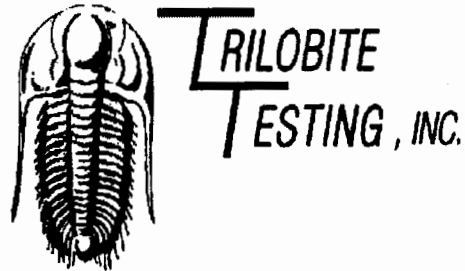


15-053-21173

27-17s-10w



## DRILL STEM TEST REPORT

Prepared For: **Samuel Gary JR & Associates**

1670 Broadway  
Suite 3300  
Denver, CO 80202

ATTN: Tom Fertal

**27-17s-10w-Ellsworth**

**Schepmann-Crow #1-27**

Start Date: 2006.01.16 @ 01:12:22

End Date: 2006.01.16 @ 09:52:37

Job Ticket #: 24326                      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

Samuel Gary JR & Associates  
1670 Broadway  
Suite 3300  
Denver, CO 80202  
ATTN: Tom Fertal

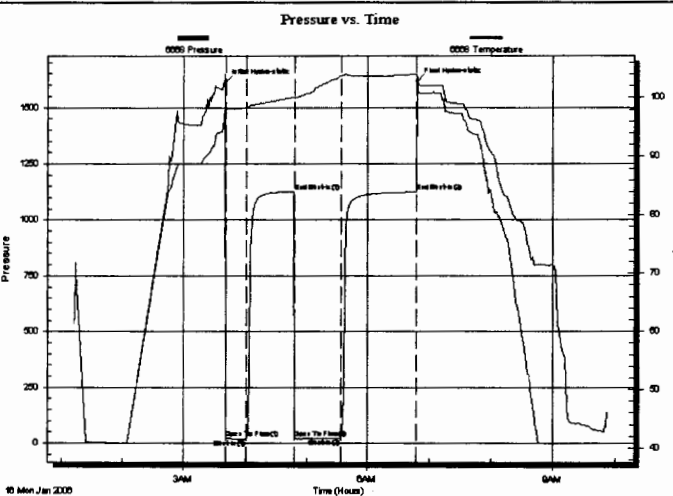
**Schepmann-Crow #1-27**  
**27-17s-10w-Ellsworth**  
Job Ticket: 24326      **DST#: 1**  
Test Start: 2006.01.16 @ 01:12:22

### GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: **No Whipstock**      ft (KB)  
Test Type: **Conventional Bottom Hole**  
Time Tool Opened: 03:40:37  
Tester: **Jake Fahrenbruch**  
Time Test Ended: 09:52:37  
Unit No: **30**  
Interval: **3332.00 ft (KB) To 3340.00 ft (KB) (TVD)**  
Reference Elevations: **1829.00 ft (KB)**  
Total Depth: **3340.00 ft (KB) (TVD)**  
**1825.00 ft (CF)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
KB to GR/CF: **4.00 ft**

**Serial #: 6668**      **Inside**  
Press@RunDepth: **22.00 psig @ 3333.00 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2006.01.16**      End Date: **2006.01.16**      Last Calib.: **2006.01.16**  
Start Time: **01:12:23**      End Time: **09:52:37**      Time On Btm: **2006.01.16 @ 03:40:07**  
Time Off Btm: **2006.01.16 @ 06:48:07**

**TEST COMMENT:** IF: Weak blow @ .5" in bucket.  
IS: Bled off, no blow back.  
FF: Weak blow on surface of water.  
FSI: Bled off, no blow back.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1610.59	98.11	Initial Hydro-static
1	23.83	98.11	Open To Flow (1)
22	19.09	98.34	Shut-In(1)
68	1127.44	100.11	End Shut-In(1)
68	22.31	99.95	Open To Flow (2)
114	22.00	103.74	Shut-In(2)
188	1124.60	104.00	End Shut-In(2)
188	1615.91	103.34	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
10.00	Free Oil 100%o	0.14
5.00	OCM 15%o85%om	0.07
0.00	No Gas in pipe.	0.00
0.00	Gravity=36.5@50degF=37.5 corrected	0.00
0.00	0	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Samuel Gary JR & Associates

**Schepmann-Crow #1-27**

1670 Broadway  
Suite 3300  
Denver, CO 80202  
ATTN: Tom Fertal

**27-17s-10w-Ellsworth**

Job Ticket: 24326      DST#: 1  
Test Start: 2006.01.16 @ 01:12:22

### Tool Information

Drill Pipe:	Length: 3322.00 ft	Diameter: 3.80 inches	Volume: 46.60 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 46.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3332.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	35.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3310.00	
Hydraulic tool	5.00			3315.00	
Jars	5.00			3320.00	
Safety Joint	2.00			3322.00	
Packer	5.00			3327.00	27.00      Bottom Of Top Packer
Packer	5.00			3332.00	
Stubb	1.00			3333.00	
Recorder	0.00	6668	Inside	3333.00	
Perforations	4.00			3337.00	
Recorder	0.00	13266	Outside	3337.00	
Bullnose	3.00			3340.00	8.00      Bottom Packers & Anchor

**Total Tool Length: 35.00**



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

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Samuel Gary JR & Associates

**Schepmann-Crow #1-27**

1670 Broadway  
Suite 3300  
Denver, CO 80202  
ATTN: Tom Fertal

**27-17s-10w-Ellsworth**  
Job Ticket: 24326      **DST#: 1**  
Test Start: 2006.01.16 @ 01:12:22

**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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8300.00 ppm			
Filter Cake: 0.04 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
10.00	Free Oil 100%o	0.140
5.00	OCM 15%o85%o	0.070
0.00	No Gas in pipe.	0.000
0.00	Gravity=36.5@50degF=37.5 corrected	0.000
0.00	0	0.000

Total Length: 15.00 ft      Total Volume: 0.210 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 6668

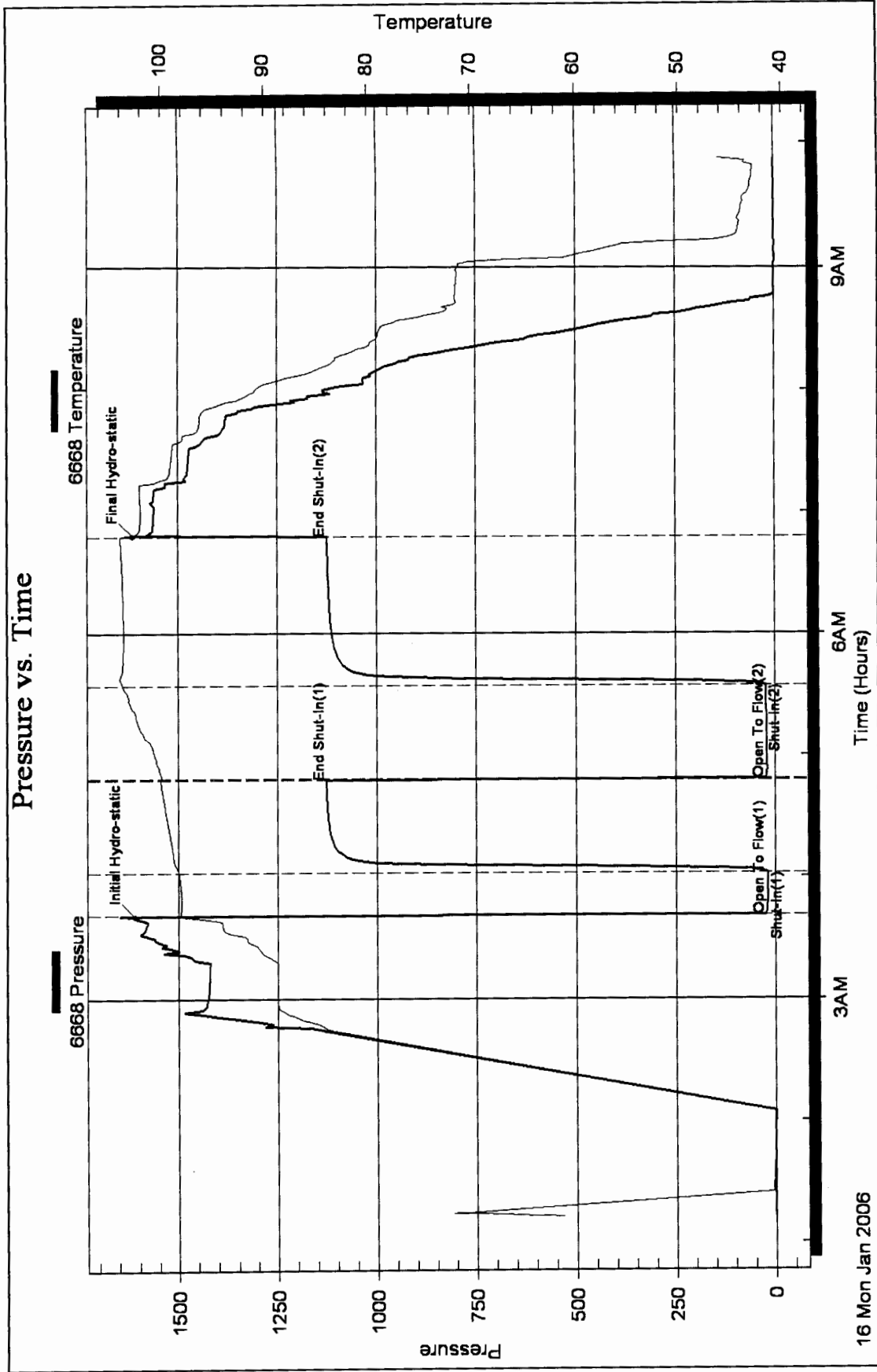
Inside

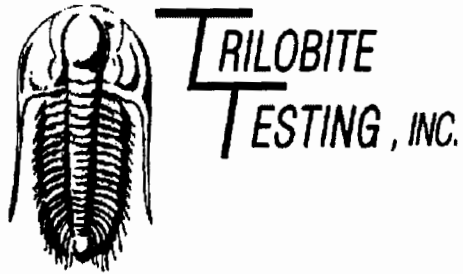
Samuel Gary JR & Associates

27-17s-10w -Elisw orth

DST Test Number: 1

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Samuel Gary JR & Associates**

1670 Broadway  
Suite 3300  
Denver, CO 80202

ATTN: Tom Fertal

**27-17s-10w-Ellsworth**

**Schepmann-Crow #1-27**

Start Date: 2006.01.16 @ 16:47:06

End Date: 2006.01.17 @ 01:30:21

Job Ticket #: 24327                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Samuel Gary JR & Associates

Schepmann-Crow #1-27

27-17s-10w-Ellsworth

DST # 2

Arbuckle

2006.01.16



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gary JR & Associates

1670 Broadway  
Suite 3300  
Denver, CO 80202  
ATTN: Tom Fertal

**Schepmann-Crow #1-27**

**27-17s-10w-Ellsworth**

Job Ticket: 24327      **DST#: 2**

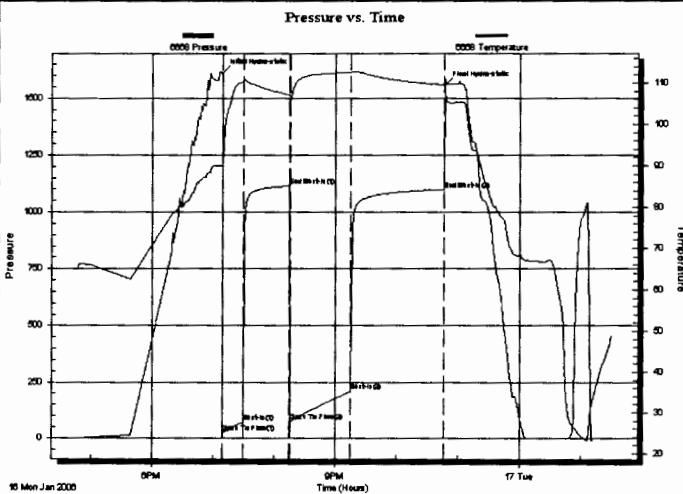
Test Start: 2006.01.16 @ 16:47:06

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: **No Whipstock:**      ft (KB)  
 Time Tool Opened: 19:09:21  
 Time Test Ended: 01:30:21  
 Interval: **3336.00 ft (KB) To 3345.00 ft (KB) (TVD)**  
 Total Depth: **3345.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Jake Fahrenbruch**  
 Unit No: **30**  
 Reference Elevations: **1829.00 ft (KB)**  
**1825.00 ft (CF)**  
 KB to GR/CF: **4.00 ft**

**Serial #: 6668**      **Inside**  
 Press@RunDepth: **209.63 psig @ 3337.00 ft (KB)**      Capacity: **7000.00 psig**  
 Start Date: **2006.01.16**      End Date: **2006.01.17**      Last Calib.: **2006.01.17**  
 Start Time: **16:47:07**      End Time: **01:30:21**      Time On Btm: **2006.01.16 @ 19:09:06**  
 Time Off Btm: **2006.01.16 @ 22:46:36**

**TEST COMMENT:** **F:** Fair blow building to 8" in bucket.  
**IS:** Bled off, no blow back.  
**FF:** Fair to string blow, Building to BOB in 55 minutes.  
**FSt:** Bled off, no blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1612.82	90.01	Initial Hydro-static
1	23.54	89.70	Open To Flow (1)
21	71.54	110.46	Shut-In(1)
66	1114.64	107.15	End Shut-In(1)
67	74.18	106.76	Open To Flow (2)
126	209.63	112.60	Shut-In(2)
218	1099.28	109.53	End Shut-In(2)
218	1559.24	109.54	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	Oil 100%o	0.28
430.00	Water 100%w	6.03
0.00	No Gas in pipe.	0.00
0.00	Gravity=36.5@50degF=37.5 corrected	0.00
0.00	0	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Samuel Gary JR & Associates

**Schepmann-Crow #1-27**

1670 Broadway  
Suite 3300  
Denver, CO 80202  
ATTN: Tom Fertal

**27-17s-10w-Ellsworth**

Job Ticket: 24327      **DST#: 2**

Test Start: 2006.01.16 @ 16:47:06

**Tool Information**

Drill Pipe:	Length: 3323.00 ft	Diameter: 3.80 inches	Volume: 46.61 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: 58000.00 lb
			<u>Total Volume: 46.61 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3336.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3314.00	
Hydraulic tool	5.00			3319.00	
Jars	5.00			3324.00	
Safety Joint	2.00			3326.00	
Packer	5.00			3331.00	27.00      Bottom Of Top Packer
Packer	5.00			3336.00	
Stubb	1.00			3337.00	
Recorder	0.00	6668	Inside	3337.00	
Perforations	5.00			3342.00	
Recorder	0.00	13266	Outside	3342.00	
Bullnose	3.00			3345.00	9.00      Bottom Packers & Anchor

**Total Tool Length: 36.00**



**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Samuel Gary JR & Associates

**Schepmann-Crow #1-27**

1670 Broadway  
Suite 3300  
Denver, CO 80202  
ATTN: Tom Fertal

**27-17s-10w-Ellsworth**

Job Ticket: 24327      **DST#: 2**  
Test Start: 2006.01.16 @ 16:47:06

**Mud and Cushion Information**

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 44.00 sec/qt  
Water Loss: 9.19 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 8700.00 ppm  
Filter Cake: 0.04 inches

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

Oil API:      deg API  
Water Salinity: ppm

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
20.00	Oil 100%o	0.281
430.00	Water 100%w	6.032
0.00	No Gas in pipe.	0.000
0.00	Gravity=36.5@50degF=37.5 corrected	0.000
0.00	0	0.000

Total Length: 450.00 ft      Total Volume: 6.313 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

Serial #: 6668

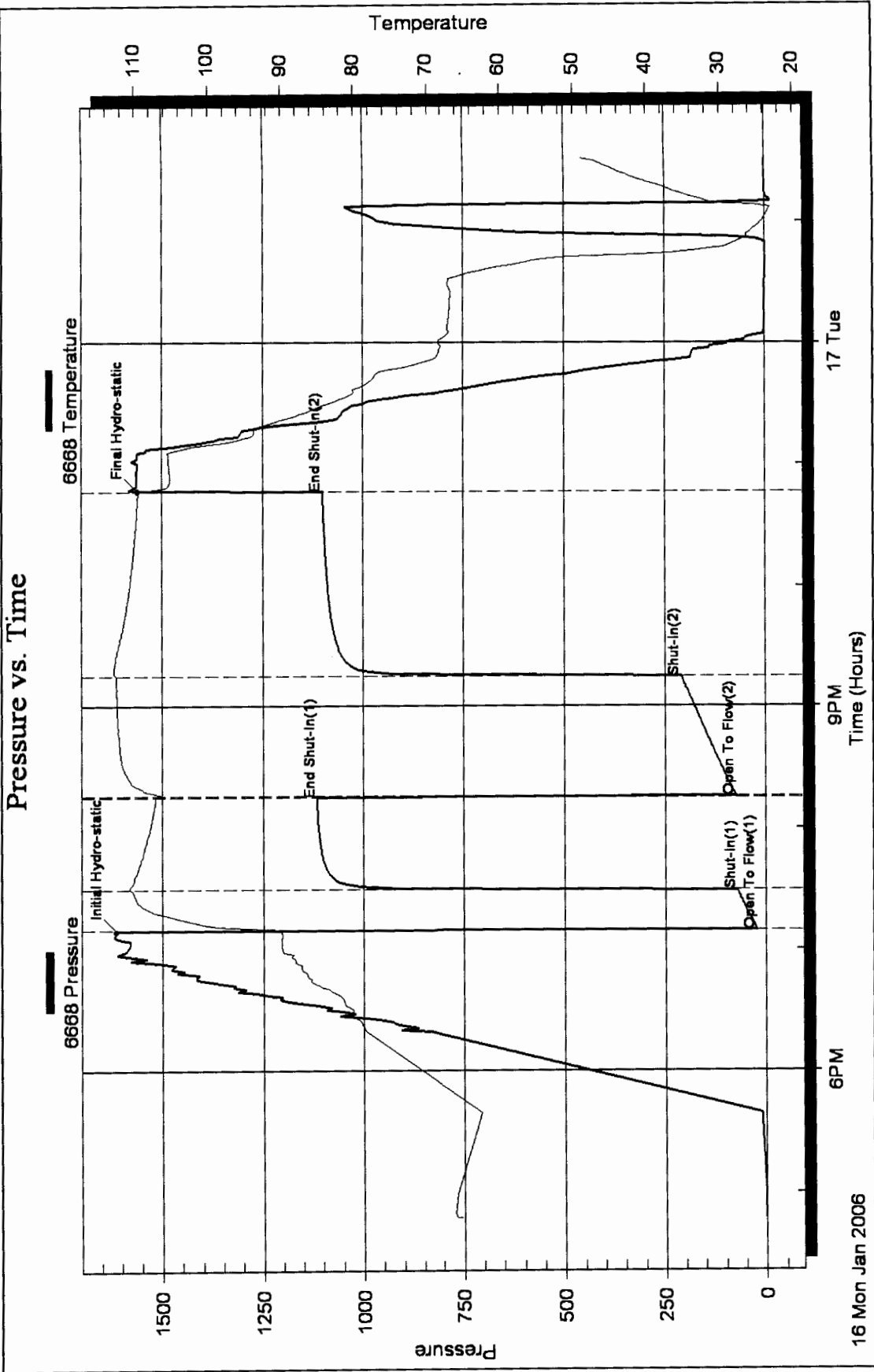
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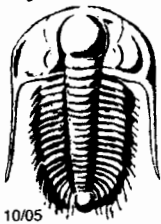
Samuel Gary JR & Associates

27-17s-10w - Elsw orth

DST Test Number: 2

### Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

10/05

8335

No 24326

## Test Ticket

Well Name & No. SCHEPMANN-CROW #1-27 Test No. 1 Date 1-16-06  
 Company Samuel Gary JR. + Associates, Inc. Zone Tested Arbuckle  
 Address 1670 Broadway, Denver, Colorado 80202 (suite 3300) Elevation 1829 KB 1825 GL  
 Co. Rep / Geo. Tom Fertal Rig Petromark Rig #2  
 Location: Sec. 27 Twp. 17S Rge. 10W Co. Ellsworth State Kansas  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3332 - 3340 Initial Str Wt./Lbs. 48000 Unseated Str Wt/Lbs. 48000  
 Anchor Length 8 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 20000  
 Top Packer Depth 3327 Tool Weight 2100  
 Bottom Packer Depth 3332 Hole Size 7 7/8" YES Rubber Size 6 3/4" YES  
 Total Depth 3340 Wt. Pipe Run NONE Drill Collar Run NONE  
 Mud Wt. 9.1 LCM TR Vis. 51 WL 9.6 Drill Pipe Size 4 1/2" X # Ft. Run 3322  
 Blow Description FF: Weak blow @ 1/2" in buckets  
ISE: Bled off, no blowback  
FP: Weak blow on surface of water  
FST: Bled off, no blowback.

Recovery - Total Feet 15 GIP NONE Ft. in DC NONE Ft. in DP 15  
 Rec. 10 Feet of Free Oil %gas 100 %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. 5 Feet of OCM %gas 15 %oil \_\_\_\_\_ %water 85 %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 104.0 °F Gravity 36 1/2 °API D @ 50 °F Corrected Gravity 37 1/2 °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 8300 ppm System

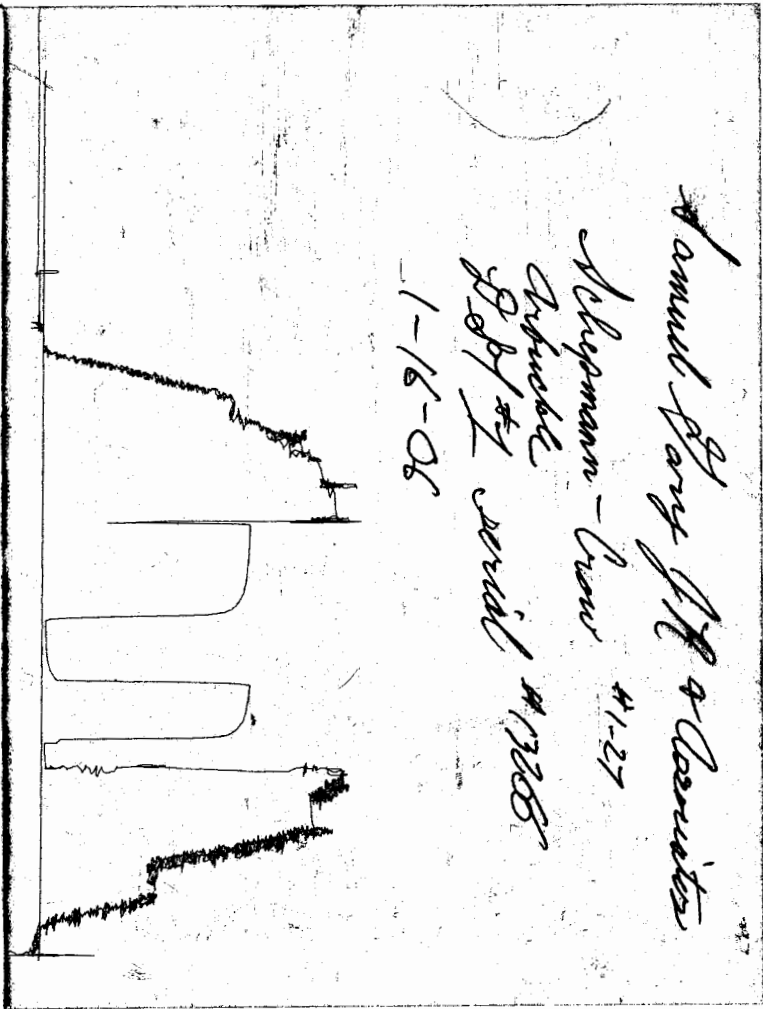
	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1611</u> PSI	<u>6668</u>	<u>100</u>
(B) First Initial Flow Pressure		<u>24</u> PSI	(depth) <u>3333</u>	<u>200</u>
(C) First Final Flow Pressure		<u>19</u> PSI	Recorder No. <u>13266</u>	<u>51</u>
(D) Initial Shut-In Pressure		<u>1127</u> PSI	(depth) <u>3337</u>	<u>35</u>
(E) Second Initial Flow Pressure		<u>22</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>22</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1125</u> PSI	Initial Opening <u>20</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1616</u> PSI	Initial Shut-In <u>45</u>	Shale Packer _____
			Final Flow <u>45</u>	Ruined Packer _____
			Final Shut-In <u>75</u>	Mileage <u>145</u> <u>145</u>
			T-On Location <u>00:45</u>	Sub Total: <u>1430</u>
			T-Started <u>01:12</u>	Std. By <u>1/7/06</u>
			T-Open <u>03:40</u>	Acc. Chg: _____
			T-Pulled <u>06:48</u>	Other: _____
			T-Out <u>09:00</u>	Total: _____

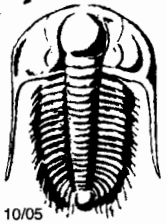
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Approved By Tom Fertal  
 Our Representative Tom Fertal *Thank you*

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 24327

## Test Ticket

Well Name & No. Schepmann - Crow # 1-27 Test No. 2 Date 1-16-06  
 Company Samuel Gary JR + Associates Zone Tested Arbuckle  
 Address 1670 Broadway Suite 3300, Denver, Colorado 80202 Elevation 1829 KB 1825 GL  
 Co. Rep / Geo. Tom Fernal Rig Petromark Rig #2  
 Location: Sec. 27 Twp. 17S Rge. 10W Co. Ellswarden State Kansas  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3336-3345 Initial Str Wt./Lbs. 50000 Unseated Str Wt./Lbs. 50000  
 Anchor Length 9 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 58000  
 Top Packer Depth 3331 Tool Weight 2100  
 Bottom Packer Depth 3336 Hole Size 7 7/8" YES Rubber Size 6 3/4" YES  
 Total Depth 3345 Wt. Pipe Run NONE Drill Collar Run NONE  
 Mud Wt. 9.1 LCM TR Vis. 44 WL 9.2 Drill Pipe Size 4 1/2" XH Ft. Run 3322  
 Blow Description IF: Fair blow building to 8" in the bucket.  
ISI: Bled off, no blowback.  
FF: Fair to strong blow building to BOB in 55 minutes.  
FSI: Bled off, no blowback

Recovery - Total Feet 450 GIP NONE Ft. in DC NONE Ft. in DP 450  
 Rec. 20 Feet of Oil %gas 100 %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. 430 Feet of Water %gas \_\_\_\_\_ %oil 100 %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 109.53 °F Gravity 36 1/2 °API D @ 50 °F Corrected Gravity 37 1/2 °API  
 RW .38-12 @ 41 °F Chlorides 31000 ppm Recovery \_\_\_\_\_ Chlorides 8700 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1613</u> PSI	<u>6668</u>	<u>8 hour</u> ★ <u>100</u>
(B) First Initial Flow Pressure		<u>24</u> PSI	(depth) <u>3337</u>	Jars <u>20</u> ★
(C) First Final Flow Pressure		<u>72</u> PSI	Recorder No. <u>0266</u>	Safety Jt. <u>50</u> ★
(D) Initial Shut-In Pressure		<u>1115</u> PSI	(depth) <u>3342</u>	Circ Sub <u>NC</u> ★
(E) Second Initial Flow Pressure		<u>74</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>210</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1099</u> PSI	Initial Opening <u>20</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1559</u> PSI	Initial Shut-In <u>45</u>	Shale Packer _____
			Final Flow <u>60</u>	Ruined Packer _____
			Final Shut-In <u>90</u>	Mileage <u>145</u> <u>145</u>
			T-On Location <u>16:45</u>	Sub Total: <u>1395</u>
			T-Started <u>16:47</u>	Std. By _____
			T-Open <u>19:09</u>	Acc. Chg: _____
			T-Pulled <u>22:46</u>	Other: _____
			T-Out <u>00:30</u>	Total: _____

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Approved By Ed Muel  
 Our Representative [Signature]

**CHART PAGE**

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

