



## DRILL STEM TEST REPORT

Prepared For: **Sho-Bar Energy Inc.**

346 E.Hwy 160  
Harper Ks.67058

ATTN: Arden Ratzlaff

**34-30s-7w Harper Ks.**

**Smith #1-34**

Start Date: 2003.08.29 @ 06:18:54

End Date: 2003.08.29 @ 14:29:09

Job Ticket #: 17139                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Sho-Bar Energy Inc.

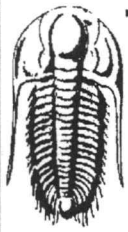
Smith #1-34

34-30s-7w Harper Ks.

DST # 1

Miss.

2003.08.29



**TRILOBITE  
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# DRILL STEM TEST REPORT

Sho-Bar Energy Inc.

**Smith #1-34**

346 E.Hwy 160  
Harper Ks.67058

**34-30s-7w Harper Ks.**

ATTN: Arden Ratzlaff

Job Ticket: 17139

**DST#: 1**

Test Start: 2003.08.29 @ 06:18:54

## GENERAL INFORMATION:

Formation: **Miss.**

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

Time Tool Opened: 08:02:09

Time Test Ended: 14:29:09

Test Type: **Conventional Bottom Hole**

Tester: **Gary Pevoteaux**

Unit No: **23**

Interval: **4325.00 ft (KB) To 4340.00 ft (KB) (TVD)**

Total Depth: **4340.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1601.00 ft (KB)**

**1592.00 ft (CF)**

KB to GR/CF: **9.00 ft**

## Serial #: 6770

**Inside**

Press@RunDepth: **1093.91 psig @ 4326.00 ft (KB)**

Start Date: **2003.08.29**

End Date: **2003.08.29**

Start Time: **06:18:55**

End Time: **14:29:09**

Capacity: **7000.00 psig**

Last Calib.: **2003.08.29**

Time On Btm: **2003.08.29 @ 08:01:24**

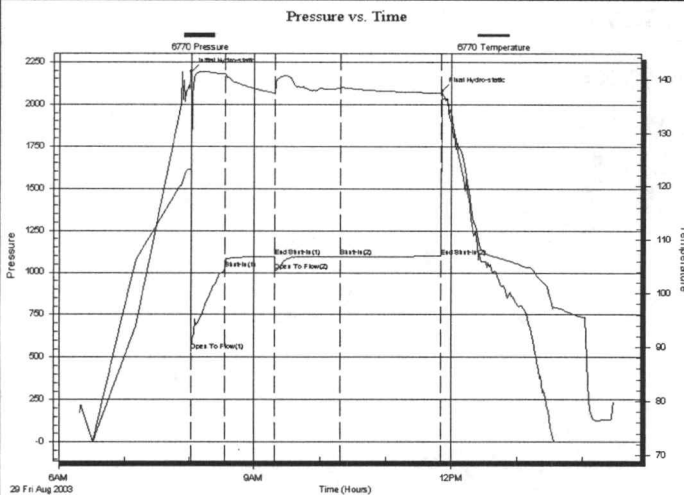
Time Off Btm: **2003.08.29 @ 11:51:24**

TEST COMMENT: IF:Strong blow .GTS in 8 mins. (see gas volume report)

IS:Venting throughout.

FF:Strong blow . (see gas volume report)

FSI:Venting throughout)



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2191.87	123.31	Initial Hydro-static
1	538.50	123.95	Open To Flow (1)
32	1018.79	140.92	Shut-In(1)
77	1094.61	137.39	End Shut-In(1)
78	1008.60	137.33	Open To Flow (2)
137	1093.91	138.42	Shut-In(2)
229	1097.11	137.46	End Shut-In(2)
230	2075.55	136.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1675.00	Salt w water Rw .06 ohms @ 82 deg.	21.31
490.00	CG 28%g 72%0	6.87
130.00	SOCGM 1%o 19%g 80%m	1.82

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	3.00	117.38
Last Gas Rate	0.25	28.00	67.26
Max. Gas Rate	0.25	41.00	87.89



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Sho-Bar Energy Inc.

**Smith #1-34**

346 E.Hwy 160  
Harper Ks.67058

**34-30s-7w Harper Ks.**

Job Ticket: 17139

**DST#: 1**

ATTN: Arden Ratzlaff

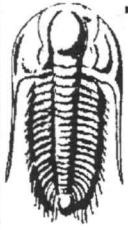
Test Start: 2003.08.29 @ 06:18:54

### Tool Information

Drill Pipe:	Length: 4090.00 ft	Diameter: 3.80 inches	Volume: 57.37 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 58.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	4325.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	37.00 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			4304.00	
Shut In Tool	5.00			4309.00	
Hydraulic tool	5.00			4314.00	
Safety Joint	2.00			4316.00	
Packer	4.00			4320.00	22.00 Bottom Of Top Packer
Packer	5.00			4325.00	
Stubb	1.00			4326.00	
Recorder	0.00	6770	Inside	4326.00	
Perforations	9.00			4335.00	
Recorder	0.00	13222	Outside	4335.00	
Bullnose	5.00			4340.00	15.00 Bottom Packers & Anchor

**Total Tool Length: 37.00**



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**FLUID SUMMARY**

Sho-Bar Energy Inc.

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346 E.Hwy 160  
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**34-30s-7w Harper Ks.**

Job Ticket: 17139

**DST#: 1**

ATTN: Arden Ratzlaff

Test Start: 2003.08.29 @ 06:18:54

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API: 38.5 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 124000 ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.38 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 4000.00 ppm		
Filter Cake: 0.20 inches		

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
1675.00	Salt water Rw .06 ohms @ 82 deg.	21.310
490.00	CG 28%g 72%0	6.873
130.00	SOCGM 1%o 19%g 80%m	1.824

Total Length: 2295.00 ft      Total Volume: 30.007 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: gp-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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

## DRILL STEM TEST REPORT

**GAS RATES**

Sho-Bar Energy Inc.

**Smith #1-34**

346 E.Hwy 160  
Harper Ks.67058

**34-30s-7w Harper Ks.**

Job Ticket: 17139

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2003.08.29 @ 06:18:54

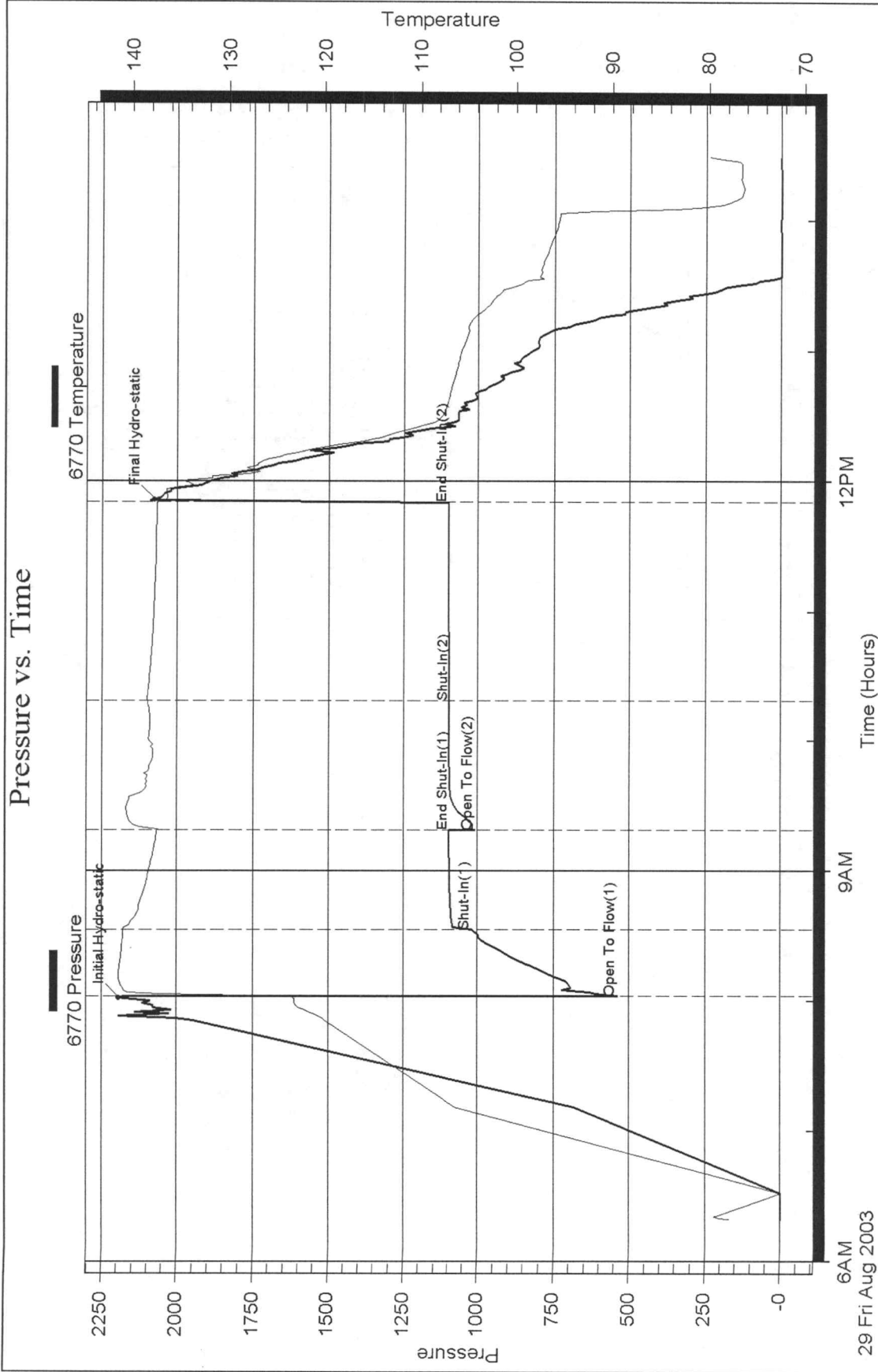
### Gas Rates Information

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	10	0.50	3.00	117.38
1	20	0.25	32.00	73.61
1	30	0.25	41.00	87.89
2	5	0.50	3.00	117.38
2	10	0.25	29.00	68.85
2	20	0.25	30.00	70.44
2	30	0.25	30.00	70.44
2	40	0.25	31.00	72.02
2	50	0.25	32.00	73.61
2	60	0.25	28.00	67.26

### Pressure vs. Time





## DRILL STEM TEST REPORT

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346 E.Hwy 160  
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ATTN: Arden Ratzlaff

**34-30s-7w Harper Ks.**

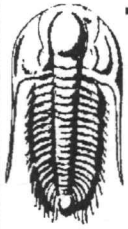
**Smith #1-34**

Start Date: 2003.08.31 @ 02:52:51

End Date: 2003.08.31 @ 11:17:51

Job Ticket #: 17140                      DST #: 2

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



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# DRILL STEM TEST REPORT

Sho-Bar Energy Inc.

**Smith #1-34**

346 E.Hwy 160  
Harper Ks.67058

**34-30s-7w Harper Ks.**

Job Ticket: 17140

**DST#: 2**

ATTN: Arden Ratzlaff

Test Start: 2003.08.31 @ 02:52:51

## GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:17:21

Time Test Ended: 11:17:51

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 23

Interval: **4720.00 ft (KB) To 4729.00 ft (KB) (TVD)**

Reference Elevations: 1601.00 ft (KB)

Total Depth: 4729.00 ft (KB) (TVD)

1592.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

## Serial #: 6770

Inside

Press@RunDepth: 492.09 psig @ 4721.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.08.31

End Date:

2003.08.31

Last Calib.: 2003.08.31

Start Time: 02:52:52

End Time:

11:17:51

Time On Btm: 2003.08.31 @ 05:16:36

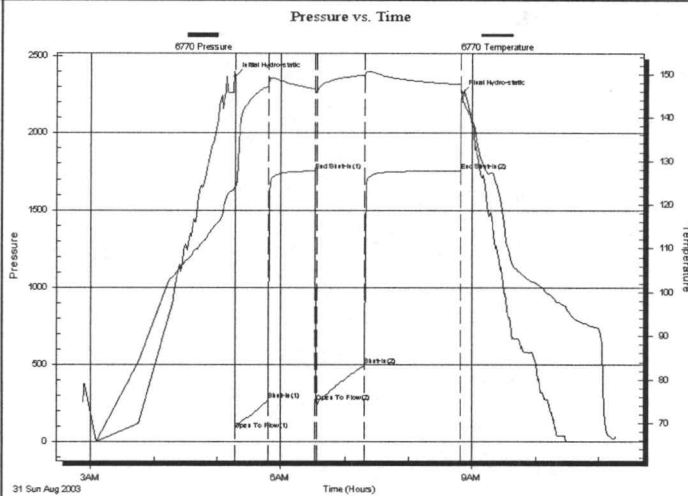
Time Off Btm: 2003.08.31 @ 08:50:06

TEST COMMENT: IF:Strong blow . B.O.B. in 40 secs. GTS in 10 mins. (see gas volume report)

IS:Venting throughout.

FF:Strong blow . (see gas volume report)

FS:Venting throughout.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2368.29	124.21	Initial Hydro-static
1	75.68	123.27	Open To Flow (1)
32	271.09	147.23	Shut-In(1)
76	1751.39	146.61	End Shut-In(1)
77	256.87	145.90	Open To Flow (2)
122	492.09	149.80	Shut-In(2)
213	1752.69	147.70	End Shut-In(2)
214	2258.64	145.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
465.00	Salt water Rw .13 ohms @70 deg.	4.34
775.00	Gassy oil 43%g 57%o	10.87

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	9.00	37.12
Last Gas Rate	0.25	13.00	43.47
Max. Gas Rate	0.25	15.00	46.64



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**TOOL DIAGRAM**

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**34-30s-7w Harper Ks.**

Job Ticket: 17140

**DST#: 2**

ATTN: Arden Ratzlaff

Test Start: 2003.08.31 @ 02:52:51

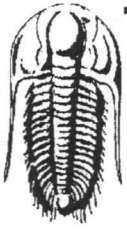
### Tool Information

Drill Pipe:	Length: 4463.00 ft	Diameter: 3.80 inches	Volume: 62.60 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 63.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4720.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	31.00 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			4699.00	
Shut In Tool	5.00			4704.00	
Hydraulic tool	5.00			4709.00	
Safety Joint	2.00			4711.00	
Packer	4.00			4715.00	22.00 Bottom Of Top Packer
Packer	5.00			4720.00	
Stubb	1.00			4721.00	
Recorder	0.00	6770	Inside	4721.00	
Perforations	3.00			4724.00	
Recorder	0.00	13222	Outside	4724.00	
Bullnose	5.00			4729.00	9.00 Bottom Packers & Anchor

**Total Tool Length: 31.00**



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Job Ticket: 17140

**DST#: 2**

ATTN: Arden Ratzlaff

Test Start: 2003.08.31 @ 02:52:51

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

41 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

64000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
465.00	Salt water Rw .13 ohms @70 deg.	4.336
775.00	Gassy oil 43%g 57%o	10.871

Total Length: 1240.00 ft      Total Volume: 15.207 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:



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**GAS RATES**

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**34-30s-7w Harper Ks.**

Job Ticket: 17140

**DST#: 2**

ATTN: Arden Ratzlaff

Test Start: 2003.08.31 @ 02:52:51

### 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	20	0.25	9.00	37.12
1	30	0.25	15.00	46.64
2	10	0.25	6.00	32.36
2	20	0.25	9.00	37.12
2	30	0.25	12.00	41.88
2	45	0.25	13.00	43.47

### Pressure vs. Time

