

## DRILL STEM TEST REPORT

Prepared For: **Abercrombie Energy LLC**

150 N Main Suite 801  
Wichita, KS 67202

ATTN: Wes Hansen

**13/28S/33W**

**Calihan 1-13**

Start Date: 2005.12.13 @ 14:19:08

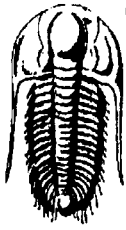
End Date: 2005.12.14 @ 00:30:47

Job Ticket #: 22347                      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

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wichita, KS 67202

**13/28S/33W**

Job Ticket: 22347

**DST#: 1**

ATTN: Wes Hansen

Test Start: 2005.12.13 @ 14:19:08

## GENERAL INFORMATION:

Formation: **Lansing 'G'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:19:38

Time Test Ended: 00:30:47

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **4416.00 ft (KB) To 4455.00 ft (KB) (TVD)**

Reference Elevations: 2965.00 ft (KB)

Total Depth: 4455.00 ft (KB) (TVD)

2960.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 6752**

Inside

Press@RunDepth: 237.70 psig @ 4419.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2005.12.13

End Date:

2005.12.14

Last Calib.:

1899.12.30

Start Time: 14:19:08

End Time:

00:30:48

Time On Btm:

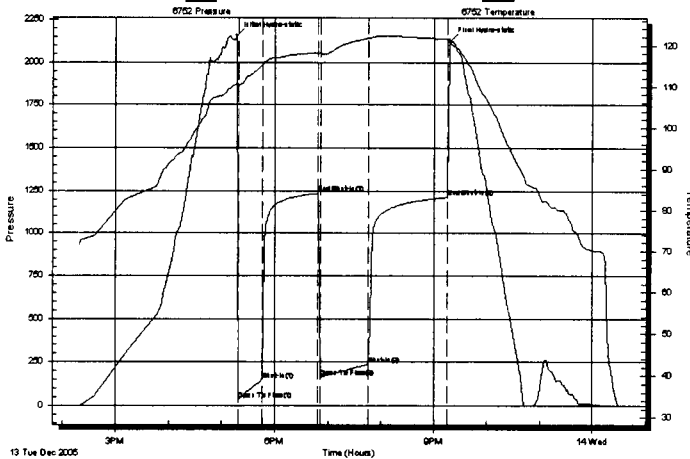
2005.12.13 @ 17:16:58

Time Off Btm:

2005.12.13 @ 21:18:18

**TEST COMMENT:** IF: 4 inches in 30 min, fair steady blow  
IS: No blow back  
FF: 2 inches in 30 min, weak steady blow  
FSI: No blow back

Pressure vs. Time



## PRESSURE SUMMARY

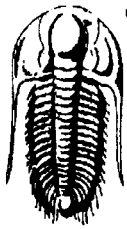
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2155.83	110.42	Initial Hydro-static
3	31.03	110.24	Open To Flow (1)
29	145.93	115.19	Shut-In(1)
93	1234.69	118.08	End Shut-In(1)
95	161.25	117.89	Open To Flow (2)
150	237.70	121.70	Shut-In(2)
239	1212.95	121.49	End Shut-In(2)
242	2125.71	120.64	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
434.00	15% m, 85% w	3.26

## Gas Rates

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



**TRILOBITE  
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## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wichita, KS 67202

**13/28S/33W**

Job Ticket: 22347

**DST#: 1**

ATTN: Wes Hansen

Test Start: 2005.12.13 @ 14:19:08

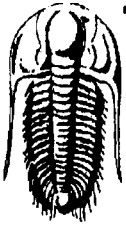
### Tool Information

Drill Pipe:	Length: 4094.00 ft	Diameter: 3.80 inches	Volume: 57.43 bbl	Tool Weight: 2000.00 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: 310.00 ft	Diameter: 2.25 inches	Volume: 1.52 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4416.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4389.00	
Shut In Tool	5.00			4394.00	
Hydraulic tool	5.00			4399.00	
Jars	5.00			4404.00	
Safety Joint	3.00			4407.00	
Packer	5.00			4412.00	28.00 Bottom Of Top Packer
Packer	4.00			4416.00	
Stubb	1.00			4417.00	
Perforations	2.00			4419.00	
Recorder	0.00	6752	Inside	4419.00	
Change Over Sub	1.00			4420.00	
Drill Pipe	31.00			4451.00	
Change Over Sub	1.00			4452.00	
Recorder	0.00	13630	Inside	4452.00	
Bullnose	3.00			4455.00	39.00 Bottom Packers & Anchor

**Total Tool Length: 67.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

## FLUID SUMMARY

Abercrombie Energy LLC

Calihan 1-13

150 N Main Suite 801  
Wichita, KS 67202

13/28S/33W

Job Ticket: 22347

DST#: 1

ATTN: Wes Hansen

Test Start: 2005.12.13 @ 14:19:08

### 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:

60000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.95 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: inches

### Recovery Information

#### Recovery Table

Length ft	Description	Volume bbl
434.00	15% m, 85% w	3.264

Total Length: 434.00 ft

Total Volume: 3.264 bbl

Num Fluid Samples: 0

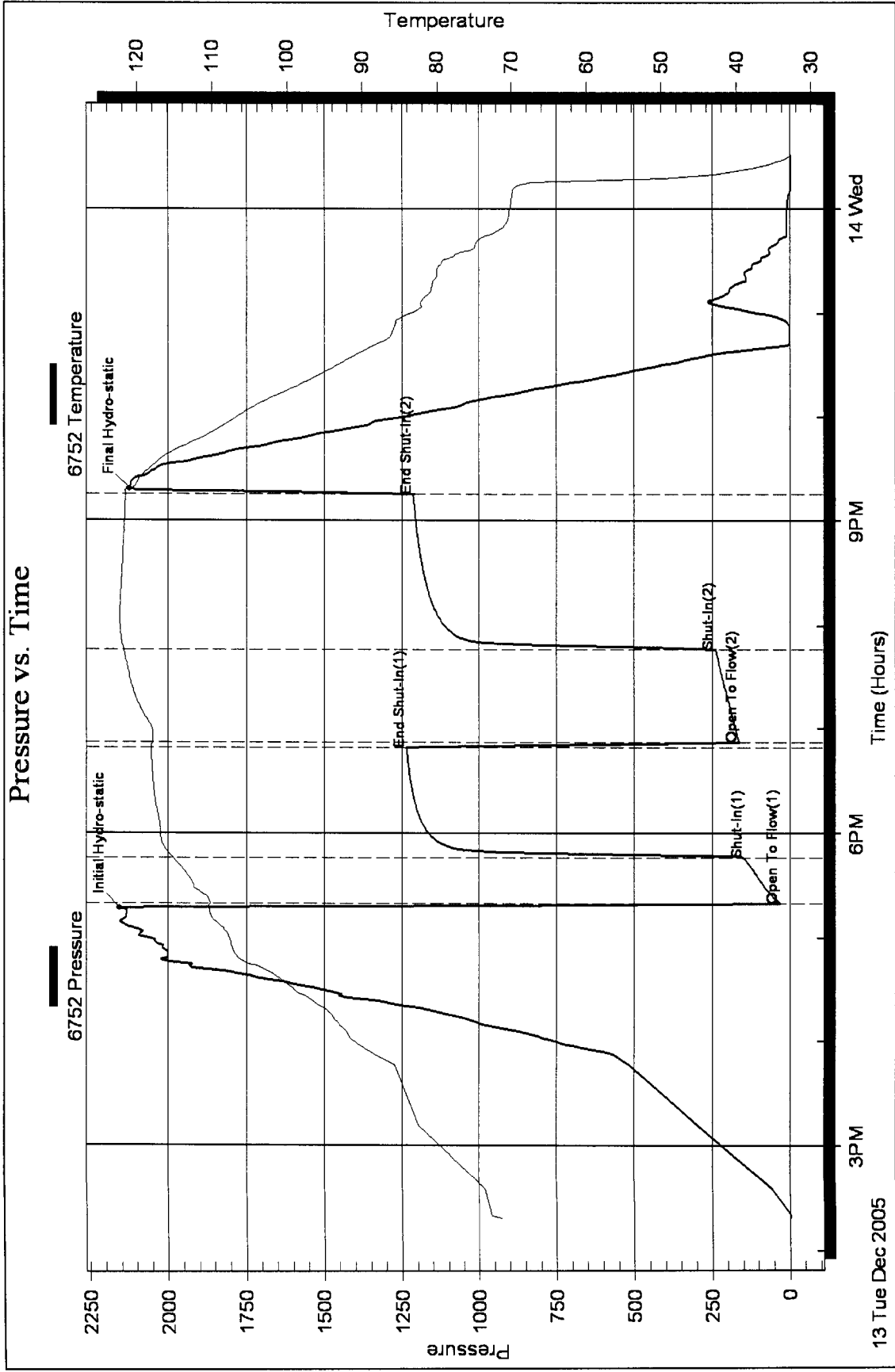
Num Gas Bombs: 0

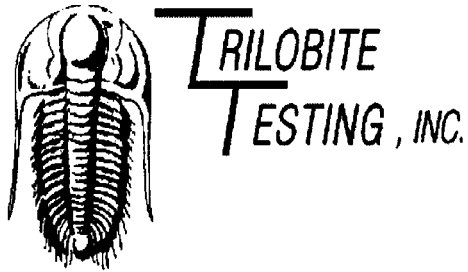
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW=.131@70F=60000





## DRILL STEM TEST REPORT

Prepared For: **Abercrombie Energy LLC**

150 N Main Suite 801  
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**13/28S/33W**

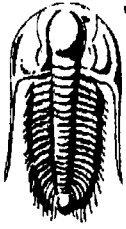
**Calihan 1-13**

Start Date: 2005.12.15 @ 05:02:30

End Date: 2005.12.15 @ 16:30:49

Job Ticket #: 22348                      DST #: 2

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PO Box 362 Hays, KS 67601  
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# DRILL STEM TEST REPORT

Abercrombie Energy LLC

Calihan 1-13

150 N Main Suite 801  
Wichita, KS 67202

13/28S/33W

Job Ticket: 22348

DST#: 2

ATTN: Wes Hansen

Test Start: 2005.12.15 @ 05:02:30

## GENERAL INFORMATION:

Formation: **Marmaton "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:15:30

Time Test Ended: 16:30:49

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **4754.00 ft (KB) To 4775.00 ft (KB) (TVD)**

Total Depth: 4775.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Good

Reference Elevations: 2965.00 ft (KB)

2960.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6752

Inside

Press@RunDepth: 80.60 psig @ 4756.00 ft (KB)

Start Date: 2005.12.15

End Date:

2005.12.15

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Start Time: 05:02:30

End Time:

16:30:49

Time On Btm: 2005.12.15 @ 09:12:50

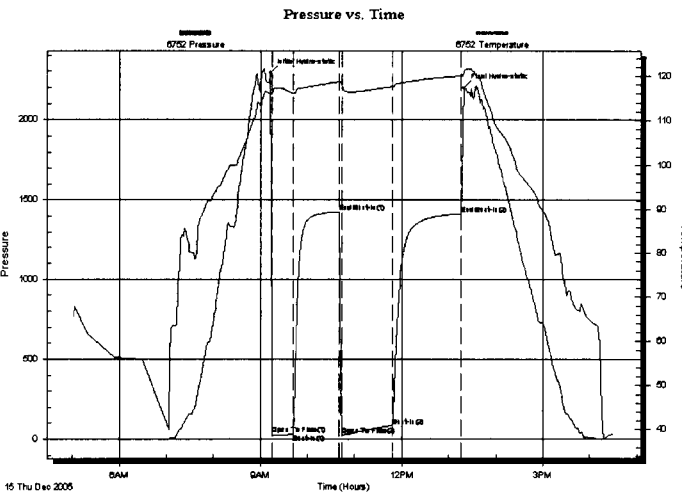
Time Off Btm: 2005.12.15 @ 13:18:50

TEST COMMENT: IF: BOB ASAO, GTS 21 min., strong steady blow

IS: No blow back

FF: BOB GTS ASAO, strong steady blow

FSI: No blow back



## PRESSURE SUMMARY

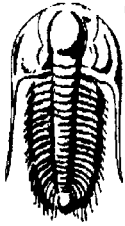
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2290.45	116.06	Initial Hydro-static
3	28.31	115.91	Open To Flow (1)
29	30.73	116.09	Shut-In(1)
88	1427.57	118.63	End Shut-In(1)
91	22.42	117.90	Open To Flow (2)
155	80.60	117.59	Shut-In(2)
243	1415.61	120.02	End Shut-In(2)
247	2200.05	121.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	100%M	0.44

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	5.00	7.26
Last Gas Rate	0.13	40.00	20.36
Max. Gas Rate	0.13	40.00	20.36



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**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Abercrombie Energy LLC  
150 N Main Suite 801  
Wichita, KS 67202  
ATTN: Wes Hansen

**Calihan 1-13**  
**13/28S/33W**  
Job Ticket: 22348      **DST#: 2**  
Test Start: 2005.12.15 @ 05:02:30

**Tool Information**

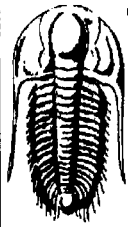
Drill Pipe:	Length: 4430.00 ft	Diameter: 3.80 inches	Volume: 62.14 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 310.00 ft	Diameter: 2.25 inches	Volume: 1.52 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 63.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4754.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	49.00 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			4727.00	
Shut In Tool	5.00			4732.00	
Hydraulic tool	5.00			4737.00	
Jars	5.00			4742.00	
Safety Joint	3.00			4745.00	
Packer	5.00			4750.00	28.00      Bottom Of Top Packer
Packer	4.00			4754.00	
Stubb	1.00			4755.00	
Perforations	1.00			4756.00	
Recorder	0.00	6752	Inside	4756.00	
Perforations	16.00			4772.00	
Recorder	0.00	13630	Inside	4772.00	
Bullnose	3.00			4775.00	21.00      Bottom Packers & Anchor

**Total Tool Length: 49.00**



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## DRILL STEM TEST REPORT

**FLUID SUMMARY**

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**Calihan 1-13**

150 N Main Suite 801  
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**13/28S/33W**

Job Ticket: 22348

**DST#: 2**

ATTN: Wes Hansen

Test Start: 2005.12.15 @ 05:02:30

### 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:

3600 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
90.00	100%M	0.443

Total Length: 90.00 ft

Total Volume: 0.443 bbl

Num Fluid Samples: 0

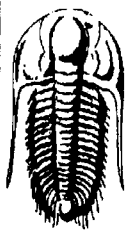
Num Gas Bombs: 1

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments: RW=1.989@60F=3600



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## DRILL STEM TEST REPORT

**GAS RATES**

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wichita, KS 67202

**13/28S/33W**

Job Ticket: 22348

**DST#: 2**

ATTN: Wes Hansen

Test Start: 2005.12.15 @ 05:02:30

### Gas Rates Information

Temperature: 59 deg C

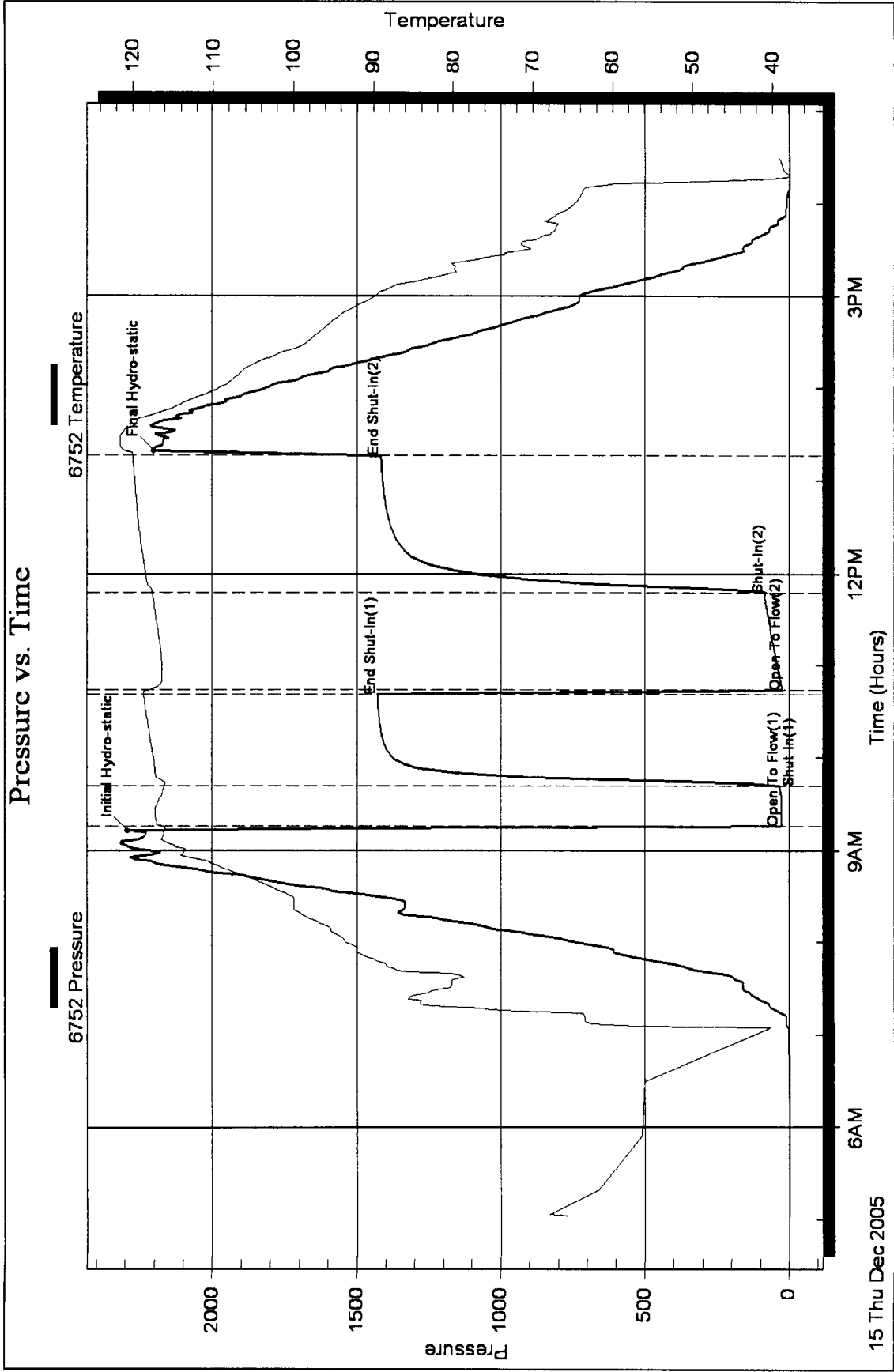
Relative Density: 0.65

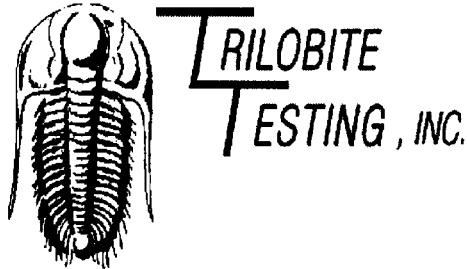
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
1	30	0.13	5.00	7.26
1	30	0.13	5.00	7.26
2	10	0.13	5.00	7.26
2	20	0.13	20.00	12.88
2	30	0.13	30.00	16.62
2	40	0.13	32.00	17.37
2	50	0.13	37.00	19.24
2	60	0.13	40.00	20.36

# Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Abercrombie Energy LLC**

150 N Main Suite 801  
Wichita, KS 67202

ATTN: Wes Hansen

**13/28S/33W**

**Calihan 1-13**

Start Date: 2005.12.16 @ 07:13:46

End Date: 2005.12.16 @ 15:30:46

Job Ticket #: 22349                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Abercrombie Energy LLC

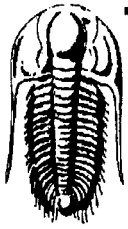
Calihan 1-13

13/28S/33W

DST # 3

Pawnee

2005.12.16



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wichita, KS 67202

**13/28S/33W**

Job Ticket: 22349

**DST#: 3**

ATTN: Wes Hansen

Test Start: 2005.12.16 @ 07:13:46

## GENERAL INFORMATION:

Formation: **Pawnee**  
 Deviated: **No Whipstock:** ft (KB)  
 Time Tool Opened: 09:34:55  
 Time Test Ended: 15:30:46

Test Type: **Conventional Bottom Hole**  
 Tester: **Chris Hagman**  
 Unit No: **34**

Interval: **4828.00 ft (KB) To 4865.00 ft (KB) (TVD)**  
 Total Depth: **4865.00 ft (KB) (TVD)**  
 Hole Diameter: **7.78 inches** Hole Condition: **Good**

Reference Elevations: **2965.00 ft (KB)**  
**2960.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

## Serial #: 6752

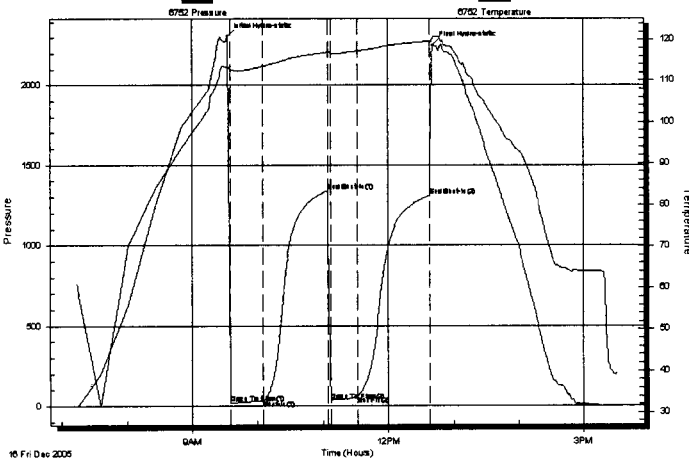
**Inside**

Press@RunDepth: **62.10 psig @ 4830.00 ft (KB)**  
 Start Date: **2005.12.16** End Date: **2005.12.16**  
 Start Time: **07:13:46** End Time: **15:30:46**

Capacity: **7000.00 psig**  
 Last Calib.: **1899.12.30**  
 Time On Btrn: **2005.12.16 @ 09:32:25**  
 Time Off Btrn: **2005.12.16 @ 12:41:26**

TEST COMMENT: IF: 2 inches in 30 min., weak steady blow  
 IS: No blow back  
 FF: Weak surface blow, steadily dieing  
 FS: No blow back

Pressure vs. Time



## PRESSURE SUMMARY

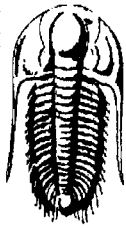
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2308.75	113.27	Initial Hydro-static
3	17.16	112.74	Open To Flow (1)
33	34.75	113.52	Shut-In(1)
92	1336.87	116.95	End Shut-In(1)
95	32.69	116.70	Open To Flow (2)
120	62.10	117.23	Shut-In(2)
187	1309.35	119.61	End Shut-In(2)
190	2252.24	120.49	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	100%M	0.44

## Gas Rates

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



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## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Abercrombie Energy LLC  
150 N Main Suite 801  
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ATTN: Wes Hansen

**Calihan 1-13**  
**13/28S/33W**  
Job Ticket: 22349      **DST#: 3**  
Test Start: 2005.12.16 @ 07:13:46

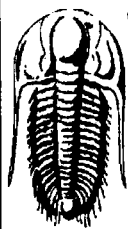
### Tool Information

Drill Pipe:	Length: 4497.00 ft	Diameter: 3.80 inches	Volume: 63.08 bbl	Tool Weight: 2000.00 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: 310.00 ft	Diameter: 2.25 inches	Volume: 1.52 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 64.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4828.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	65.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4801.00	
Shut In Tool	5.00			4806.00	
Hydraulic tool	5.00			4811.00	
Jars	5.00			4816.00	
Safety Joint	3.00			4819.00	
Packer	5.00			4824.00	28.00      Bottom Of Top Packer
Packer	4.00			4828.00	
Stubb	1.00			4829.00	
Perforations	1.00			4830.00	
Recorder	0.00	6752	Inside	4830.00	
Change Over Sub	1.00			4831.00	
Drill Pipe	30.00			4861.00	
Change Over Sub	1.00			4862.00	
Recorder	0.00	13630	Inside	4862.00	
Bullnose	3.00			4865.00	37.00      Bottom Packers & Anchor

**Total Tool Length: 65.00**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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**Calihan 1-13**

150 N Main Suite 801  
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**13/28S/33W**

Job Ticket: 22349

**DST#: 3**

ATTN: Wes Hansen

Test Start: 2005.12.16 @ 07:13:46

## 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:

3500 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2100.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	100%M	0.443

Total Length: 90.00 ft

Total Volume: 0.443 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW=1.889@60F=3500ppm

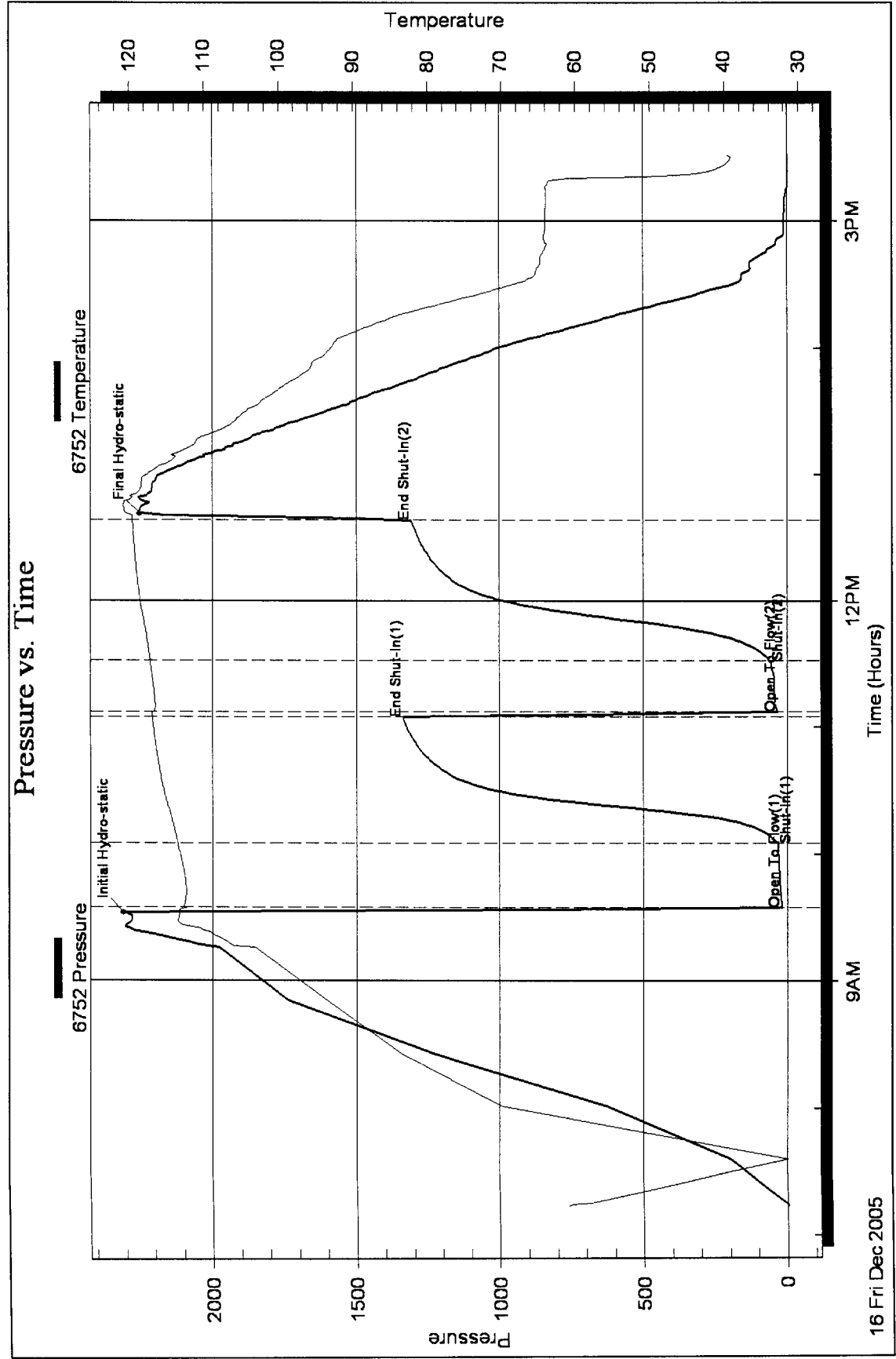
Serial #: 6752

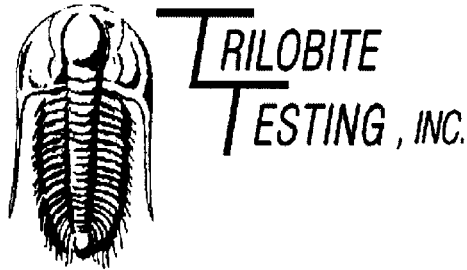
Inside

Abercrombie Energy LLC

13/28S/33W

DST Test Number: 3





## DRILL STEM TEST REPORT

Prepared For: **Abercrombie Energy LLC**

150 N Main Suite 801  
Wichita, KS 67202

ATTN: Wes Hansen

**13/28S/33W**

**Calihan 1-13**

Start Date: 2005.12.17 @ 10:22:46

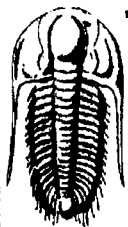
End Date: 2005.12.17 @ 17:57:46

Job Ticket #: 22350                      DST #: 4

Trilobite Testing, Inc

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



**TRILOBITE  
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# DRILL STEM TEST REPORT

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wchita, KS 67202

**13/28S/33W**

Job Ticket: 22350

**DST#: 4**

ATTN: Wes Hansen

Test Start: 2005.12.17 @ 10:22:46

## GENERAL INFORMATION:

Formation: **Atoka**

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

Time Tool Opened: 12:38:16

Time Test Ended: 17:57:46

Test Type: **Conventional Bottom Hole**

Tester: **Chris Hagman**

Unit No: **34**

Interval: **4994.00 ft (KB) To 5050.00 ft (KB) (TVD)**

Total Depth: **5050.00 ft (KB) (TVD)**

Hole Diameter: **7.78 inches** Hole Condition: **Good**

Reference Elevations: **2965.00 ft (KB)**

**2960.00 ft (CF)**

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

## Serial #: 6752

**Inside**

Press@RunDepth: **20.49 psig @ 4996.00 ft (KB)**

Start Date: **2005.12.17**

End Date:

**2005.12.17**

Start Time: **10:22:46**

End Time:

**17:57:46**

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2005.12.17 @ 12:35:55**

Time Off Btm: **2005.12.17 @ 14:40:56**

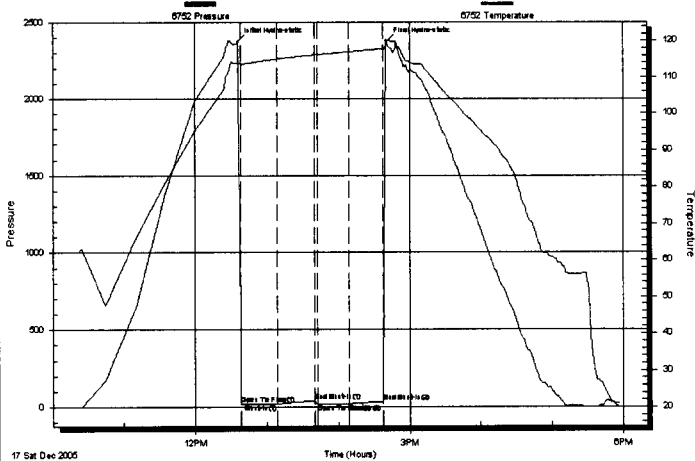
TEST COMMENT: IF: Weak surface blow, died 15 min.

IS: No blow back

FF: Weak surface blow, died 2 min.

FSI: No blow back

Pressure vs. Time



## PRESSURE SUMMARY

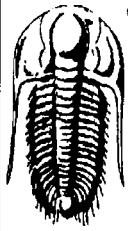
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2375.92	113.85	Initial Hydro-static
3	19.48	112.56	Open To Flow (1)
33	18.86	114.99	Shut-In(1)
65	40.58	116.11	End Shut-In(1)
67	17.71	116.18	Open To Flow (2)
94	20.49	116.99	Shut-In(2)
122	34.25	117.80	End Shut-In(2)
126	2378.85	120.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	100%M	0.07

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wichita, KS 67202

**13/28S/33W**

Job Ticket: 22350

**DST#: 4**

ATTN: Wes Hansen

Test Start: 2005.12.17 @ 10:22:46

### Tool Information

Drill Pipe:	Length: 4684.00 ft	Diameter: 3.80 inches	Volume: 65.70 bbl	Tool Weight: 2000.00 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: 310.00 ft	Diameter: 2.25 inches	Volume: 1.52 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 67.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4994.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4972.00	
Shut In Tool	5.00			4977.00	
Hydraulic tool	5.00			4982.00	
Safety Joint	3.00			4985.00	
Packer	5.00			4990.00	23.00 Bottom Of Top Packer
Packer	4.00			4994.00	
Stubb	1.00			4995.00	
Perforations	1.00			4996.00	
Recorder	0.00	6752	Inside	4996.00	
Perforations	18.00			5014.00	
Change Over Sub	1.00			5015.00	
Drill Pipe	31.00			5046.00	
Change Over Sub	1.00			5047.00	
Recorder	0.00	13630	Inside	5047.00	
Bullnose	3.00			5050.00	56.00 Bottom Packers & Anchor

**Total Tool Length: 79.00**



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Abercrombie Energy LLC

**Calihan 1-13**

150 N Main Suite 801  
Wichita, KS 67202

**13/28S/33W**

Job Ticket: 22350

**DST#: 4**

ATTN: Wes Hansen

Test Start: 2005.12.17 @ 10:22:46

## 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:

7300 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	100%M	0.074

Total Length: 15.00 ft      Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

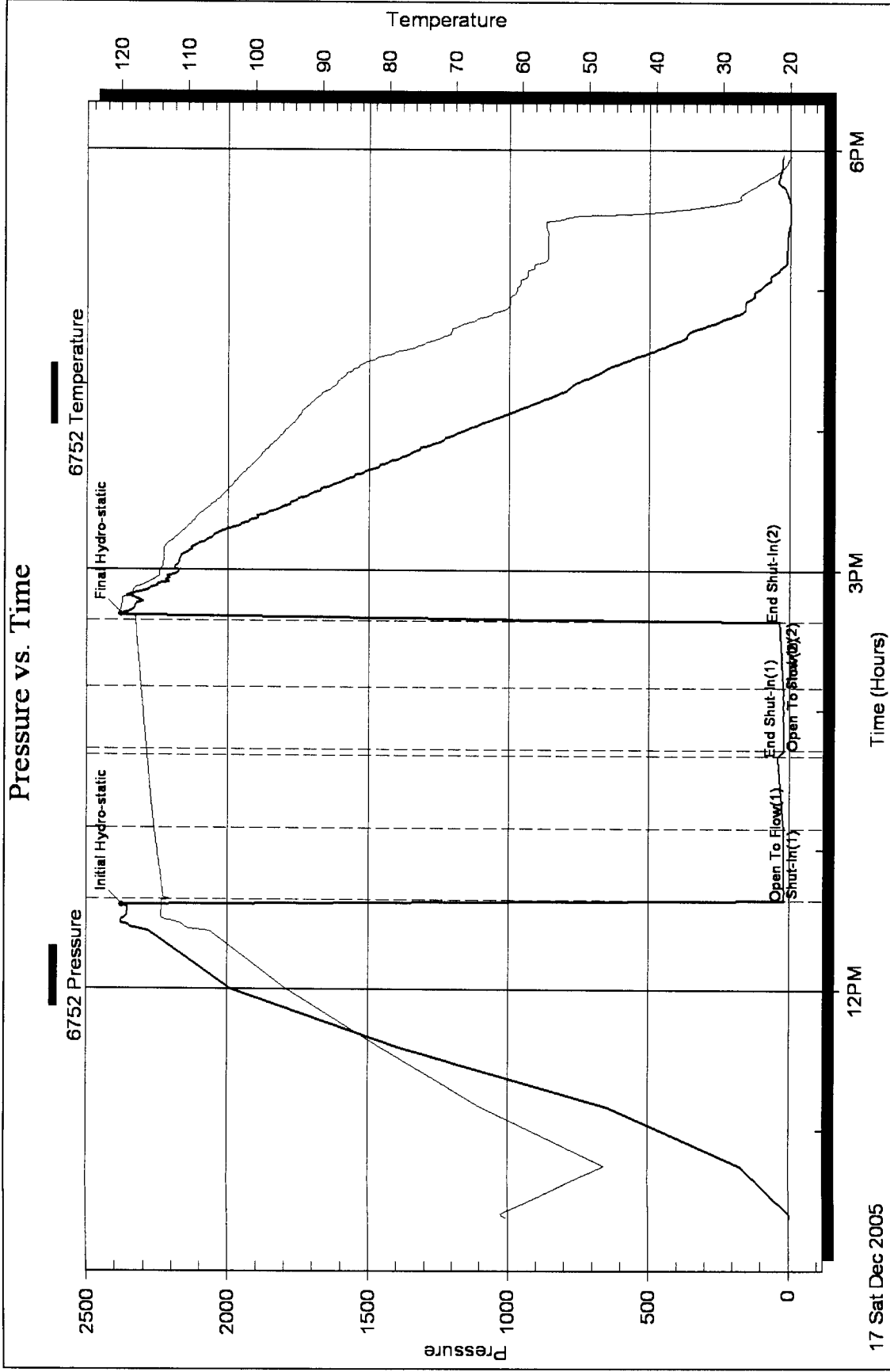
Serial #:

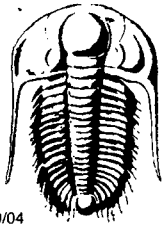
Laboratory Name:

Laboratory Location:

Recovery Comments: RW=1.548@40F=7300

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

8234  
No 22347

## Test Ticket

Well Name & No. Calibar #1-13 Test No. 1 Date 12-13-05  
 Company Abercrombie Energy, LLC Zone Tested Lansing 'G'  
 Address 150 N. Main Suite 801 Wichita, KS 67202 Elevation 2965 KB 2960 GL  
 Co. Rep / Geo. Wes Hansen Cont. Aber #3 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 13 Twp. 28S Rge. 33W Co. Haskell State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4416 - 4455 Initial Str Wt./Lbs. 60K Unseated Str Wt./Lbs. 60K  
 Anchor Length 39' Wt. Set Lbs. 20K Wt. Pulled Loose/Lbs. 80K  
 Top Packer Depth 4411 Tool Weight 2K  
 Bottom Packer Depth 4416 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 4415 Wt. Pipe Run N.A. Drill Collar Run 310  
 Mud Wt. 9.2 LCM 3# Vis. SS WL 8.0 Drill Pipe Size 4.5 x H Ft. Run 4094

Blow Description IF: 4 inches in 30 min, fair steady blow  
IS: No blow back  
FP: 1.5 inches in 30 min, weak steady blow  
FS: No blow back

Recovery - Total Feet 434 GIP \_\_\_\_\_ Ft. in DC 310 Ft. in DP 124  
 Rec. 434 Feet of Muddy water %gas \_\_\_\_\_ %oil 85 %water \_\_\_\_\_ %mud 15  
 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 121 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW .131 @ 70 °F Chlorides 60,000 ppm Recovery \_\_\_\_\_ Chlorides 1,700 ppm System

	AK-1	Alpine	Recorder No.	Test	
(A) Initial Hydrostatic Mud	2156	PSI	6752 (2:19)	✓	1100
(B) First Initial Flow Pressure	31	PSI	(depth) 4419	✓	200
(C) First Final Flow Pressure	146	PSI	Recorder No. 13630	✓	50
(D) Initial Shut-In Pressure	1335	PSI	(depth) 4452		
(E) Second Initial Flow Pressure	161	PSI	Recorder No. _____		
(F) Second Final Flow Pressure	238	PSI	(depth) _____		
(G) Final Shut-In Pressure	1213	PSI	Initial Opening 30		
(Q) Final Hydrostatic Mud	2126	PSI	Initial Shut-In 60		

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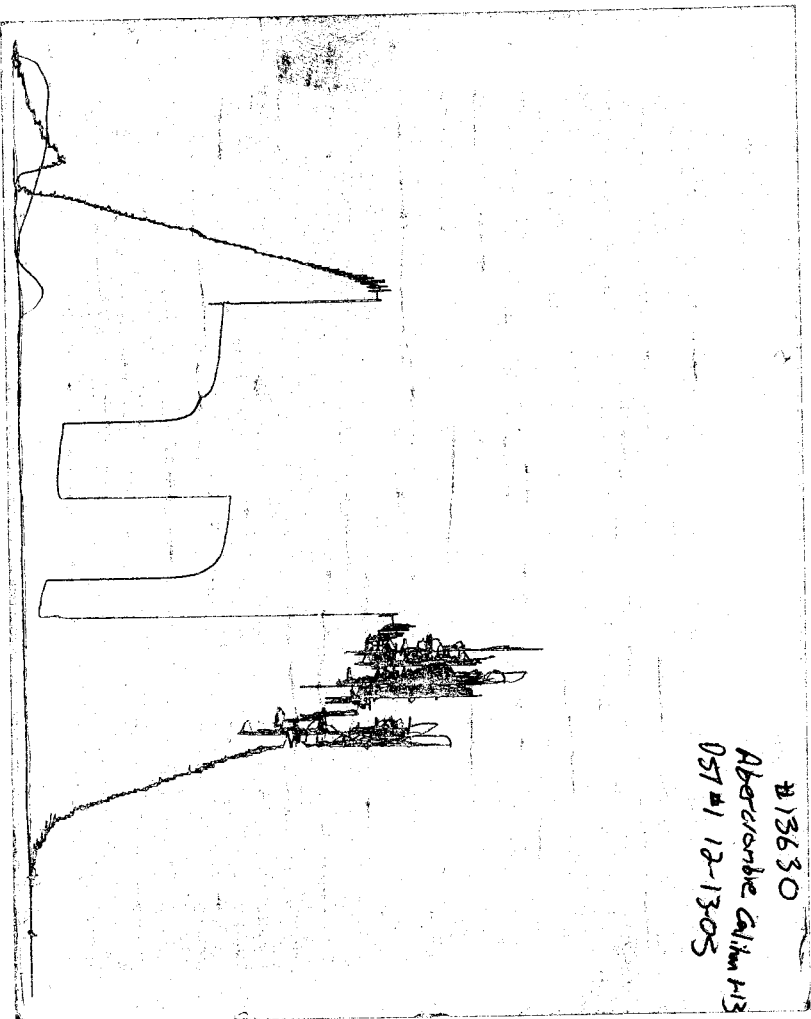
Approved By Wesley Hansen  
 Our Representative [Signature]

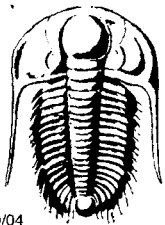
Final Flow	60
Final Shut-In	90
T-On Location	1315
T-Started	1445
T-Open	1720
T-Pulled	2130
T-Out	0015

Jars ✓ 200  
 Safety Jt. ✓ 50  
 Circ Sub \_\_\_\_\_  
 Sampler \_\_\_\_\_  
 Straddle \_\_\_\_\_  
 Ext. Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Ruined Packer ✓ x1 reg 200  
 Mileage ✓ x 90 90  
 Sub Total: 1640  
 Std. By x 2.0 10  
 Other ✓ ACC charge 150  
 Total: 1890 1890

**CHART PAGE**

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





# TRILOBITE TESTING INC.

No 22348

P.O. Box 362 • Hays, Kansas 67601

9/04

## Test Ticket

Well Name & No. Caliban #1-13 Test No. 2 Date 12-15-05  
 Company Abercrombie Energy, LLC Zone Tested Marmaton "B"  
 Address 150 N. Main Suite 801 Wichita, KS 67202 Elevation 2965 KB 2960 GL  
 Co. Rep / Geo. Wes Hansen Cont. Aber #3 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 13 Twp. 28S Rge. 33W Co. Haskell State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4754 - 4775 Initial Str Wt./Lbs. 62K Unseated Str Wt./Lbs. 62K  
 Anchor Length 21' Wt. Set Lbs. 20K Wt. Pulled Loose/Lbs. 80K  
 Top Packer Depth 4749 Tool Weight 2K  
 Bottom Packer Depth 4754 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 4775 Wt. Pipe Run N.A Drill Collar Run 310  
 Mud Wt. 9.1 LCM S# Vis. S:7 WL 7.2 Drill Pipe Size 4.5 x 17 Ft. Run 4430  
 Blow Description IP: BOB 1510, GTS 21 min, strong steady blow  
IS: No blow back  
FP: BOB GTS 1510, strong steady blow  
FS: No blow back

Recovery - Total Feet 90 GIP 4650 Ft. in DC 90 Ft. in DP \_\_\_\_\_  
 Rec. 90 Feet of mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 100 %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 1.989 @ 60 °F Chlorides 3600 ppm Recovery \_\_\_\_\_ Chlorides 1900 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2290</u>	PSI	<u>6752 (15:00)</u>	<u>✓ conu. 1100</u>
(B) First Initial Flow Pressure	<u>28</u>	PSI	(depth) <u>4756</u>	Jars <u>✓ 200</u>
(C) First Final Flow Pressure	<u>31</u>	PSI	Recorder No. <u>13630</u>	Safety Jt. <u>✓ 50</u>
(D) Initial Shut-In Pressure	<u>1428</u>	PSI	(depth) <u>4772</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>22</u>	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>81</u>	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>1416</u>	PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>2200</u>	PSI	Initial Shut-In <u>60</u>	Shale Packer _____
			Final Flow <u>60</u>	Ruined Packer _____
			Final Shut-In <u>90</u>	Mileage <u>✓ x 90 = 90</u>
			T-On Location <u>0400</u>	Sub Total: <u>1440</u>
			T-Started <u>2645</u>	Std. By <u>x 3.5 + 24175</u>
			T-Open <u>0915</u>	Other <u>✓ acc Chg 150</u>
			T-Pulled <u>1315</u>	Total: <u>1765</u>
			T-Out <u>1630</u>	1 day standby <u>\$ 500</u>

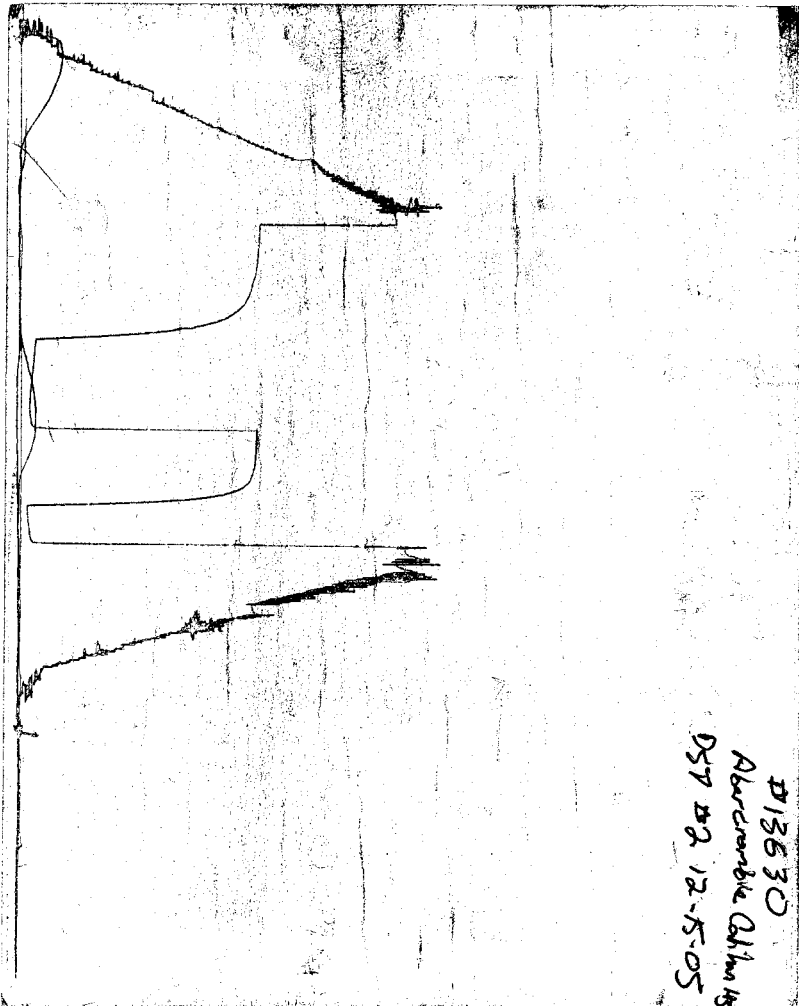
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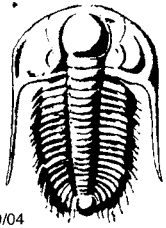
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 Our Representative [Signature]



**CHART PAGE**

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# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 22349

9/04

## Test Ticket

Well Name & No. Colihon #1-13 Test No. 3 Date 12-16-05  
 Company Abercrombie Energy, LLC Zone Tested Pawnee  
 Address 150 N Main Street 801 Wichita, KS 67202 Elevation 2965 KB 2960 GL  
 Co. Rep / Geo. Wes Hansen Cont. Aber 23 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 13 Twp. 28S Rge. 33W Co. Haskell State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4828-4865 Initial Str Wt./Lbs. 70K Unseated Str Wt./Lbs. 70K  
 Anchor Length 37' Wt. Set Lbs. 20K Wt. Pulled Loose/Lbs. 80K  
 Top Packer Depth 4823 Tool Weight 2K  
 Bottom Packer Depth 4828 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 4865 Wt. Pipe Run N.A Drill Collar Run 310  
 Mud Wt. 9.2 LCM 4# Vis. 56 WL 8.0 Drill Pipe Size 4.5 XH Ft. Run 4497

Blow Description IF: 2 inches in 30 min., weak steady blow  
IS: No blow back  
FF: Weak surface blow, weak steadily dying blow  
FST: No blow back

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>60</u>	Feet of <u>mud</u>	%gas	%oil %water <u>100%</u> %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 1.889 @ 60 °F Chlorides 3500 ppm Recovery \_\_\_\_\_ Chlorides 2100 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2309</u> PSI		<u>6752 (7.13)</u>	<u>1100</u>
(B) First Initial Flow Pressure	<u>17</u> PSI		<u>4830</u>	<u>200</u>
(C) First Final Flow Pressure	<u>35</u> PSI		<u>13630</u>	<u>50</u>
(D) Initial Shut-In Pressure	<u>1337</u> PSI		<u>4862</u>	
(E) Second Initial Flow Pressure	<u>33</u> PSI			
(F) Second Final Flow Pressure	<u>62</u> PSI			
(G) Final Shut-In Pressure	<u>1309</u> PSI	Initial Opening	<u>30</u>	
(Q) Final Hydrostatic Mud	<u>2252</u> PSI	Initial Shut-In	<u>60</u>	

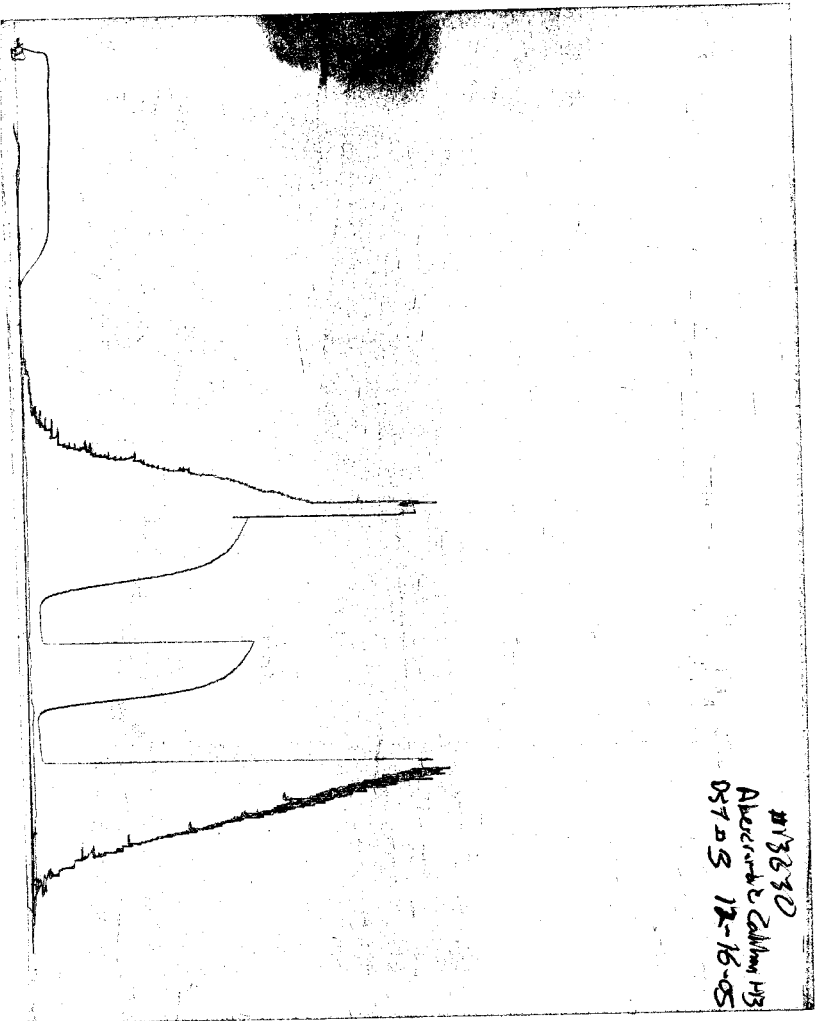
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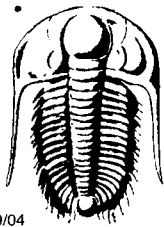
Approved By Wesley Hansen  
 Our Representative [Signature]

Final Flow	<u>30</u>	Ruined Packer	
Final Shut-In	<u>60</u>	Mileage <u>✓ x 90</u>	<u>90</u>
T-On Location	<u>0700</u>	Sub Total:	<u>1440 1440</u>
T-Started	<u>0715</u>	Std. By	<u>0</u>
T-Open	<u>0935</u>	Other <u>✓ acc charge</u>	<u>150</u>
T-Pulled	<u>1235</u>	Total:	<u>1590 B 1590</u>
T-Out	<u>1530</u>		

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 22350

9/04

## Test Ticket

Well Name & No. Calihan #1-13 Test No. 4 Date 12-17-05  
 Company Abercrombie Energy, LLC Zone Tested A token  
 Address 150 N Main Suite 801 Wichita, KS 67202 Elevation 2965 KB 2960 GL  
 Co. Rep / Geo. Wes Hansen Cont. Aber #3 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 13 Twp. 28S Rge. 33W Co. Haskell State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4994-5050 Initial Str Wt./Lbs. 70K Unseated Str Wt./Lbs. 70K  
 Anchor Length 56' Wt. Set Lbs. 20K Wt. Pulled Loose/Lbs. 80K  
 Top Packer Depth 4989 Tool Weight 2K  
 Bottom Packer Depth 4994 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 5050 Wt. Pipe Run N.A. Drill Collar Run 310  
 Mud Wt. 9.1 LCM 5# Vis. 56 WL 7.2 Drill Pipe Size 4.5 x # Ft. Run 4684  
 Blow Description IF: Weak surface blow, died 15 min.  
ISL: No blow back  
FF: Weak surface blow, died 2 min.  
FSL: No blow back

Recovery - Total Feet 15 GIP \_\_\_\_\_ Ft. in DC 15 Ft. in DP \_\_\_\_\_  
 Rec. 15 Feet of mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 100 %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 118 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW 1.548 @ 40 °F Chlorides 2300 ppm Recovery \_\_\_\_\_ Chlorides 1500 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud		<u>2376</u>	PSI	Recorder No.	<u>61752 (10:23)</u>	Test <input checked="" type="checkbox"/> <u>1200</u>
(B) First Initial Flow Pressure		<u>19</u>	PSI	(depth)	<u>4996</u>	Jars _____
(C) First Final Flow Pressure		<u>19</u>	PSI	Recorder No.	<u>13630</u>	Safety Jt. <input checked="" type="checkbox"/> <u>50</u>
(D) Initial Shut-In Pressure		<u>41</u>	PSI	(depth)	<u>5047</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>18</u>	PSI	Recorder No.		Sampler _____
(F) Second Final Flow Pressure		<u>20</u>	PSI	(depth)		Straddle _____
(G) Final Shut-In Pressure		<u>34</u>	PSI	Initial Opening	<u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>2379</u>	PSI	Initial Shut-In	<del>23</del> <u>30</u>	Shale Packer _____
				Final Flow	<u>30</u>	Ruined Packer _____
				Final Shut-In	<u>30</u>	Mileage <u>4x90</u> <u>90</u>
				T-On Location	<u>1000</u>	Sub Total: <del>1340</del> <u>1340</u>
				T-Started	<u>1030</u>	Std. By _____
				T-Open	<u>1240</u>	Other <input checked="" type="checkbox"/> <u>Acc charge 15</u>
				T-Pulled	<u>1440</u>	Total: <u>1490</u> <u>#1490</u>
				T-Out	<u>1800</u>	

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Approved By Wesley Hansen  
 Our Representative [Signature]

**CHART PAGE**

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

