F-Strong BOB in 15 min**
FF-Weak building to 11" fair blow
Times- 30-60-45-90



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1848.29	101.88	Initial Hydro-static
2	23.27	102.14	Open To Flow (1)
31	90.82	104.74	Shut-In (1)
92	1160.22	107.82	End Shut-In (1)
93	96.89	107.83	Open To Flow (2)
137	168.65	109.37	Shut-In (2)
227	1158.19	112.46	End Shut-In (2)
228	1811.62	112.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	HOCgsyM 10%g 40%o 50%rm	0.30
402.00	CGsyO 10%g 90%o	5.41
92.00	GIP	1.29

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilg Co, Inc.

250 N. Water Ste 300
Wichita, Ks. 67202

ATTN: Scott Robinson

Rusco-Davis # 4-25

25-11-20-Ellis-Ks

Job Ticket: 16502

DST#: 6

Test Start: 2002.08.21 @ 07:10:22

Tool Information

Drill Pipe:	Length: 3587.00 ft	Diameter: 3.80 inches	Volume: 50.32 bbl	Tool Weight:	900.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 87.00 ft	Diameter: 2.25 inches	Volume: 0.43 bbl	Weight to Pull Loose:	65000.00 lb
			Total Volume: 50.75 bbl	Tool Chased	0.01 ft
Drill Pipe Above KB:	17.01 ft			String Weight: Initial	63000.00 lb
Depth to Top Packer:	3680.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	15.02 ft				
Tool Length:	38.02 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3658.00		
S.I. Tool	5.00			3663.00		
HMV	5.00			3668.00		
Safety Joint	2.00			3670.00		
Packer	5.00			3675.00	23.00	Bottom Of Top Packer
Packer	5.00			3680.00		
Stubb	1.00			3681.00		
Recorder	0.01	2357	Inside	3681.01		
Perforations	11.00			3692.01		
Recorder	0.01	13254	Outside	3692.02		
Bullnose	3.00			3695.02	15.02	Bottom Packers & Anchor

Total Tool Length: 38.02

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 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		FLUID SUMMARY
	Murfin Drig Co, Inc. 250 N. Water Ste 300 Wichita, Ks. 67202 ATTN: Scott Robinson	Rusco-Davis # 4-25 25-11-20-Ellis-Ks Job Ticket: 16502 DST#: 6 Test Start: 2002.08.21 @ 07:10:22	

Mud and Cushion Information			
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 48.00 sec/qt Water Loss: 7.59 in ³ Resistivity: ohm.m Salinity: 6800.00 ppm Filter Cake: inches	Cushion Type: Cushion Length: ft Cushion Volume: bbl Gas Cushion Type: Gas Cushion Pressure: psig	Oil API: 30 deg API Water Salinity: ppm	

Recovery Information		
Recovery Table		
Length ft	Description	Volume bbl
62.00	HOCGsyM 10%g 40%o 50%m	0.305
402.00	CGsyO 10%g 90%o	5.411
92.00	GIP	1.291

Total Length: 556.00 ft	Total Volume: 7.007 bbl	
Num Fluid Samples: 0	Num Gas Bombs: 0	Serial #:
Laboratory Name:	Laboratory Location:	
Recovery Comments:		

DST Test Number: 6

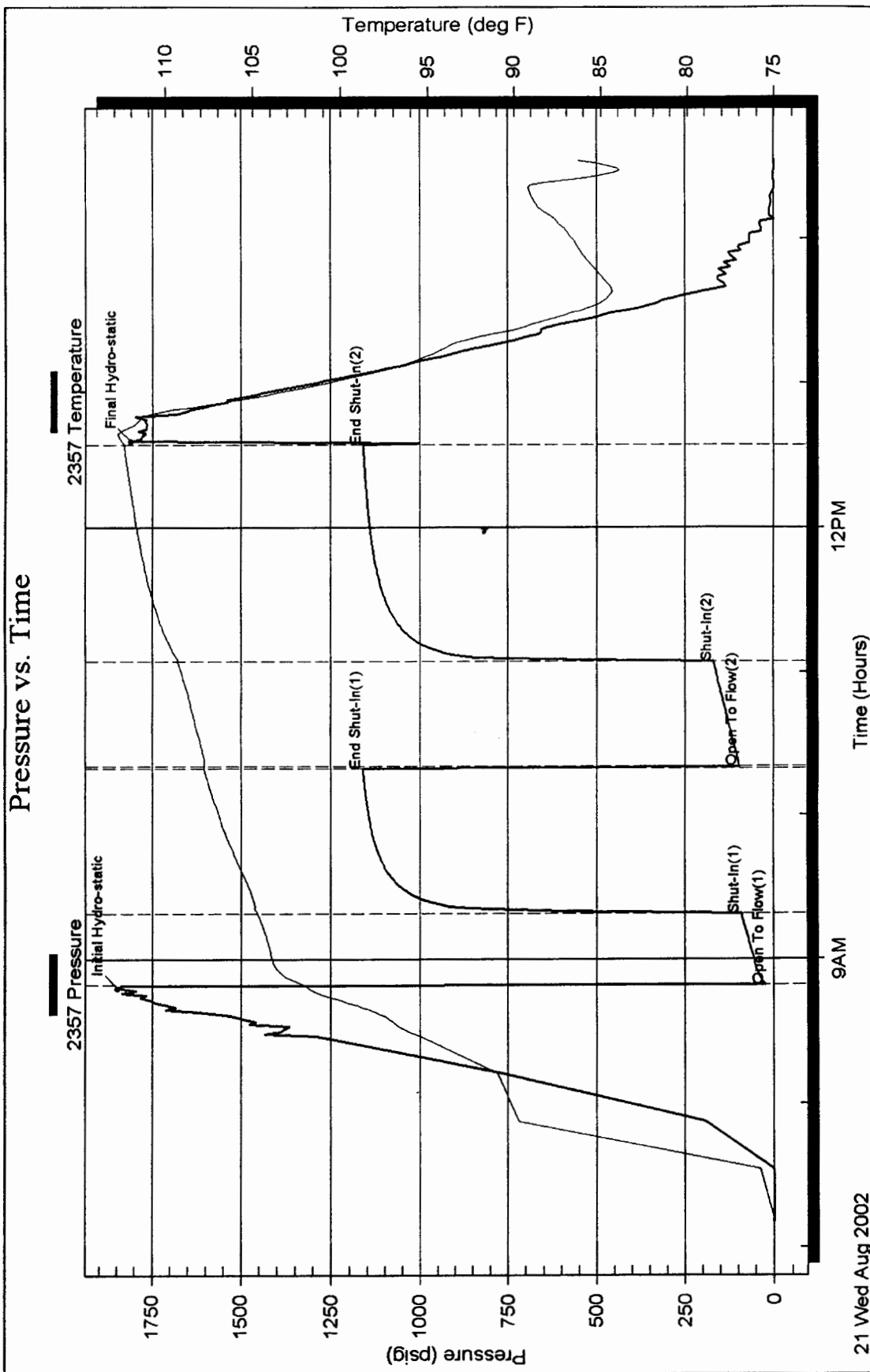
25-11-20-Ellis-Ks

Murfin Drig Co, Inc.

Inside

Serial #: 2357

Pressure vs. Time

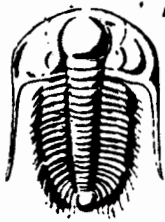


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Test Ticket

Well Name & No. <u>Rusco Davis #4-25</u>	Test No. <u>1</u>	Date <u>8-17-02</u>
Company <u>Murfin Drilling Co, Inc.</u>	Zone Tested <u>ORead</u>	
Address <u>250 N. WTC. STE 300, Wichita, Ks. 67202</u>	Elevation <u>2081</u> KB <u>2076</u> GL	
Co. Rep / Geo. <u>Kris Kennedy</u>	Cont. <u>Murfin #16</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>25</u> Twp. <u>11</u> Rge. <u>20</u> Co. <u>Ellis</u> State <u>KS</u>		
No. of Copies <u> </u> Distribution Sheet (Y, N) <u> </u> Turnkey (Y, N) <u> </u> Evaluation (Y, N) <u> </u>		

Interval Tested <u>3278 — 3294</u>	Initial Str Wt./Lbs. <u>60,000</u>	Unseated Str Wt./Lbs. <u>61,000</u>
Anchor Length <u>16</u>	Wt. Set Lbs. <u>30,000</u>	Wt. Pulled Loose/Lbs. <u>76,000</u>
Top Packer Depth <u>3278</u>	Tool Weight <u>2000</u>	
Bottom Packer Depth <u>3294</u>	Hole Size — 7 7/8" <u> </u>	Rubber Size — 6 3/4" <u> </u>
Total Depth <u>3346</u>	Wt. Pipe Run <u> </u>	Drill Collar Run <u>87</u>
Mud Wt. <u>9.1</u> LCM <u> </u> Vis. <u>44</u> WL <u>9.2</u>	* Drill Pipe Size <u>4.5</u>	Ft. Run <u>3182</u>
Blow Description <u>I.F. Strong - BOB in 7 min.</u>		
<u>ISI - Weak - building to 1"</u>		
<u>F.F. - Strong - BOB in 7 min.</u>		
<u>FSI - Weak - building to 3"</u>		
Recovery — Total Feet <u>422</u> GIP <u>754</u>	Ft. in DC <u>87</u>	Ft. in DP <u>335</u>
Rec. <u>380</u> Feet Of <u>CGS 0</u>	<u>20</u> %gas <u>80</u> %oil	%water <u> </u> %mud <u> </u>
Rec. <u>42</u> Feet Of <u>HMC 0</u>	%gas <u>70</u> %oil	%water <u>30</u> %mud <u> </u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil	%water <u> </u> %mud <u> </u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil	%water <u> </u> %mud <u> </u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil	%water <u> </u> %mud <u> </u>
BHT <u>110</u> °F Gravity <u> </u> °API D@ <u> </u>	°F Corrected Gravity <u>34</u> °API <u> </u>	
RW <u> </u> @ <u> </u> °F Chlorides <u> </u> ppm Recovery	Chlorides <u>4400</u> ppm System	

(A) Initial Hydrostatic Mud	AK-1 <u>1641</u> Alpine	PSI Recorder No. <u>2357</u>	T-On Location <u>16:30</u>
(B) First Initial Flow Pressure	<u>22</u> PSI	(depth) <u>3279</u>	T-Started <u>18:25</u>
(C) First Final Flow Pressure	<u>74</u> PSI	Recorder No. <u>13254</u>	T-Open <u>20:05</u>
(D) Initial Shut-In Pressure	<u>1003</u> PSI	(depth) <u>3288</u>	T-Pulled <u>23:50</u>
(E) Second Initial Flow Pressure	<u>78</u> PSI	Recorder No. <u>13248</u>	T-Out <u>01:38</u>
(F) Second Final Flow Pressure	<u>143</u> PSI	(depth) <u>3296</u>	T-Off Location <u>02:00</u>
(G) Final Shut-in Pressure	<u>982</u> PSI	Initial Opening <u> </u>	Test <u> </u>
(Q) Final Hydrostatic Mud	<u>1640</u> PSI	Initial Shut-in <u> </u>	Jars <u> </u>

Final Flow Safety Joint X

Final Shut-in KCC Straddle X

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Approved By

Our Representative Dan Baugle

Circ. Sub

Sampler

Extra Packer X

Elec. Rec. X

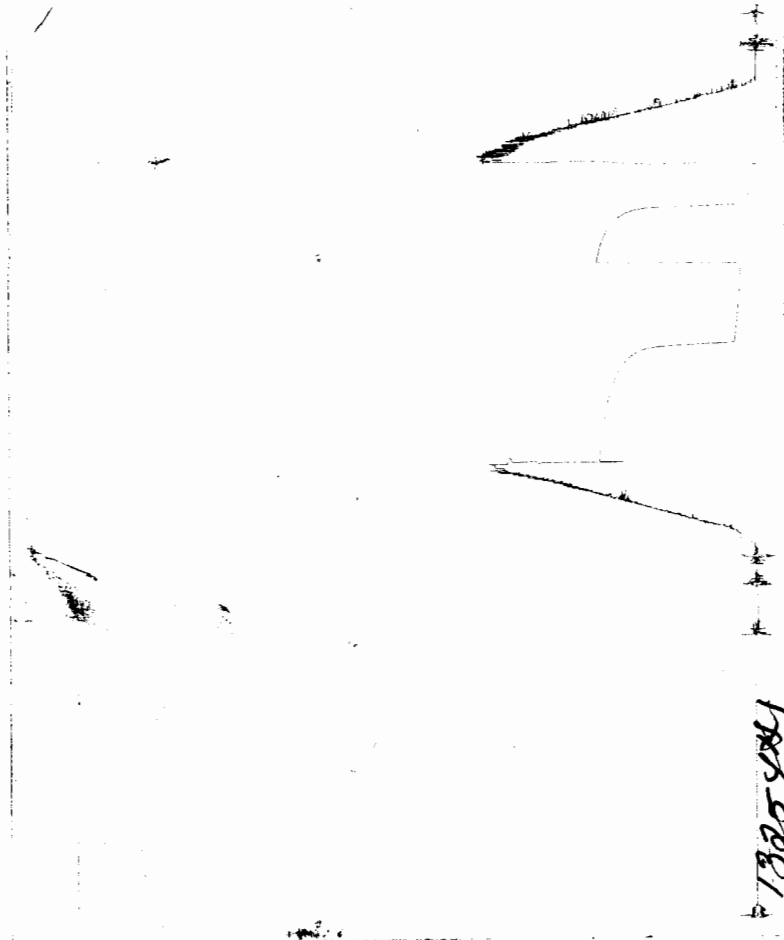
Mileage 32

Other

TOTAL PRICE \$

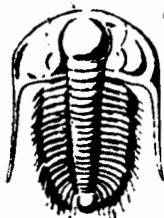
CHART PAGE

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



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OCT 16 2002 No 16323

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Test Ticket

Well Name & No. Rusco-Davis #4-25 Test No. 2 Date 8-18-02
 Company Murfin Drilling Co. Inc. Zone Tested C-D-E-F LKC
 Address _____ Elevation 2081 KB 2076 GL
 Co. Rep / Geo. Kris Kennedy Cont. Murfin #16 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 25 Twp. 11 Rge. 20 Co. Ellis State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3412 — 3452 Initial Str Wt./Lbs. 61000 Unseated Str Wt./Lbs. 23000
 Anchor Length 40 Wt. Set Lbs. 30000 Wt. Pulled Loose/Lbs. 29000
 Top Packer Depth 3407 Tool Weight 2000
 Bottom Packer Depth 3412 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 3452 Wt. Pipe Run _____ Drill Collar Run 87
 Mud Wt. 9.2 LCM _____ Vis. 45 WL 8 * Drill Pipe Size 4.5X11 Ft. Run 3307
 Blow Description I.F. Strong - B.O.B. in 2.5 min.
ISI - Strong - B.O.B. in 8 min.
E.F. Strong - B.O.B. in 2 min.
FST - Strong B.O.B. in 8 min.
 Recovery — Total Feet 1054 GIP 1922 Ft. in DC 87 Ft. in DP 967
 Rec. 806 Feet Of CGSYO 20 %gas 80 %oil _____ %water _____ %mud
 Rec. 248 Feet Of HMC GSYO 20 %gas 60 %oil _____ %water 20 %mud
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud
 BHT 112 °F Gravity _____ °API D@ _____ °F Corrected Gravity 36 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 5000 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1742</u>	PSI	Recorder No. <u>2357</u>	T-On Location	<u>13:35</u>
(B) First Initial Flow Pressure	<u>55</u>	PSI	(depth) <u>3413</u>	T-Started	<u>13:53</u>
(C) First Final Flow Pressure	<u>191</u>	PSI	Recorder No. <u>13254</u>	T-Open	<u>15:26</u>
(D) Initial Shut-In Pressure	<u>625</u>	PSI	(depth) <u>3449</u>	T-Pulled	<u>19:10</u>
(E) Second Initial Flow Pressure	<u>197</u>	PSI	Recorder No. _____	T-Out	<u>21:23</u>
(F) Second Final Flow Pressure	<u>339</u>	PSI	(depth) _____	T-Off Location	<u>21:45</u>
(G) Final Shut-in Pressure	<u>614</u>	PSI	Initial Opening <u>30</u>	Test	_____
(Q) Final Hydrostatic Mud	<u>1665</u>	PSI	Initial Shut-in <u>45</u>	Jars	_____
			Final Flow <u>60</u>	Safety Joint <u>X</u>	
			Final Shut-in <u>90</u>	Straddle <u>KCC</u>	

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Approved By [Signature]

Our Representative [Signature]

Circ. Sub OCT 14 2002
 Sampler _____
 Extra Packer CONFIDENTIAL
 Elec. Rec. X
 Mileage 32
 Other _____
 TOTAL PRICE \$ _____

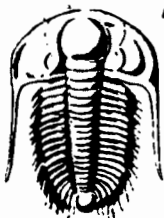
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Test Ticket

Well Name & No. Rusco - Davis #4-25 Test No. 3 Date 8-19-02
 Company Murfin Drilling Co. Inc Zone Tested G LKC
 Address _____ Elevation 2081 KB 2076 GL
 Co. Rep / Geo. Kris Kennedy Cont. Murfin #16 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 25 Twp. 11 Rge. 20 Co. Ellis State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3453 - 3475 Initial Str Wt./Lbs. 61000 Unseated Str Wt./Lbs. 61000
 Anchor Length 22 Wt. Set Lbs. 30000 Wt. Pulled Loose/Lbs. 65000
 Top Packer Depth 3448 Tool Weight 1200
 Bottom Packer Depth 3453 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 3475 Wt. Pipe Run _____ Drill Collar Run 87
 Mud Wt. 9.2 LCM _____ Vis. 45 WL 8 Drill Pipe Size 4.5XH Ft. Run 3370

Blow Description I.F. Strong - B.O.B in 20 min.

ISI - Weak building to 1"

F.F. Strong B.O.B. in 15 min

ESI - Weak steady surface blow

Recovery — Total Feet 310 GIP 558 Ft. in DC 87 Ft. in DP 223
 Rec. 248 Feet Of CG 510 20 %gas 80 %oil %water %mud
 Rec. 62 Feet Of slightly B.C.M %gas 3 %oil %water 97 %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 BHT 108 °F Gravity _____ °API D@ _____ °F Corrected Gravity 34 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 5000 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud	<u>1703</u>	PSI	Recorder No. <u>2357</u>	T-On Location	<u>03:00</u>	
(B) First Initial Flow Pressure	<u>16</u>	PSI	(depth) <u>3454</u>	T-Started	<u>03:31</u>	
(C) First Final Flow Pressure	<u>37</u>	PSI	Recorder No. <u>13254</u>	T-Open	<u>05:05</u>	
(D) Initial Shut-In Pressure	<u>345</u>	PSI	(depth) <u>3472</u>	T-Pulled	<u>09:05</u>	
(E) Second Initial Flow Pressure	<u>60</u>	PSI	Recorder No. _____	T-Out	<u>10:42</u>	
(F) Second Final Flow Pressure	<u>108</u>	PSI	(depth) _____	T-Off Location	<u>11:00</u>	
(G) Final Shut-in Pressure	<u>338</u>	PSI	Initial Opening <u>30</u>	Test	_____	
(Q) Final Hydrostatic Mud	<u>1673</u>	PSI	Initial Shut-in <u>60</u>	Jars	_____	
			Final Flow <u>60</u>	Safety Joint	<u>X</u>	
			Final Shut-in <u>6090</u>	Straddle	_____	

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Approved By [Signature]

Our Representative [Signature]

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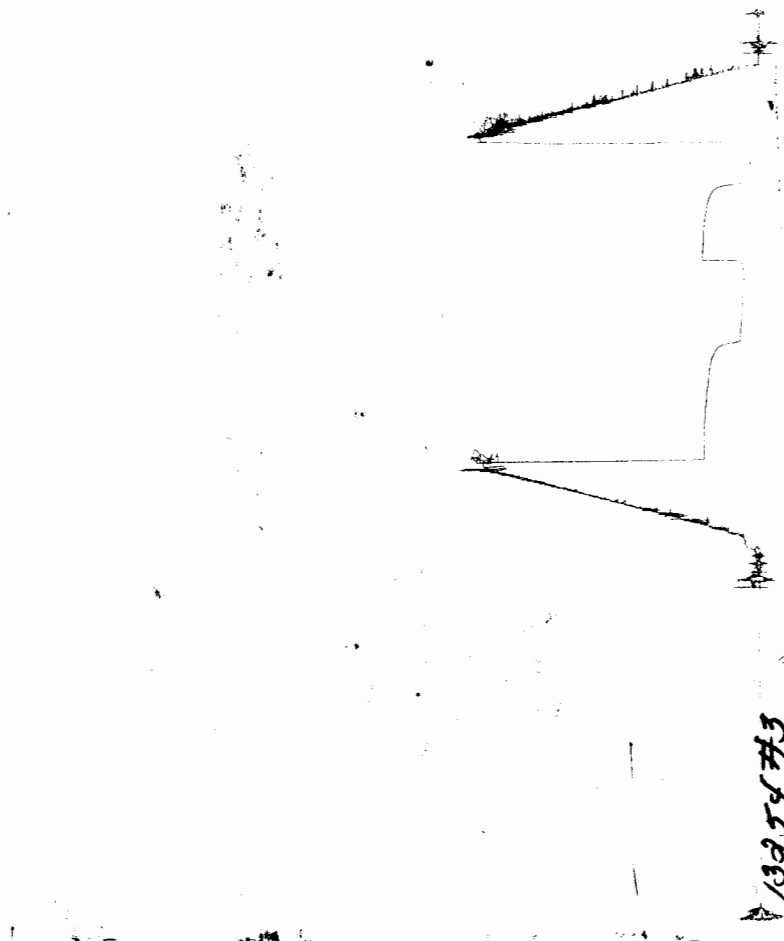
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Sampler _____
 Extra Packer _____
 Elec. Rec. X
 Mileage 32
 Other _____
 TOTAL PRICE \$ _____

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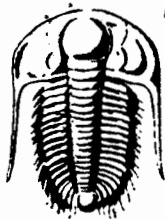
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KCC WICHITA No 16325

Test Ticket

Well Name & No. Rusco - Davis #4-25 Test No. 4 Date 8-19-02
 Company Murfin Drilling Co. Inc. Zone Tested H-I-J-K LKC
 Address _____ Elevation 2081 KB 2076 GL
 Co. Rep / Geo. Kris Kennedy Cont. Murfin #16 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 25 Twp. 11 Rge. 20 Co. Ellis State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3486 - 3574 Initial Str Wt./Lbs. 62,000 Unseated Str Wt./Lbs. 62,000
 Anchor Length 88 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 65,000
 Top Packer Depth 3481 Tool Weight 1100
 Bottom Packer Depth 3486 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 3574 Wt. Pipe Run _____ Drill Collar Run 87
 Mud Wt. 9.2 LCM _____ Vis. 43 WL 7.6 Drill Pipe Size 4.5x4 Ft. Run 3399
 Blow Description I.F. Weak-building to 7" fair blow

F.F. Weak-building to 3"

Recovery — Total Feet 186 GIP 248 Ft. in DC 87 Ft. in DP 99
 Rec. 30 Feet Of CGSYM 10% gas 90% oil %water %mud
 Rec. 156 Feet Of HOC GSYM 10% gas 30% oil %water 60% mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 BHT 108 °F Gravity _____ °API D@ _____ °F Corrected Gravity 28 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 5900 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1734</u>	PSI	Recorder No. <u>2357</u>	T-On Location	<u>22:20</u>
(B) First Initial Flow Pressure	<u>21</u>	PSI	(depth) <u>3489</u>	T-Started	<u>23:02</u>
(C) First Final Flow Pressure	<u>63</u>	PSI	Recorder No. <u>13254</u>	T-Open	<u>00:48</u>
(D) Initial Shut-in Pressure	<u>1053</u>	PSI	(depth) <u>3553</u>	T-Pulled	<u>04:33</u>
(E) Second Initial Flow Pressure	<u>68</u>	PSI	Recorder No. _____	T-Out	<u>06:25</u>
(F) Second Final Flow Pressure	<u>97</u>	PSI	(depth) _____	T-Off Location	<u>06:45</u>
(G) Final Shut-in Pressure	<u>988</u>	PSI	Initial Opening <u>30</u>	Test	_____
(Q) Final Hydrostatic Mud	<u>1709</u>	PSI	Initial Shut-in <u>60</u>	Jars	_____
			Final Flow <u>45</u>	Safety Joint	<u>X</u>
			Final Shut-in <u>90</u>	Straddle	_____

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Approved By [Signature]

Our Representative [Signature]

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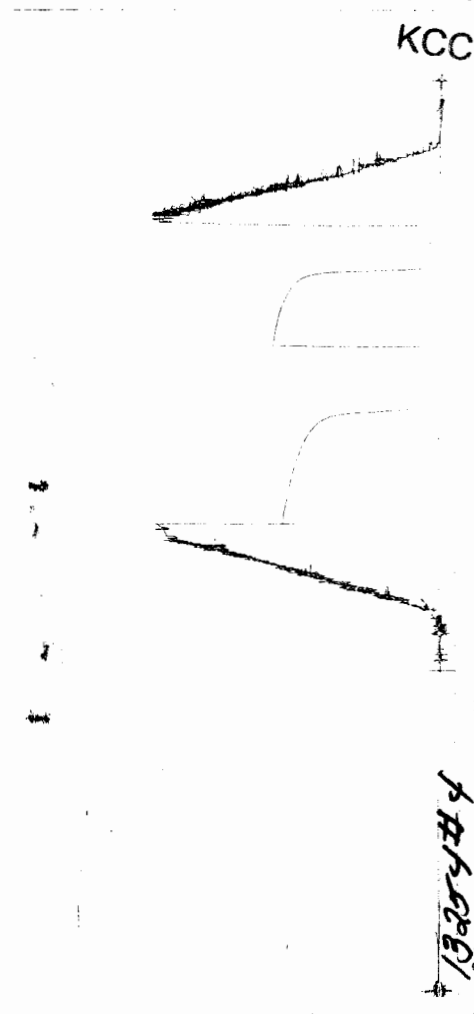
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Extra Packer _____
 Elec. Rec. X
 Mileage 32
 Other _____
 TOTAL PRICE \$ _____

CHART PAGE

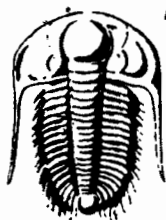
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Test Ticket

Well Name & No. Rusco - Davis #4-25 Test No. 5 Date 8-20-02
 Company Murfin Drilling Co. Inc Zone Tested Arbuckle
 Address _____ Elevation 2081 KB 2076 GL
 Co. Rep / Geo. Kris Kennedy Cont. Murfin #16 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 25 Twp. 11 Rge. 20 Co. Ellis State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3651 - 3680 Initial Str Wt./Lbs. 63,000 Unseated Str Wt./Lbs. 64,000
 Anchor Length 29 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 65,000
 Top Packer Depth 3646 Tool Weight 1100
 Bottom Packer Depth 3651 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 3680 Wt. Pipe Run _____ Drill Collar Run 87
 Mud Wt. 9.2 LCM _____ Vis. 48 WL 7.6 * Drill Pipe Size 4.5 X 11 Ft. Run 3556
 Blow Description I.F. Strong - B.O.B in 25 min.

E.F. Strong B.O.B in 30 min.

Recovery — Total Feet 444 GIP 124 Ft. in DC 87 Ft. in DP 357
 Rec. 382 Feet Of CGSYO 10 %gas 90%oil %water %mud
 Rec. 62 Feet Of OCBSYM 10 %gas 30%oil %water 60% mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of (No WTR) %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 BHT 113 °F Gravity _____ °API D@ _____ °F Corrected Gravity 30 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 6800 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1901</u>	PSI	Recorder No. <u>2357</u>	T-On Location	<u>16:00</u>
(B) First Initial Flow Pressure	<u>22</u>	PSI	(depth) <u>3653</u>	T-Started	<u>16:57</u>
(C) First Final Flow Pressure	<u>83</u>	PSI	Recorder No. <u>13254</u>	T-Open	<u>18:15</u>
(D) Initial Shut-In Pressure	<u>1174</u>	PSI	(depth) <u>3677</u>	T-Pulled	<u>22:00</u>
(E) Second Initial Flow Pressure	<u>88</u>	PSI	Recorder No. _____	T-Out	<u>00:03</u>
(F) Second Final Flow Pressure	<u>172</u>	PSI	(depth) _____	T-Off Location	<u>00:15</u>
(G) Final Shut-in Pressure	<u>1169</u>	PSI	Initial Opening <u>30</u>	Test	_____
(Q) Final Hydrostatic Mud	<u>1810</u>	PSI	Initial Shut-in <u>45</u>	Jars	_____
			Final Flow <u>60</u>	Safety Joint	<u>X</u>
			Final Shut-in <u>90</u>	Straddle	_____

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Approved By [Signature]

Our Representative [Signature]

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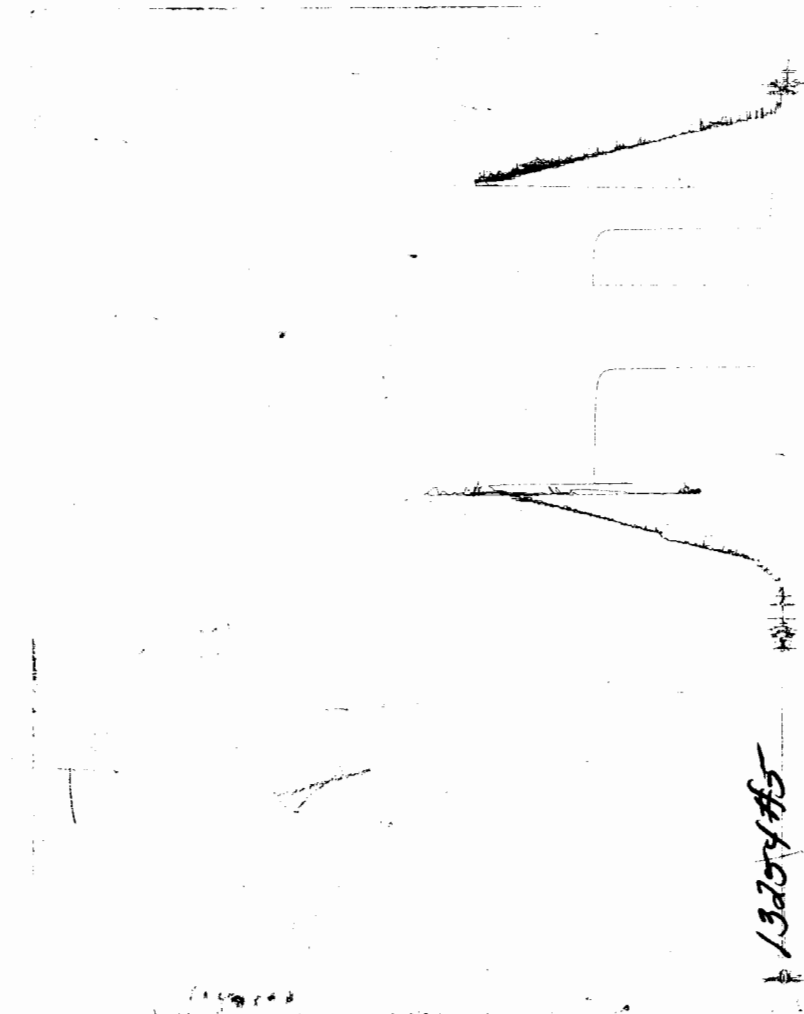
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Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Elec. Rec. X
 Mileage 32
 Other _____
 TOTAL PRICE \$ _____

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No 16502

Test Ticket

Well Name & No. Rusco - Davis #4-25 Test No. 6 Date 8-21-02
 Company Murfin Drilling Co. Inc Zone Tested Arbuckle
 Address _____ Elevation 2081 KB 2076 GL
 Co. Rep / Geo. Kris Kennedy Cont. Murfin #16 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 25 Twp. 11 Rge. 20 Co. Ellis State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3680 — 3695 Initial Str Wt./Lbs. 63,000 Unseated Str Wt./Lbs. 64,000
 Anchor Length 15 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 65,000
 Top Packer Depth 3675 Tool Weight 900
 Bottom Packer Depth 3680 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 3695 Wt. Pipe Run _____ Drill Collar Run 87
 Mud Wt. 9.2 LCM _____ Vis. 48 WL 7.6 Drill Pipe Size 4.5x14 Ft. Run 3587
 Blow Description I.F. Strong - Bob in 15 min.

I.F. Weak - building to 11" fair blow

Recovery — Total Feet 464 GIP 92 Ft. in DC 87 Ft. in DP 377
 Rec. 402 Feet Of CGSYO 10 %gas 90 %oil %water %mud
 Rec. 62 Feet Of 140 CGSYM 10 %gas 40 %oil %water 50 %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of (No water) %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 BHT 112 °F Gravity _____ °API D@ _____ °F Corrected Gravity 30 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 6800 ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud		<u>1848</u>	PSI	Recorder No. <u>2357</u>	T-On Location <u>06:30</u>
(B) First Initial Flow Pressure		<u>23</u>	PSI	(depth) <u>3681</u>	T-Started <u>07:10</u>
(C) First Final Flow Pressure		<u>90</u>	PSI	Recorder No. <u>13254</u>	T-Open <u>08:47</u>
(D) Initial Shut-In Pressure		<u>1160</u>	PSI	(depth) <u>3692</u>	T-Pulled <u>12:32</u>
(E) Second Initial Flow Pressure		<u>96</u>	PSI	Recorder No. _____	T-Out <u>14:31</u>
(F) Second Final Flow Pressure		<u>168</u>	PSI	(depth) _____	T-Off Location _____
(G) Final Shut-in Pressure		<u>1158</u>	PSI	Initial Opening <u>30</u>	Test _____
(Q) Final Hydrostatic Mud		<u>1811</u>	PSI	Initial Shut-in <u>60</u>	Jars _____
				Final Flow <u>45</u>	Safety Joint <u>X</u>
				Final Shut-in <u>90</u>	Straddle _____
					Circ. Sub _____
					Sampler _____
					Extra Packer _____
					Elec. Rec. <u>X</u>
					Mileage <u>32</u>
					Other _____
					TOTAL PRICE \$ _____

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Approved By Kris Kennedy

Our Representative Don Dangle

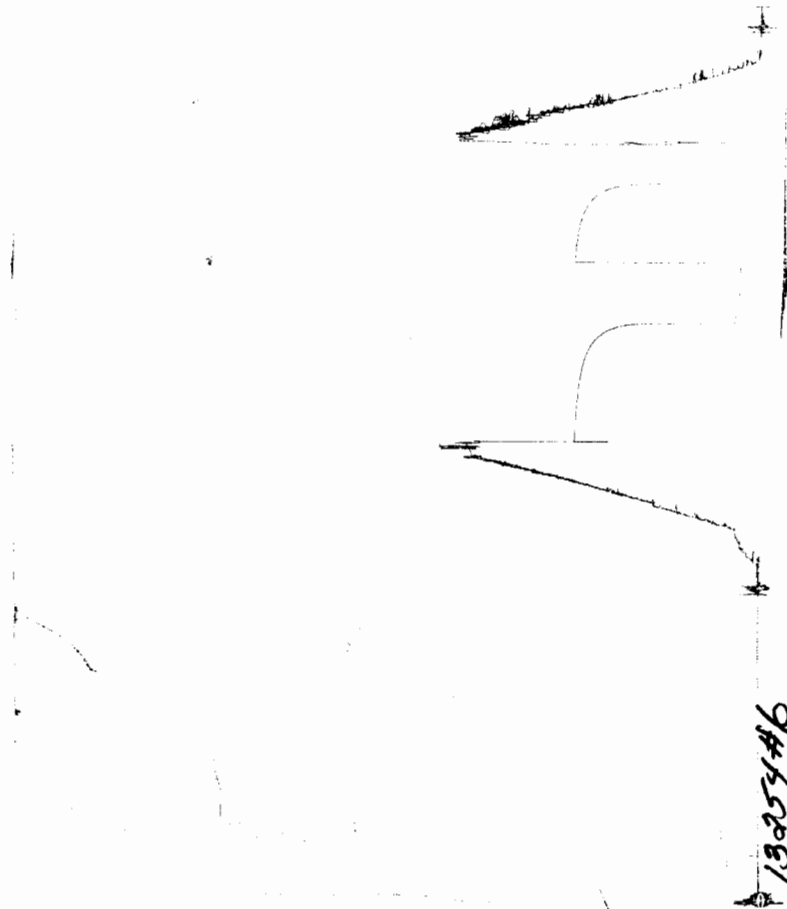
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