

15-063-21825

32-13s-31w



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Grand Mesa Operating Comp.**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206

ATTN: Steve Carl

**32-13-31 Gove KS**

**Hess #4-32**

Start Date: 2010.02.15 @ 13:42:01

End Date: 2010.02.15 @ 20:09:48

Job Ticket #: 37084                      DST #: 1

**KCC  
APR 14 2010  
CONFIDENTIAL**

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

**RECEIVED  
APR 14 2010  
KCC WICHITA**

Grand Mesa Operating Comp.

Hess #4-32

32-13-31 Gove KS

DST # 1

Lansing "D"

2010.02.15



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkw y.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37084

**DST#: 1**

Test Start: 2010.02.15 @ 13:42:01

## GENERAL INFORMATION:

Formation: **Lansing " D"**

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

Time Tool Opened: 15:38:00

Time Test Ended: 20:09:48

Test Type: **Conventional Bottom Hole**

Tester: **Mike Roberts**

Unit No: **37**

Interval: **4031.00 ft (KB) To 4075.00 ft (KB) (TVD)**

Total Depth: **4075.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

Reference Elevations: **2957.00 ft (KB)**

**2952.00 ft (CF)**

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

**Serial #: 8359** **Outside**

Press@RunDepth: **403.95 psig @ 4037.00 ft (KB)**

Start Date: **2010.02.15**

End Date: **2010.02.15**

Capacity: **8000.00 psig**

Last Calib.: **2010.02.15**

Start Time: **13:42:01**

End Time: **20:09:48**

Time On Btm: **2010.02.15 @ 15:37:36**

Time Off Btm: **2010.02.15 @ 17:38:48**

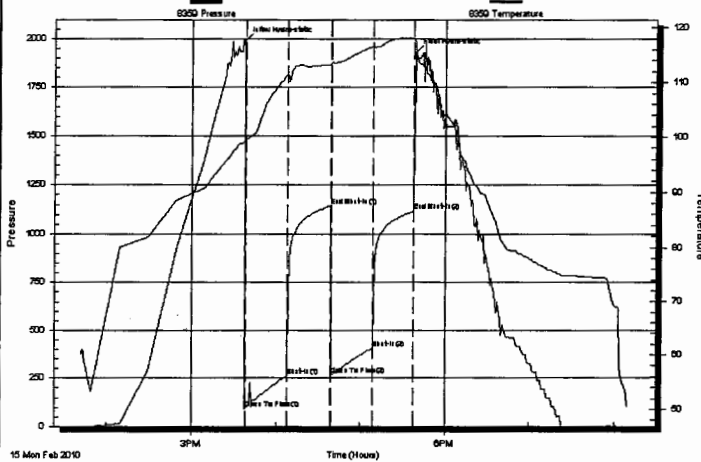
TEST COMMENT: **IF:BOB in 6 min.**

**IS:No Return**

**FF:BOB in 8 Min**

**FS:No Return**

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1991.15	99.16	Initial Hydro-static
1	93.97	98.87	Open To Flow (1)
31	259.44	111.42	Shut-In(1)
62	1144.48	113.24	End Shut-In(1)
62	266.05	113.57	Open To Flow (2)
92	403.95	116.57	Shut-In(2)
121	1117.01	118.14	End Shut-In(2)
122	1928.70	116.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	gmcow 20%g 20m 30%w 30%o	0.15
62.00	gcmw o 10 % g 10 %m 15 %w 65 % o	0.30
620.00	gcmw o 5% g 5% m 20% w 70% o	8.43
245.00	mw 5%m 95%w	3.44

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37084

**DST#: 1**

Test Start: 2010.02.15 @ 13:42:01

### Tool Information

Drill Pipe:	Length: 3902.00 ft	Diameter: 3.80 inches	Volume: 54.73 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: 25000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume: 55.33 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	14.50 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4031.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	66.50 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			4009.50	
Shut In Tool	5.00			4014.50	
Hydraulic tool	5.00			4019.50	
Safety Joint	2.50			4022.00	
Packer	5.00			4027.00	22.50 Bottom Of Top Packer
Packer	4.00			4031.00	
Stubb	1.00			4032.00	
Perforations	5.00			4037.00	
Recorder	0.00	8351	Inside	4037.00	
Recorder	0.00	8359	Outside	4037.00	
Change Over Sub	1.00			4038.00	
Drill Pipe	31.00			4069.00	
Change Over Sub	1.00			4070.00	
Bullnose	5.00			4075.00	44.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>66.50</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37084

DST#: 1

Test Start: 2010.02.15 @ 13:42:01

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 66.00 sec/qt  
Water Loss: 7.93 in<sup>3</sup>  
Resistivity: 0.00 ohm.m  
Salinity: 1400.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: 0 deg API  
Water Salinity: 20000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	gmcow 20%g 20m 30%w 30%o	0.148
62.00	gcmw o 10 % g 10 %m 15 %w 65 % o	0.305
620.00	gcmw o 5% g 5% m 20% w 70% o	8.433
245.00	nw 5%m 95%w	3.437

Total Length: 957.00 ft      Total Volume: 12.323 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: RW=52.6\* @ .416=20000

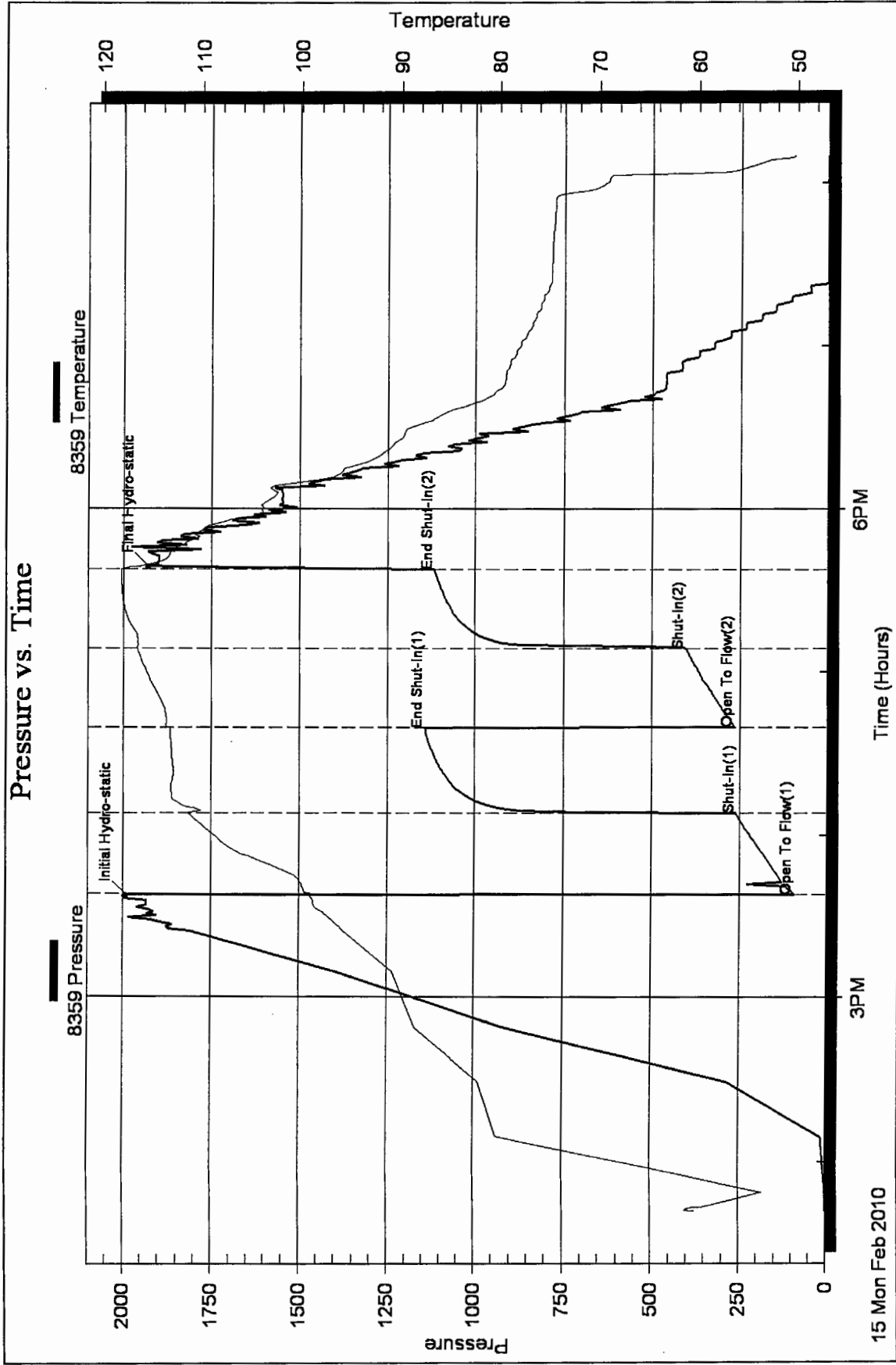
Serial #: 8359

Outside Grand Mesa Operating Comp.

32-13-31 Gove KS

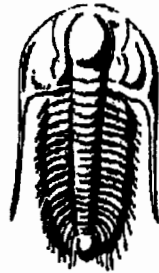
DST Test Number: 1

### Pressure vs. Time



Ref. No: 37084

Trilobite Testing, Inc



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Comp.**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206

ATTN: Steve Carl

**32-13-31 Gove KS**

**Hess #4-32**

Start Date: 2010.02.16 @ 15:04:01

End Date: 2010.02.16 @ 20:04:48

Job Ticket #: 37085                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Grand Mesa Operating Comp.

Hess #4-32

1700 Waterfront Pkw y.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

32-13-31 Gove KS

Job Ticket: 37085

DST#: 2

Test Start: 2010.02.16 @ 15:04:01

## GENERAL INFORMATION:

Formation: **Lansing "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:48:36

Time Test Ended: 20:04:48

Test Type: Conventional Bottom Hole

Tester: Mike Roberts

Unit No: 37

Interval: **4212.00 ft (KB) To 4239.00 ft (KB) (TVD)**

Total Depth: 4075.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2957.00 ft (KB)

2952.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **8359** Outside

Press@RunDepth: 57.25 psig @ 4213.00 ft (KB)

Start Date: 2010.02.16

End Date: 2010.02.16

Capacity: 8000.00 psig

Last Calib.: 2010.02.16

Start Time: 15:04:01

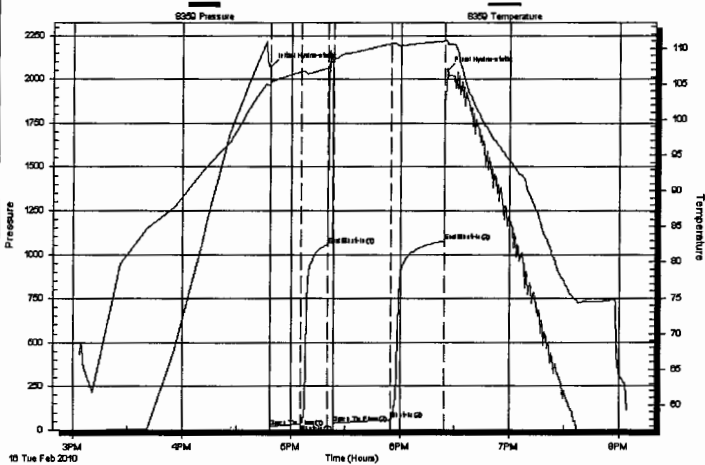
End Time: 20:04:48

Time On Btm: 2010.02.16 @ 16:48:12

Time Off Btm: 2010.02.16 @ 18:25:36

TEST COMMENT: IF:No blow  
IS:No return  
FF:Flushed tool, Built to 2 1/4" blow  
FS:No return

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2073.68	104.91	Initial Hydro-static
1	16.60	104.95	Open To Flow (1)
17	33.36	106.67	Shut-In(1)
33	1054.22	107.19	End Shut-In(1)
36	38.99	108.20	Open To Flow (2)
67	57.25	110.62	Shut-In(2)
96	1077.22	110.99	End Shut-In(2)
98	2052.49	110.57	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	m 100% m	0.30

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37085

**DST#: 2**

Test Start: 2010.02.16 @ 15:04:01

**Tool Information**

Drill Pipe:	Length: 4083.00 ft	Diameter: 3.80 inches	Volume: 57.27 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: 25000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume: 57.87 bbl		Tool Chased 20.00 ft
Drill Pipe Above KB:	14.50 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4212.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	49.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4190.50	
Shut In Tool	5.00			4195.50	
Hydraulic tool	5.00			4200.50	
Safety Joint	2.50			4203.00	
Packer	5.00			4208.00	22.50 Bottom Of Top Packer
Packer	4.00			4212.00	
Stubb	1.00			4213.00	
Recorder	0.00	8351	Inside	4213.00	
Recorder	0.00	8359	Outside	4213.00	
Perforations	21.00			4234.00	
Bullnose	5.00			4239.00	27.00 Bottom Packers & Anchor

**Total Tool Length: 49.50**



**TRILOBITE  
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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37085

**DST#: 2**

Test Start: 2010.02.16 @ 15:04:01

**Mud and Cushion Information**

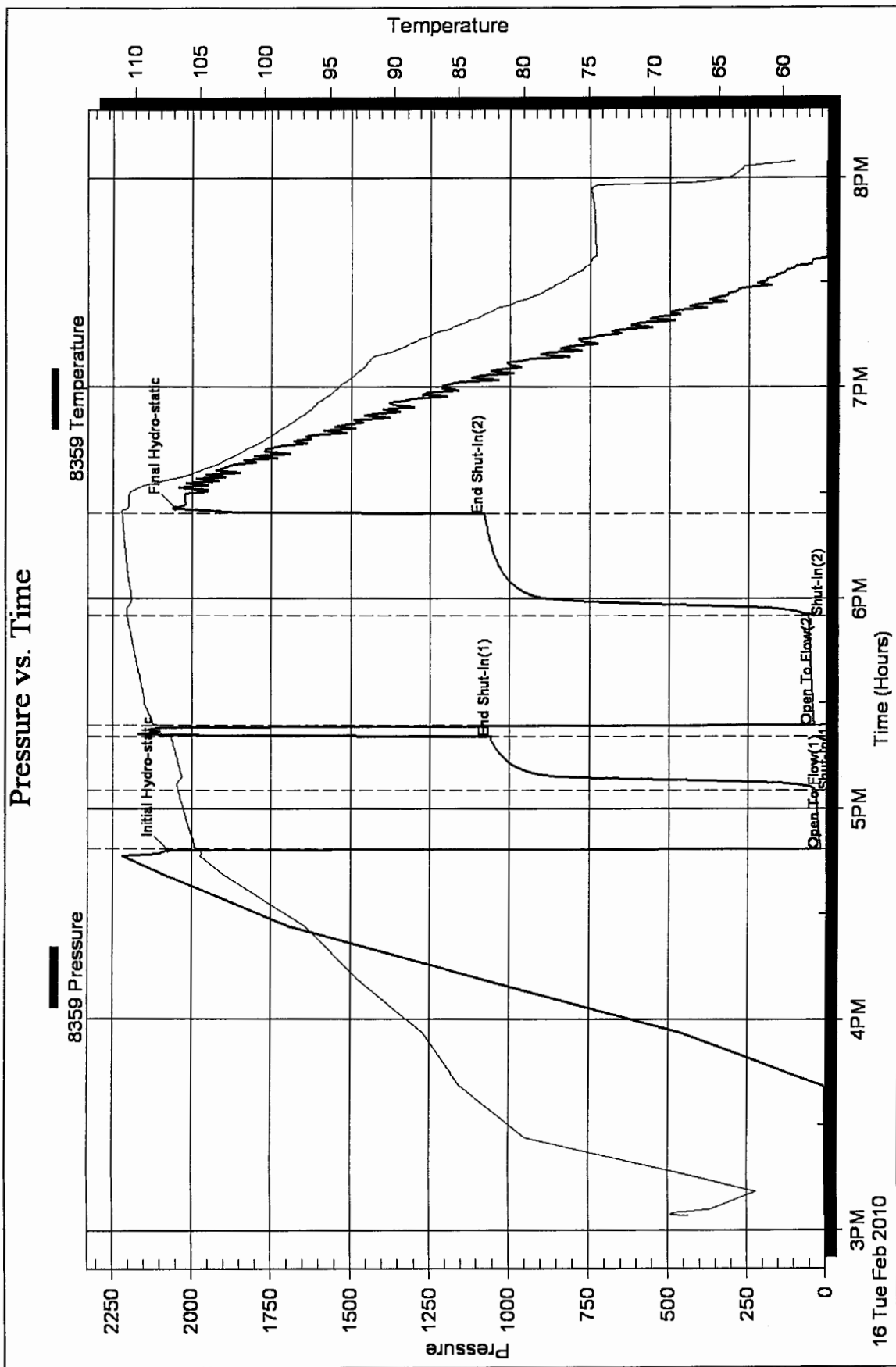
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.17 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

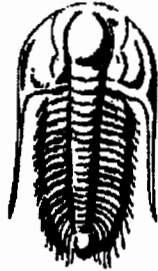
**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
60.00	m 100% m	0.295

Total Length: 60.00 ft      Total Volume: 0.295 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Grand Mesa Operating Comp.**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206

ATTN: Steve Carl

**32-13-31 Gove KS**

**Hess #4-32**

Start Date: 2010.02.18 @ 01:57:01

End Date: 2010.02.18 @ 08:14:36

Job Ticket #: 37086                      DST #: 3

Trilobite Testing, Inc

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

Grand Mesa Operating Comp.

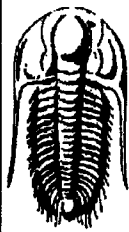
Hess #4-32

32-13-31 Gove KS

DST # 3

Krebs Johnson

2010.02.18



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Grand Mesa Operating Comp.

Hess #4-32

1700 Waterfront Pkw y.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

32-13-31 Gove KS

Job Ticket: 37086

DST#: 3

Test Start: 2010.02.18 @ 01:57:01

### GENERAL INFORMATION:

Formation: **Krebs Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:05:24

Time Test Ended: 08:14:36

Test Type: Conventional Bottom Hole

Tester: Mike Roberts

Unit No: 37

Interval: **4512.00 ft (KB) To 4580.00 ft (KB) (TVD)**

Total Depth: 4075.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2957.00 ft (KB)

2952.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **8359**

Outside

Press@RunDepth: 80.41 psig @ 4513.00 ft (KB)

Start Date: 2010.02.18

End Date: 2010.02.18

Start Time: 01:57:01

End Time: 08:14:36

Capacity: 8000.00 psig

Last Calib.: 2010.02.18

Time On Btm: 2010.02.18 @ 04:05:00

Time Off Btm: 2010.02.18 @ 06:06:24

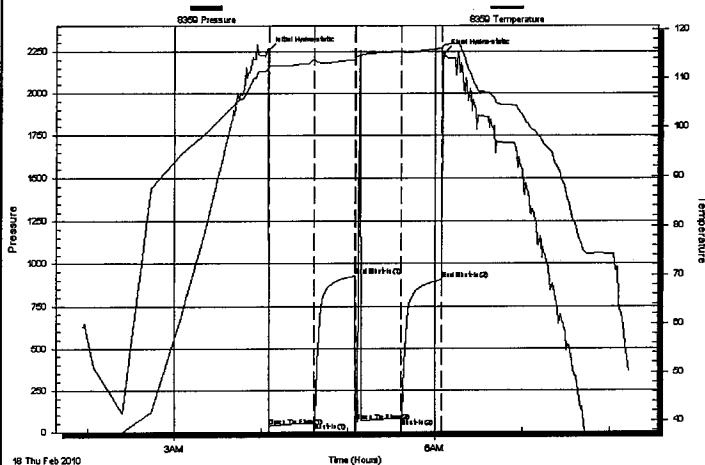
TEST COMMENT: IF:Surface blow built to 1/8" blow

IS:No return

FF:Weak surface blow

FS:No return

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2255.92	111.98	Initial Hydro-static
1	33.14	112.07	Open To Flow (1)
32	57.10	113.75	Shut-In(1)
61	928.75	113.73	End Shut-In(1)
61	59.95	114.19	Open To Flow (2)
92	80.41	115.46	Shut-In(2)
121	906.04	115.98	End Shut-In(2)
122	2237.96	116.59	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
75.00	100% Mud	0.37

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37086

**DST#: 3**

Test Start: 2010.02.18 @ 01:57:01

## Tool Information

Drill Pipe:	Length: 4397.00 ft	Diameter: 3.80 inches	Volume: 61.68 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: 25000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 62.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.50 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4512.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	90.50 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			4490.50	
Shut In Tool	5.00			4495.50	
Hydraulic tool	5.00			4500.50	
Safety Joint	2.50			4503.00	
Packer	5.00			4508.00	22.50 Bottom Of Top Packer
Packer	4.00			4512.00	
Stubb	1.00			4513.00	
Recorder	0.00	8351	Inside	4513.00	
Recorder	0.00	8359	Outside	4513.00	
Change Over Sub	1.00			4514.00	
Drill Pipe	31.00			4545.00	
Change Over Sub	1.00			4546.00	
Perforations	29.00			4575.00	
Bullnose	5.00			4580.00	68.00 Bottom Packers & Anchor

**Total Tool Length: 90.50**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Grand Mesa Operating Comp.

**Hess #4-32**

1700 Waterfront Pkwy.  
Bldg 600  
Wichita KS 67206  
ATTN: Steve Carl

**32-13-31 Gove KS**

Job Ticket: 37086

**DST#: 3**

Test Start: 2010.02.18 @ 01:57:01

## 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:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
75.00	100% Mud	0.369

Total Length: 75.00 ft      Total Volume: 0.369 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

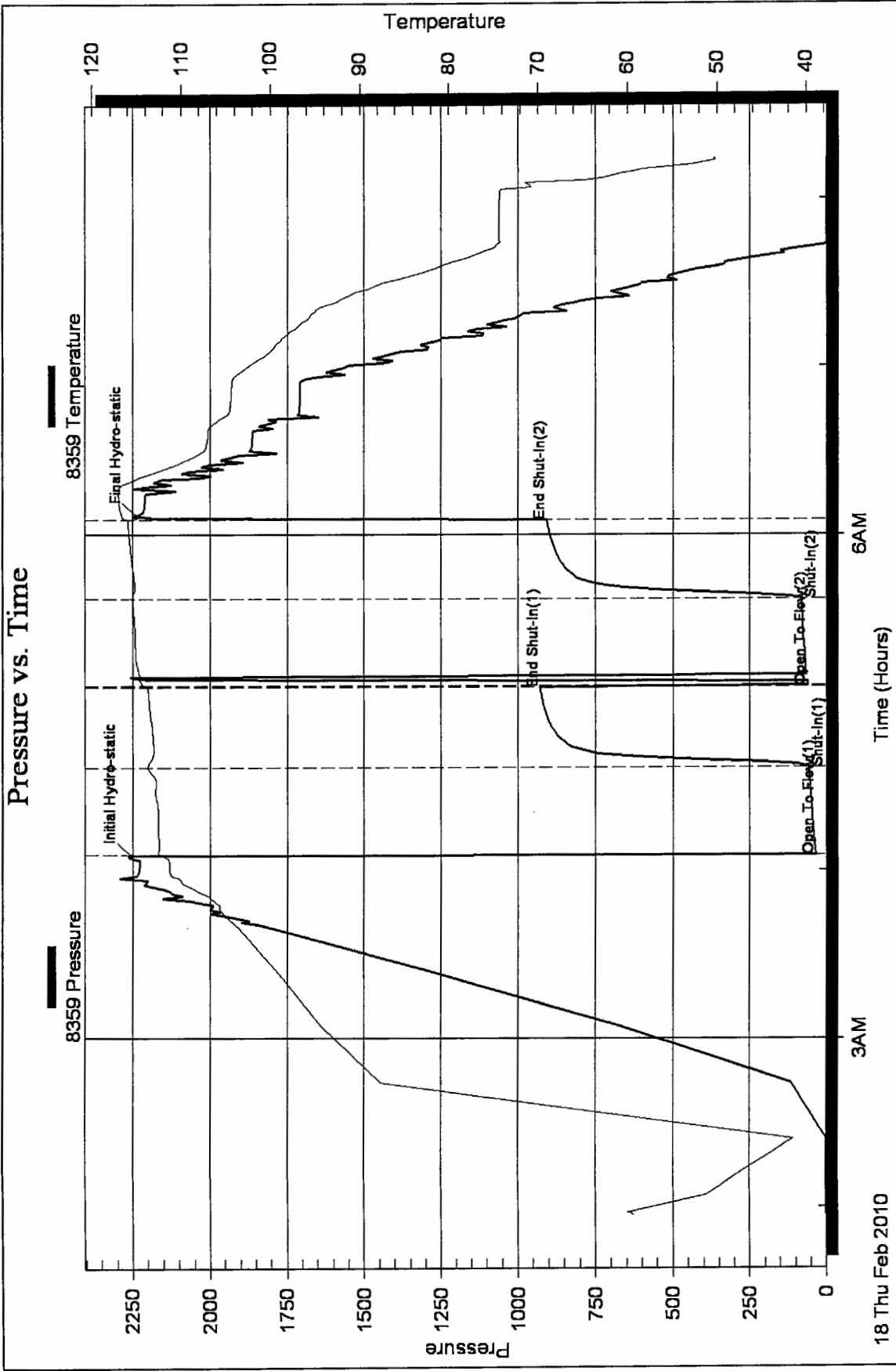
Serial #: 8359

Outside Grand Mesa Operating Comp.

32-13-31 Gove KS

DST Test Number: 3

### Pressure vs. Time

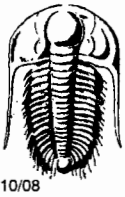


18 Thu Feb 2010

3AM

6AM

Time (Hours)



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
FEB 22 2010

## Test Ticket

NO. 37084 13934

Well Name & No. #4-32 Hess Test No. 1 Date 2-15-10  
 Company Grand Mesa Operating Company Elevation 2957 KB 2952 GL  
 Address 1700 N. Waterfront Pkwy Bldg 600  
 Co. Rep / Geo. Steve Carl Rig Murfin #24  
 Location: Sec. 32 Twp. 13 Rge. 31 Co. Grove State KS

Interval Tested 4031-4075 Zone Tested Lansing "D"  
 Anchor Length 44' Drill Pipe Run 3902 Mud Wt. 9.0  
 Top Packer Depth 4027 Drill Collars Run 120 Vis 66  
 Bottom Packer Depth 4031 Wt. Pipe Run Ø WL 8  
 Total Depth 4075 Chlorides 1400 ppm System LCM 2  
 Blow Description IF: BOB IN 6 MIN  
IS: NO RETURN  
FF: BOB IN 8 MIN  
FS: NO RETURN

Rec	Feet of	%gas	%oil	%water	%mud
30	gmcow	20	30	30	20
62	gmcow	10	45	15	10
620	gmcow	5	70	20	5
245	mw			95	5

Rec Total 957 BHT 118 Gravity — API RW 52.6 @ 416 °F Chlorides 20,000 ppm

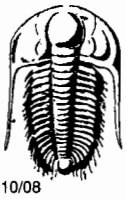
(A) Initial Hydrostatic 1991  Test 1150- T-On Location 11:00 Am  
 (B) First Initial Flow 93  Jars — T-Started 13:42  
 (C) First Final Flow 259  Safety Joint 75- T-Open 15:38  
 (D) Initial Shut-In 1144  Circ Sub NL T-Pulled 17:38  
 (E) Second Initial Flow 266  Hourly Standby — T-Out 20:00  
 (F) Second Final Flow 403  Mileage BORT = \$80.00 Comments —  
 (G) Final Shut-In 1117  Sampler —  
 (H) Final Hydrostatic 1901  Straddle —  
 Shale Packer —  Ruined Shale Packer —  
 Extra Packer —  Ruined Packer —  
 Extra Recorder —  Extra Copies —  
 Day Standby — Sub Total Ø  
 Accessibility — Total 1305-  
 Sub Total 1305-

Initial Open 30  
 Initial Shut-In 30  
 Final Flow 30  
 Final Shut-In 30

Approved By [Signature]

Our Representative Mike Roberts

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
FEB 22 2010  
BY: \_\_\_\_\_

## Test Ticket

NO. 37085

Well Name & No. #4-32 Hess Test No. 2 Date 2-16-10  
 Company Grand Mesa Operating Comp. Elevation 2957 KB 2952 GL  
 Address 1700 N. Waterfront Pkwy Bldg 600  
 Co. Rep / Geo. Steve Carl Rig Murfin #24  
 Location: Sec. 32 Twp. 13 Rge. 31 Co. Gove State KS

Interval Tested 4212-4239 Zone Tested Lansing "J"  
 Anchor Length 27' Drill Pipe Run 4083' Mud Wt. 9.1  
 Top Packer Depth 4208 Drill Collars Run 121 Vis 58  
 Bottom Packer Depth ~~4239~~ 4212 Wt. Pipe Run 0 WL 7.2  
 Total Depth 4239 Chlorides 2000 ppm System LCM ~~2~~ 3  
 Blow Description IF: No Blow  
IS: No Return  
FF: Flushed tool - Built to 2 1/2" Blow  
FS: No Return

Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60' BHT 110 Gravity   API RW   @   ° F Chlorides   ppm

(A) Initial Hydrostatic 2073  Test 1150' T-On Location 13:15  
 (B) First Initial Flow 16  Jars   T-Started 15:04  
 (C) First Final Flow 33  Safety Joint 75' T-Open 16:49  
 (D) Initial Shut-In 1054  Circ Sub 50' T-Pulled 18:25  
 (E) Second Initial Flow 38  Hourly Standby   T-Out 20:04  
 (F) Second Final Flow 57  Mileage 80 RT = \$ 80.00 Comments    
 (G) Final Shut-In 1077  Sampler    
 (H) Final Hydrostatic 2024  Straddle    
 Shale Packer    Ruined Shale Packer    
 Extra Packer    Ruined Packer    
 Extra Recorder    Extra Copies    
 Day Standby   Sub Total 0  
 Accessibility   Total 1355'  
 Sub Total 1355'

Initial Open 15  
 Initial Shut-In 15  
 Final Flow 30  
 Final Shut-In 30

Approved By [Signature]

Our Representative Mike Roberto

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
FEB 22 2010

## Test Ticket

NO. 37086

10/08

BY: \_\_\_\_\_

Well Name & No. #4-32 Hess Test No. 3 Date 2-18-10  
 Company Grand Mosa Operating Comp. Elevation 2957 KB 2952 GL  
 Address 1700 N. Waterfront Pkwy Bldg 600  
 Co. Rep / Geo. Steve Carl Rig Murfin #24  
 Location: Sec. 32 Twp. 13 Rge. 31 Co. Croce State KS

Interval Tested 4512-4580 Zone Tested Krebs Johnson  
 Anchor Length 68' Drill Pipe Run 4397 Mud Wt. 9.3  
 Top Packer Depth 4508 Drill Collars Run 121 Vis 50  
 Bottom Packer Depth 4512 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4580 Chlorides 2200 ppm System LCM 1  
 Blow Description IF! Surface Blow Built to 1/8" Blow  
IS! NO Return  
FF! Weak Surface Blow  
FS! NO Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>75</u>	<u>m</u>			<u>100</u>	
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

Rec Total 75' BHT 115 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 2255  Test 1150- T-On Location 12:38 AM  
 (B) First Initial Flow 33  Jars \_\_\_\_\_ T-Started 01:57  
 (C) First Final Flow 57  Safety Joint 75- T-Open 04:05  
 (D) Initial Shut-In 928  Circ Sub NC T-Pulled 06:05  
 (E) Second Initial Flow 59  Hourly Standby \_\_\_\_\_ T-Out 08:15  
 (F) Second Final Flow 80  Mileage 80 RTF # 80.00 Comments \_\_\_\_\_  
 (G) Final Shut-In 906  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2234  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  
 Initial Shut-In 30  
 Final Flow 30 Flush  
 Final Shut-In 30  
 Sub Total 1305-  
 Total 1305-

Approved By \_\_\_\_\_

Our Representative Mike Rohrer

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