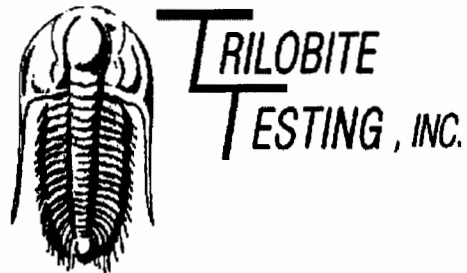


15-007-22782

8-32s-12w



DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating,co.LLC**

125 N.Market suite 1000
Wichita,Ks.67202

ATTN: Vern Schrag

8-32S-12W

Clarke#1

Start Date: 2004.01.06 @ 14:57:01

End Date: 2004.01.07 @ 01:01:01

Job Ticket #: 18734 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

Woolsey Operating,co.LLC

125 N.Market suite 1000
Wichita,Ks.67202

ATTN: Vern Schrag

Clarke#1

8-32S-12W

Job Ticket: 18734

DST#: 1

Test Start: 2004.01.06 @ 14:57:01

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:53:16

Time Test Ended: 01:01:01

Test Type: Conventional Bottom Hole

Tester: Darren L.Amerine

Unit No: 19

Interval: **4213.00 ft (KB) To 4235.00 ft (KB) (TVD)**

Reference Elevations: 1497.00 ft (KB)

Total Depth: 4235.00 ft (KB) (TVD)

1488.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 6625 Inside

Press@RunDepth: 73.78 psig @ 4215.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2004.01.06

End Date:

2004.01.07

Last Calib.: 2004.01.07

Start Time: 14:57:06

End Time:

01:01:01

Time On Btmr: 2004.01.06 @ 17:49:16

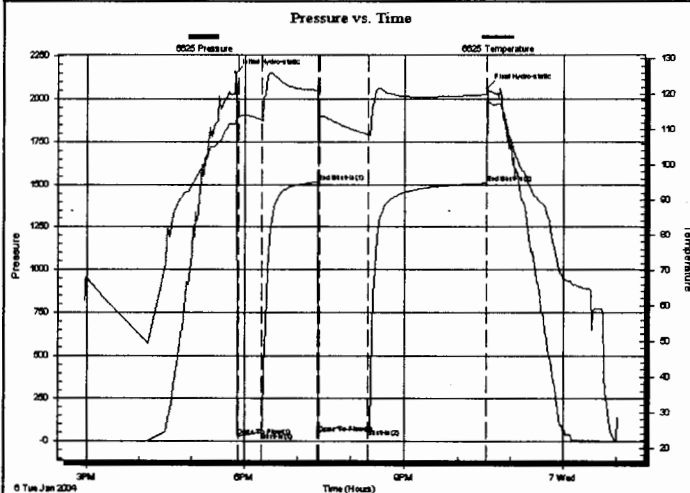
Time Off Btmr: 2004.01.06 @ 22:33:16

TEST COMMENT: IF:Strong blow b.o.b in 15 sec.GTS in 13 mins.Gauge gas.

IS:Bled down n fo 4 mins.no blow back.

FF:Strong blow b.o.b of diesel in 10 sec.gauge gas.

FSI:Bled down n for 5 mins.1/2" in diesel bucket.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2152.14	112.00	Initial Hydro-static
4	31.70	113.51	Open To Flow (1)
30	51.21	112.63	Shut-In(1)
94	1515.43	121.20	End Shut-In(1)
96	46.95	113.28	Open To Flow (2)
151	73.78	108.53	Shut-In(2)
283	1507.25	119.99	End Shut-In(2)
284	2067.03	120.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	4075' of gip	0.00
130.00	HG&OCWM 30% gas 10% oil 20% water	41.82 ud

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	2.00	60.08
Last Gas Rate		0.00	
Max. Gas Rate	0.38	21.00	129.68



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating,co.LLC

Clarke#1

125 N.Market suite 1000
Wichita,Ks.67202

8-32S-12W

Job Ticket: 18734

DST#: 1

ATTN: Vern Schrag

Test Start: 2004.01.06 @ 14:57:01

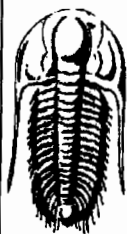
Tool Information

Drill Pipe:	Length:	4205.00 ft	Diameter:	3.80 inches	Volume:	58.99 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	60000.00 lb
					Total Volume:	58.99 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft							
Depth to Top Packer:	4213.00 ft							
Depth to Bottom Packer:	ft							
Interval between Packers:	22.00 ft							
Tool Length:	51.00 ft							
Number of Packers:	2	Diameter:	6.75 inches					
Tool Comments:								

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4185.00	
Shut In Tool	5.00			4190.00	
Hydraulic tool	5.00			4195.00	
Jars	5.00			4200.00	
Safety Joint	3.00			4203.00	
Packer	5.00			4208.00	29.00 Bottom Of Top Packer
Packer	5.00			4213.00	
Stubb	2.00			4215.00	
Recorder	0.00	6625	Inside	4215.00	
Anchor	17.00			4232.00	
Recorder	0.00	10991	Outside	4232.00	
Bullnose	3.00			4235.00	22.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating,co.LLC

Clarke#1

125 N.Market suite 1000
Wichita,Ks.67202

8-32S-12W

Job Ticket: 18734

DST#: 1

ATTN: Vern Schrag

Test Start: 2004.01.06 @ 14:57:01

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: 120000 ppm

Viscosity: 40.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.56 in³

Gas Cushion Type:

Resistivity: 0.80 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	4075' of gip	0.000
130.00	HG&OCWM 30% gas 10% oil 20% water 40% n	1.824

Total Length: 130.00 ft Total Volume: 1.824 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments: .04@70'=120000



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating,co.LLC

Clarke#1

125 N.Market suite 1000
Wichita,Ks.67202

8-32S-12W

Job Ticket: 18734

DST#: 1

ATTN: Vern Schrag

Test Start: 2004.01.06 @ 14:57:01

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	18	0.38	2.00	60.08
1	23	0.38	3.50	65.57
1	28	0.38	4.50	69.23
1	30	0.38	5.00	71.07
2	10	0.38	15.00	107.70
2	20	0.38	18.00	118.69
2	30	0.38	21.00	129.68
2	40	0.38	14.00	104.04
2	50	0.38	14.00	104.04
2	60	0.38	14.00	104.04
0	0	-999999.00	0.00	-999999.00

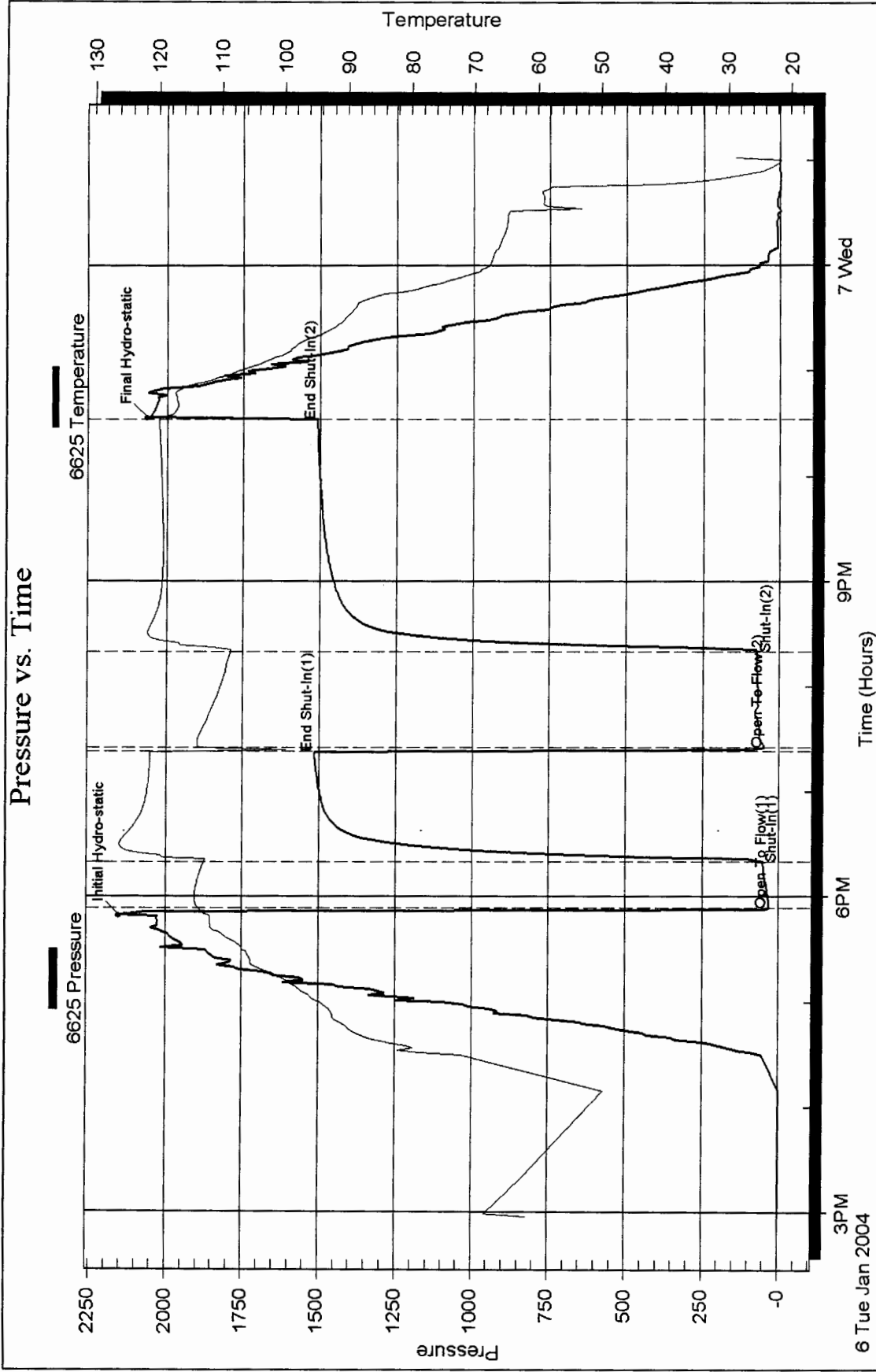
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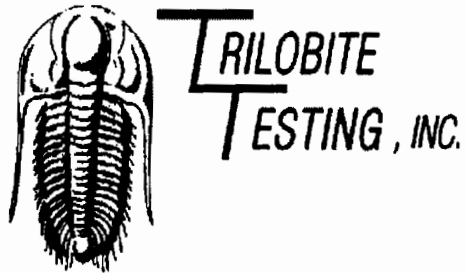
Inside

Woodsey Operating Co. LLC

8-32S-12W

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating,co.LLC**

125 N.Market suite 1000
Wichita,Ks.67202

ATTN: Vern Schrag

8-32S-12W

Clarke#1

Start Date: 2004.01.07 @ 10:16:43

End Date: 2004.01.07 @ 19:24:08

Job Ticket #: 18735 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

Woolsey Operating,co.LLC

125 N.Market suite 1000
Wichita,Ks.67202

ATTN: Vern Schrag

Clarke#1

8-32S-12W

Job Ticket: 18735

DST#: 2

Test Start: 2004.01.07 @ 10:16:43

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:48:08

Time Test Ended: 19:24:08

Test Type: Conventional Bottom Hole

Tester: Darren L.Amerine

Unit No: 19

Interval: **4235.00 ft (KB) To 4255.00 ft (KB) (TVD)**

Total Depth: 4235.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1497.00 ft (KB)

1488.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: **6625** Inside

Press@RunDepth: 31.13 psig @ 4237.00 ft (KB)

Start Date: 2004.01.07

End Date:

2004.01.07

Start Time: 10:16:43

End Time:

19:24:08

Capacity: 7000.00 psig

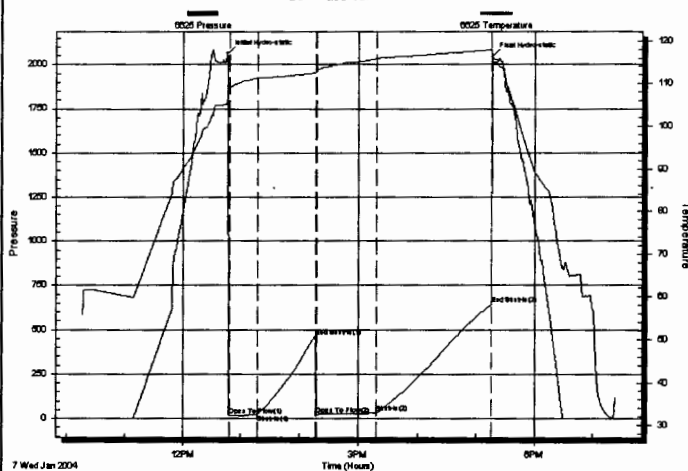
Last Calib.: 2004.01.07

Time On Btm: 2004.01.07 @ 12:45:53

Time Off Btm: 2004.01.07 @ 17:17:08

TEST COMMENT: IF:Fair blow built to b.o.b in 8 mins.
IS:Bled down n for 5 mins.no blow back.
FF:Strong blow b.o.b in 3 mins.
FS:Bled down n for 2 mins.no blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2063.77	106.91	Initial Hydro-static
3	14.75	108.82	Open To Flow (1)
31	21.51	111.32	Shut-In (1)
90	463.36	112.50	End Shut-In (1)
91	21.04	113.10	Open To Flow (2)
153	31.13	115.92	Shut-In (2)
270	644.43	117.95	End Shut-In (2)
272	2046.32	115.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1050'gip	0.00
50.00	SO&GCWM 10%gas 10%oil 10%water	710.70ud
0.00	show of free oil @tool	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating,co.LLC

Clarke#1

125 N.Market suite 1000
Wichita,Ks.67202

8-32S-12W

Job Ticket: 18735

DST#: 2

ATTN: Vern Schrag

Test Start: 2004.01.07 @ 10:16:43

Tool Information

Drill Pipe:	Length: 4235.00 ft	Diameter: 3.80 inches	Volume: 59.41 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			Total Volume: 59.41 bbl	Tool Chased 2.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4235.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	48.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4212.00	
Hydraulic tool	5.00			4217.00	
Jars	5.00			4222.00	
Safety Joint	3.00			4225.00	
Packer	5.00			4230.00	28.00 Bottom Of Top Packer
Packer	5.00			4235.00	
Stubb	2.00			4237.00	
Recorder	0.00	6625	Inside	4237.00	
Anchor	15.00			4252.00	
Recorder	0.00	10991	Outside	4252.00	
Bullnose	3.00			4255.00	20.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating,co.LLC

Clarke#1

125 N.Market suite 1000
Wichita,Ks.67202

8-32S-12W

Job Ticket: 18735

DST#: 2

ATTN: Vern Schrag

Test Start: 2004.01.07 @ 10:16:43

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: 44.00 sec/qt

Cushion Volume:

bbl

Water Loss: 16.75 in³

Gas Cushion Type:

Resistivity: 0.70 ohm.m

Gas Cushion Pressure:

psig

Salinity: 10000.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	1050'gip	0.000
50.00	SO&GCWM 10%gas 10%oil 10%water 70%r	0.701
0.00	show of free oil @tool	0.000

Total Length: 50.00 ft Total Volume: 0.701 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

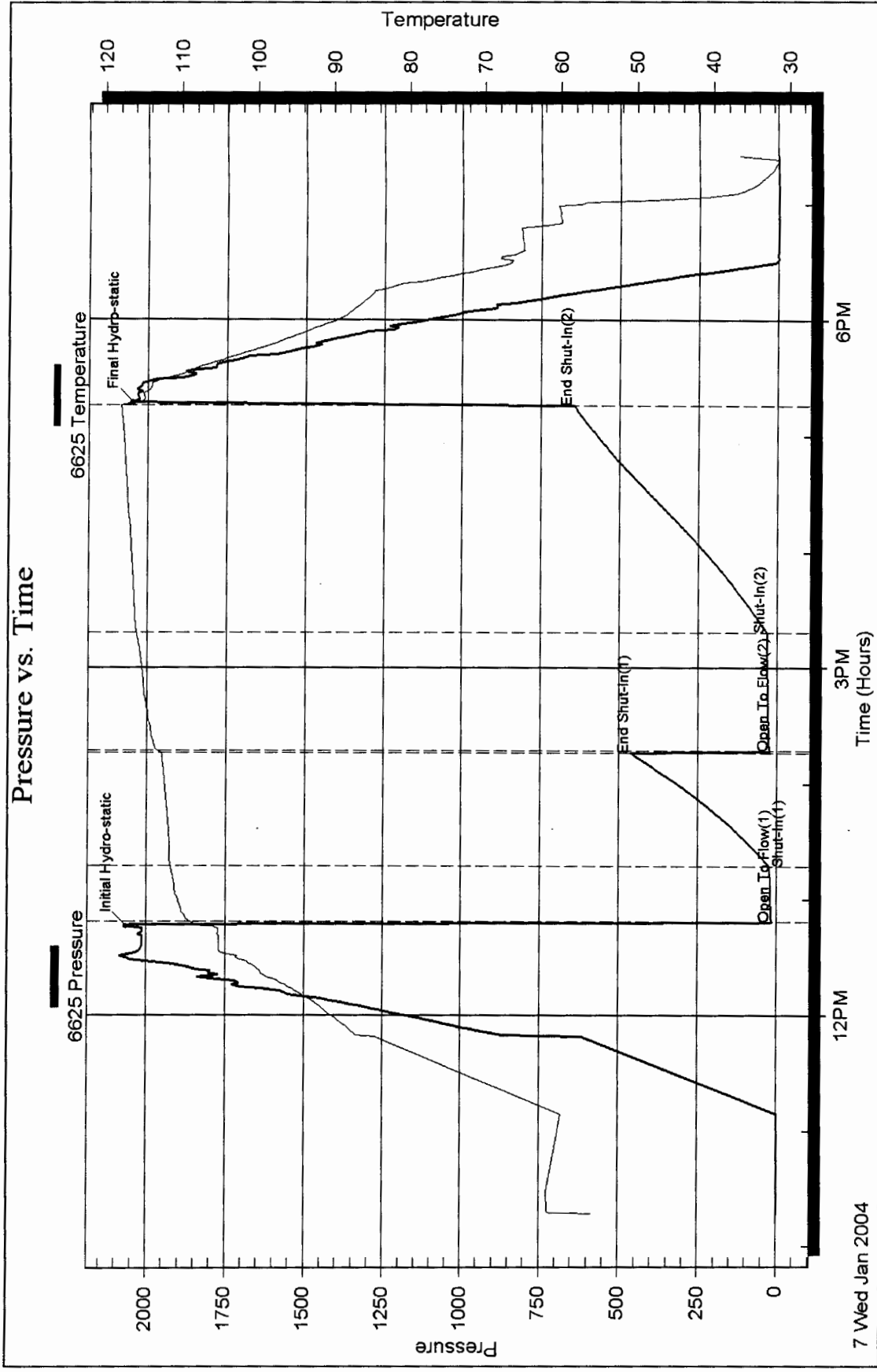
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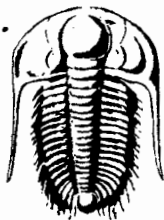
Inside

Woodsey Operating,co.LLC

8-32S-12W

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

TWN
6119

Nº 18734

05/03

Test Ticket

Well Name & No.	Clarke #1	Test No.	#1	Date	1-6-04
Company	Woolsey Operating Co. LLC. 125 N.	Zone Tested	M.55.		
Address	Market Suite 1000 Wichita, Ks. 67202	Elevation	1497	KB	1488 GL
Co. Rep / Geo.	Vern Schrag	Cont.	Duke #4	Est. Ft. of Pay	Por. %
Location: Sec.	8	Twp.	32S	Rge.	12W Co. Barber, Co. State KS
No. of Copies	5	Disbtribution Sheet (Y, N)	—	Turnkey (Y, N)	— Evaluation (Y, N) —

Interval Tested	4213 - 4235'	Initial Str Wt./Lbs.	47,000	Unseated Str Wt./Lbs.	48,000
Anchor Length	22'	Wt. Set Lbs.	20,000	Wt. Pulled Loose/Lbs.	60,000
Top Packer Depth	4208'	Tool Weight	2100		
Bottom Packer Depth	4213'	Hole Size 7 7/8"	✓	Rubber Size 6 3/4"	✓
Total Depth	4235'	Wt. Pipe Run	N/A	Drill Collar Run	N/A
Mud Wt.	9.2 LCM 3# Vis. 40 WL 11.6	Drill Pipe Size	4 1/2 x H	Ft. Run	4205'
Blow Description	TF: Strong blow b.o.b. in 15 sec. GTS in 13 mins. Gauge Gas. TSI: Bled down for 4 mins. No blow back. FF: Strong blow b.o.b. of diesel in 10 sec. Gauge Gas. TSI: Bled down for 5 mins. Built back to 1/2" in diesel bucket.				
Recovery - Total Feet	130'	GIP	4075	Ft. in DC	N/A
Rec.	130'	Feet of	H6POCUM	30% gas	10 %oil 20 %water 40 %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	120°	°F Gravity		°API D @	°F Corrected Gravity °API
RW	.04	@ 70 °F	Chlorides 129,000 ppm	Recovery	Chlorides 8,000 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	2152	PSI	Recorder No.	6625	Test	✓	800
(B) First Initial Flow Pressure	32	PSI	(depth)	4215'	Elec. Rec.	✓	150
(C) First Final Flow Pressure	51	PSI	Recorder No.	10991	Jars	✓	200
(D) Initial Shut-In Pressure	1515	PSI	(depth)	4232'	Safety Jt.	✓	50
(E) Second Initial Flow Pressure	47	PSI	Recorder No.		Circ Sub		
(F) Second Final Flow Pressure	74	PSI	(depth)		Sampler		
(G) Final Shut-In Pressure	1507	PSI	Initial Opening	30	Straddle		
(Q) Final Hydrostatic Mud	2067	PSI	Initial Shut-In	60	Ext. Packer		
			Final Flow	60	Shale Packer		
			Final Shut-In	120	Mileage	3076	64.6
			T-On Location	1345'	Sub Total:		1204.60
			T-Started	1456	Std. By	1/2	45
			T-Open	1756	Other		
			T-Pulled	2226	Total:		
			T-Out	0101			

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Approved By: *Vern Schrag*

Our Representative: *Dennis L. Moreno*



GAS VOLUME REPORT

Woolsey Operating Co. LLC
OPERATOR

OPERATOR

CLARKE #1

WELL NAME AND NO.

#

DST NO.

GTS in 13 mins.

Remarks:



GAS VOLUME REPORT

NAME REPORT
Clarke #1

#/
DST NO.

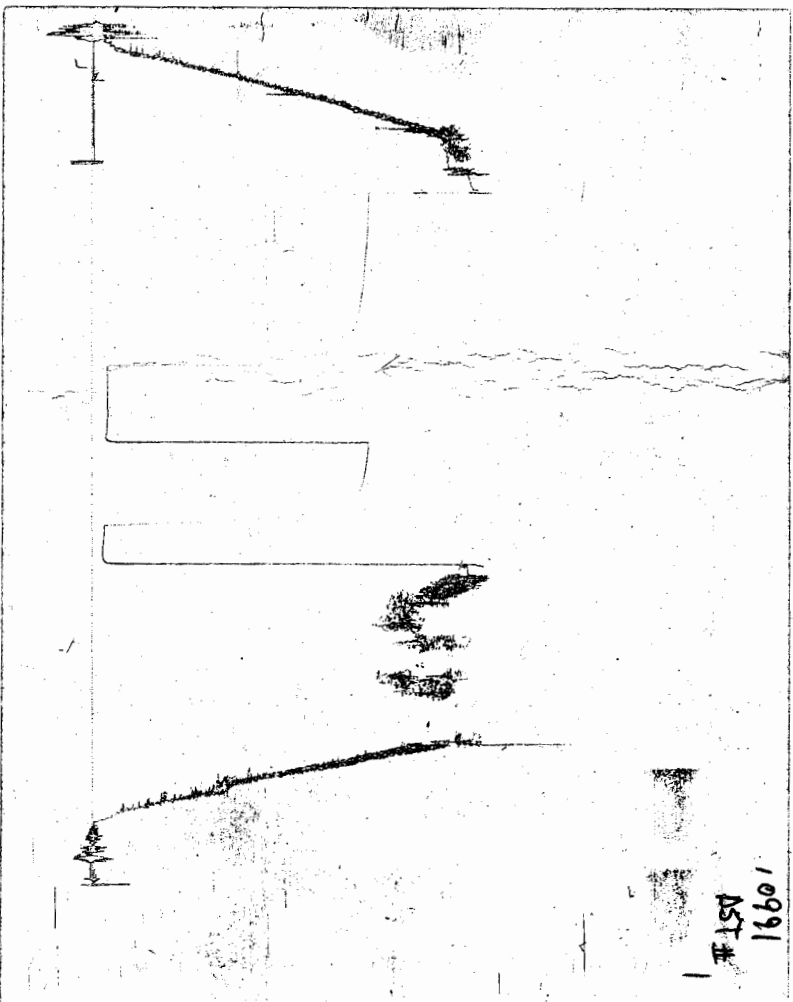
Final Flow

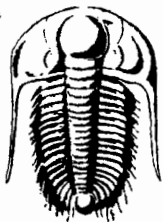
[illegible]

Remarks:

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18735

05/03

Test Ticket

Well Name & No. <u>Clarke #1</u>	Test No. <u>#2</u>	Date <u>1-7-04</u>
Company <u>Woolsey Operating Co. LLC 125 N</u>	Zone Tested <u>M.55.</u>	
Address <u>Market Suite 1000 Wichita, Ks. 67202</u>	Elevation <u>1497</u>	KB <u>1488</u> GL
Co. Rep / Geo. <u>Vern Schrag</u>	Cont. <u>Duke #4</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>8</u> Twp. <u>32S</u> Rge. <u>12W</u>	Co. <u>Barber, Co.</u>	State <u>Ks</u>
No. of Copies <u>5</u>	Disbtribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>4235' - 4255'</u>	Initial Str Wt./Lbs. <u>47000</u>	Unseated Str Wt./Lbs. <u>47000</u>
Anchor Length <u>20'</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>65000</u>
Top Packer Depth <u>4230'</u>	Tool Weight <u>2100</u>	
Bottom Packer Depth <u>4235'</u>	Hole Size <u>7 7/8"</u> ✓	Rubber Size <u>6 3/4"</u> ✓
Total Depth <u>4255'</u>	Wt. Pipe Run <u>N/A</u>	Drill Collar Run <u>N/A</u>
Mud Wt. <u>9.0</u> LCM <u>2nd</u> Vis. <u>44</u> WL <u>16.8</u>	Drill Pipe Size <u>4 1/2 x #</u>	Ft. Run <u>4235. -</u>

Blow Description IF: Fair blow b.o.b in 8 mins.

ISI: Bled down for 5 mins. No blow back.

FF: Strong blow b.o.b in 3 mins.

FST: Bled down for 2 mins. No blow back.

Recovery - Total Feet <u>50'</u>	GIP <u>1050</u>	Ft. in DC <u>N/A</u>	Ft. in DP <u>50'</u>
Rec. <u>50'</u>	Feet of <u>50' 6" CUM</u>	10 %gas	10 %oil 10 %water 70 %mud
Rec. <u>1050</u>	Feet of <u>GIP</u>	%gas	%oil %water %mud
Rec. _____	Feet of <u>Show of free oil @ Top</u>	%gas	%oil %water %mud
Rec. _____	Feet of _____	%gas	%oil %water %mud
Rec. _____	Feet of _____	%gas	%oil %water %mud

BHT 118° °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API

RW N/A @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 10,000 ppm System

(A) Initial Hydrostatic Mud	AK-1 Alpine <u>2064</u> PSI	Recorder No. <u>6625</u>	Test <u>✓</u>
(B) First Initial Flow Pressure	<u>15</u> PSI	(depth) <u>4237'</u>	Elec. Rec. <u>✓</u>
(C) First Final Flow Pressure	<u>22</u> PSI	Recorder No. <u>10991</u>	Jars <u>✓</u>
(D) Initial Shut-In Pressure	<u>463</u> PSI	(depth) <u>4252'</u>	Safety Jt. <u>✓</u>
(E) Second Initial Flow Pressure	<u>21</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>31</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>644</u> PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>2046</u> PSI	Initial Shut-In <u>60</u>	Ext. Packer _____

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Approved By

Our Representative

Darren Schrag
Darren Schrag

Final Flow	<u>60</u>
Final Shut-In	<u>120</u>
T-On Location	<u>1000</u>
T-Started	<u>1016</u>
T-Open	<u>1257</u>
T-Pulled	<u>1727</u>
T-Out	<u>1724</u>

Mileage	_____
Sub Total:	<u>1264.60</u>
Std. By	_____
Other	_____
Total:	_____

CHART PAGE

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

