

DRILL STEM TEST REPORT

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

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Justin Carter

4 18 10W Rice KS

Stumps 3-4

Start Date: 2007.10.07 @ 21:07:48

End Date: 2007.10.08 @ 08:35:33

Job Ticket #: 26935 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 Ste 3300
Denver CO 80202

ATTN: Justin Carter

Stumps 3-4

4 18 10W Rice KS

Job Ticket: 26935

DST#: 1

Test Start: 2007.10.07 @ 21:07:48

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:12:03

Time Test Ended: 08:35:33

Test Type: Conventional Bottom Hole

Tester: Travy Cushenbery

Unit No: 30

Interval: **3214.00 ft (KB) To 3274.00 ft (KB) (TVD)**

Total Depth: 3274.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1785.00 ft (KB)

1775.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6668 Inside

Press@RunDepth: 735.98 psig @ 3214.00 ft (KB)

Start Date: 2007.10.07

End Date: 2007.10.08

Start Time: 21:07:53

End Time: 08:35:33

Capacity: 7000.00 psig

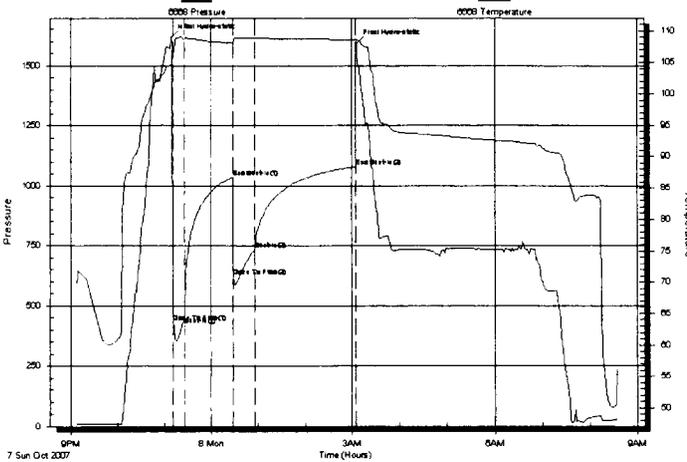
Last Calib.: 2007.10.08

Time On Btm: 2007.10.07 @ 23:09:18

Time Off Btm: 2007.10.08 @ 03:05:48

TEST COMMENT: IF Strong blow BOB in 45 secs.
ISI Bled off No blow back
FF Strong blow BOB in 30secs.
FSI Bled off No blow back (Dropped bar circulated out)

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1617.26	104.64	Initial Hydro-static
3	432.85	106.25	Open To Flow (1)
17	456.94	108.81	Shut-In(1)
79	1036.97	108.13	End Shut-In(1)
79	625.38	108.05	Open To Flow (2)
107	735.98	108.94	Shut-In(2)
235	1079.93	108.56	End Shut-In(2)
237	1592.72	108.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	G Ocwt WM 10%G 10%O 40%W 40%M	2.35

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr & Associates

Stumps 3-4

1670 Broadway Ste 3300
Denver CO 80202

4 18 10W Rice KS

Job Ticket: 26935

DST#: 1

ATTN: Justin Carter

Test Start: 2007.10.07 @ 21:07:48

Tool Information

Drill Pipe:	Length: 3068.00 ft	Diameter: 3.80 inches	Volume: 43.04 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 43.65 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3214.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	88.00 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			3191.00	
Hydraulic tool	5.00			3196.00	
Jars	5.00			3201.00	
Safety Joint	3.00			3204.00	
Packer	5.00			3209.00	28.00 Bottom Of Top Packer
Packer	5.00			3214.00	
Recorder	0.00	6668	Inside	3214.00	
Perforations	6.00			3220.00	
Change Over Sub	1.00			3221.00	
Drill Pipe	33.00			3254.00	
Change Over Sub	1.00			3255.00	
Perforations	16.00			3271.00	
Recorder	0.00	13266	Outside	3271.00	
Bullnose	3.00			3274.00	60.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr & Associates

Stumps 3-4

1670 Broadway Ste 3300
Denver CO 80202

4 18 10W Rice KS

Job Ticket: 26935

DST#: 1

ATTN: Justin Carter

Test Start: 2007.10.07 @ 21:07:48

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:	19000 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in ³	Gas Cushion Type:		
Resistivity: 0.50 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4500.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
248.00	G Ocut WM 10%G 10%O 40%W 40%M	2.349

Total Length: 248.00 ft Total Volume: 2.349 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Total Recovery 1,612' . Only 248 'w as samples out of 4 stands.

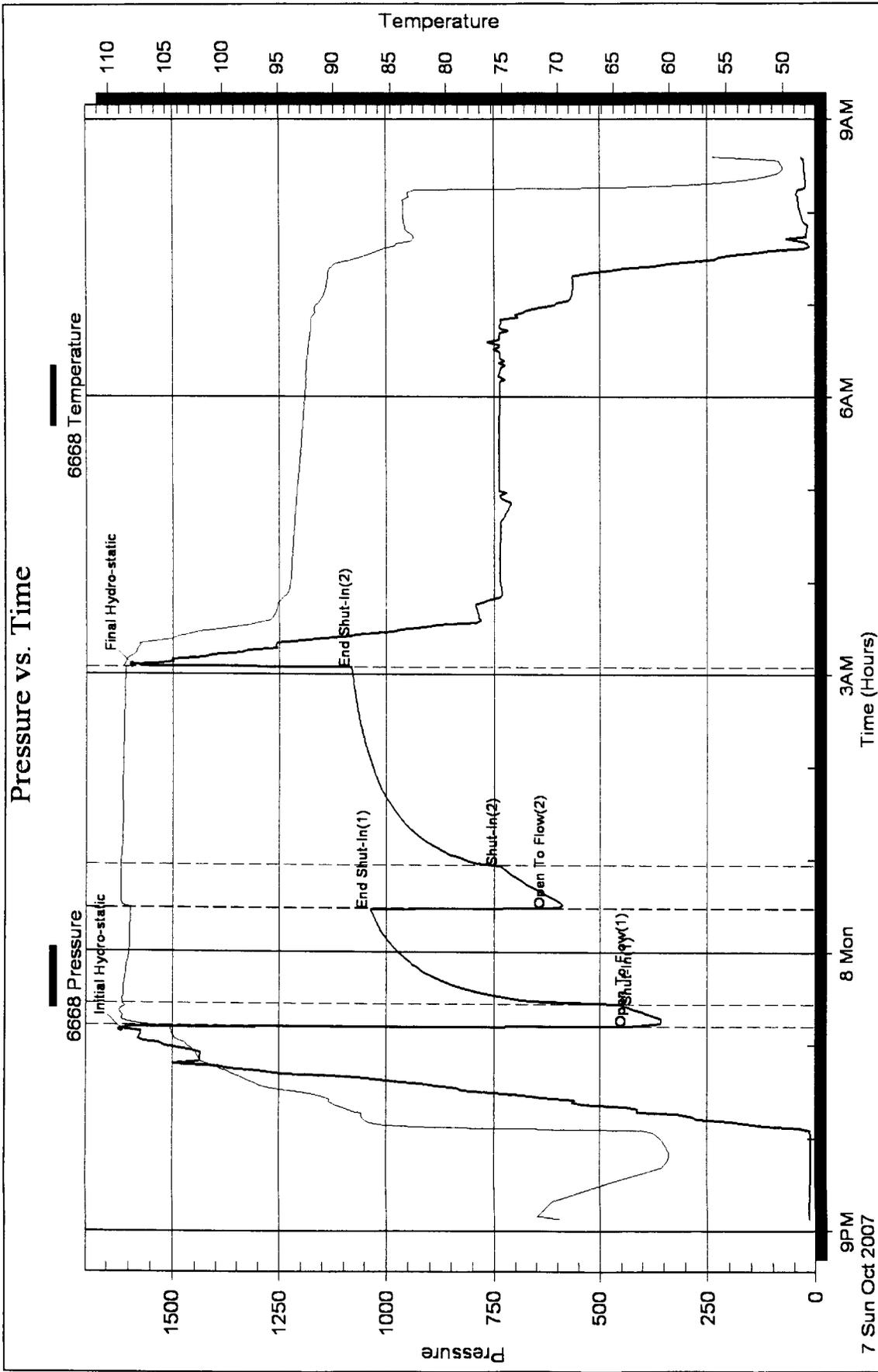
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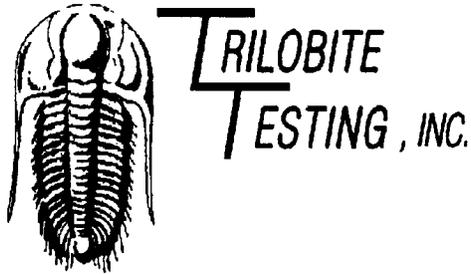
Inside

Samuel Gary Jr & Associates

4 18 10W Rice KS

DST Test Number: 1





DRILL STEM TEST REPORT

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

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Justin Carter

4 18 10W Rice KS

Stumps 3-4

Start Date: 2007.10.09 @ 04:22:28

End Date: 2007.10.09 @ 13:49:13

Job Ticket #: 26936 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr & Associates

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Justin Carter

Stumps 3-4

4 18 10W Rice KS

Job Ticket: 26936

DST#: 2

Test Start: 2007.10.09 @ 04:22:28

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:08:13

Time Test Ended: 13:49:13

Test Type: Conventional Straddle

Tester: Travy Cushenbery

Unit No: 30

Interval: **3258.00 ft (KB) To 3268.00 ft (KB) (TVD)**

Total Depth: 3342.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1785.00 ft (KB)

1775.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6668

Inside

Press@RunDepth: 1140.46 psig @ 3258.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2007.10.09

End Date:

2007.10.09

Last Calib.: 2007.10.09

Start Time: 04:22:33

End Time:

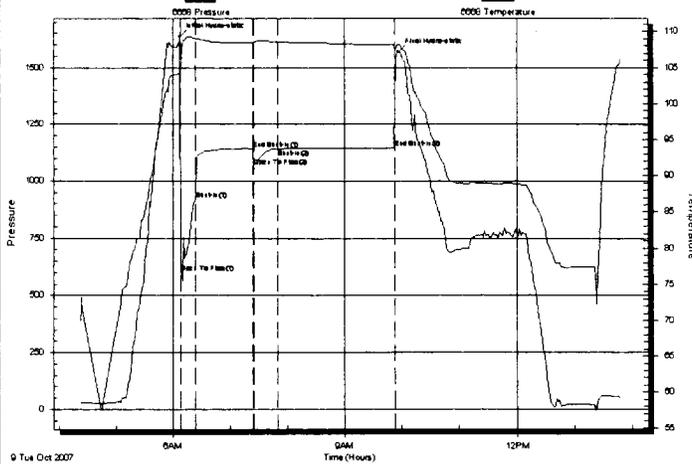
13:49:13

Time On Btm: 2007.10.09 @ 06:07:13

Time Off Btm: 2007.10.09 @ 09:56:58

TEST COMMENT: IF Strong blow BOB in 30 secs.
ISI Bled off No blow back
FF Strong blow BOB immediately After 20 mins Blow decreased to 7" in bucket
FSI Bled off

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1635.25	104.10	Initial Hydro-static
1	599.93	102.94	Open To Flow (1)
17	920.54	109.02	Shut-In (1)
78	1142.64	108.41	End Shut-In (1)
78	1065.59	108.15	Open To Flow (2)
103	1140.46	108.54	Shut-In (2)
226	1143.19	108.12	End Shut-In (2)
230	1568.08	108.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	Mud w/scum of O 100%M	0.61
310.00	WM 30%W 70%M	4.35
310.00	MW 70%W 30%M	4.35
248.00	MW 90%W 10%M	3.48

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr & Associates

Stumps 3-4

1670 Broadway Ste 3300
Denver CO 80202

4 18 10W Rice KS

Job Ticket: 26936

DST#:2

ATTN: Justin Carter

Test Start: 2007.10.09 @ 04:22:28

Tool Information

Drill Pipe:	Length: 3125.00 ft	Diameter: 3.80 inches	Volume: 43.84 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume:	44.45 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3258.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	3265.00 ft			
Interval between Packers:	7.00 ft			
Tool Length:	112.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3235.00	
Hydraulic tool	5.00			3240.00	
Jars	5.00			3245.00	
Safety Joint	3.00			3248.00	
Packer	5.00			3253.00	28.00 Bottom Of Top Packer
Packer	5.00			3258.00	
Recorder	0.00	6668	Inside	3258.00	
Perforations	6.00			3264.00	
Recorder	0.00	13266	Outside	3264.00	
Blank Off Sub	1.00			3265.00	7.00 Tool Interval
Packer	3.00			3268.00	
Stubb	2.00			3270.00	
Change Over Sub	1.00			3271.00	
Drill Pipe	63.00			3334.00	
Change Over Sub	1.00			3335.00	
Perforations	4.00			3339.00	
Recorder	0.00	13363	Outside	3339.00	
Bullnose	3.00			3342.00	77.00 Bottom Packers & Anchor

Total Tool Length: 112.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr & Associates

Stumps 3-4

1670 Broadway Ste 3300
Denver CO 80202

4 18 10W Rice KS

Job Ticket: 26936

DST#: 2

ATTN: Justin Carter

Test Start: 2007.10.09 @ 04:22:28

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:

19000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.40 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	Mud w/scum of O 100%M	0.610
310.00	WM 30%W 70%M	4.348
310.00	MW 70%W 30%M	4.348
248.00	MW 90%W 10%M	3.479

Total Length: 992.00 ft Total Volume: 12.785 bbl

Num Fluid Samples: 0

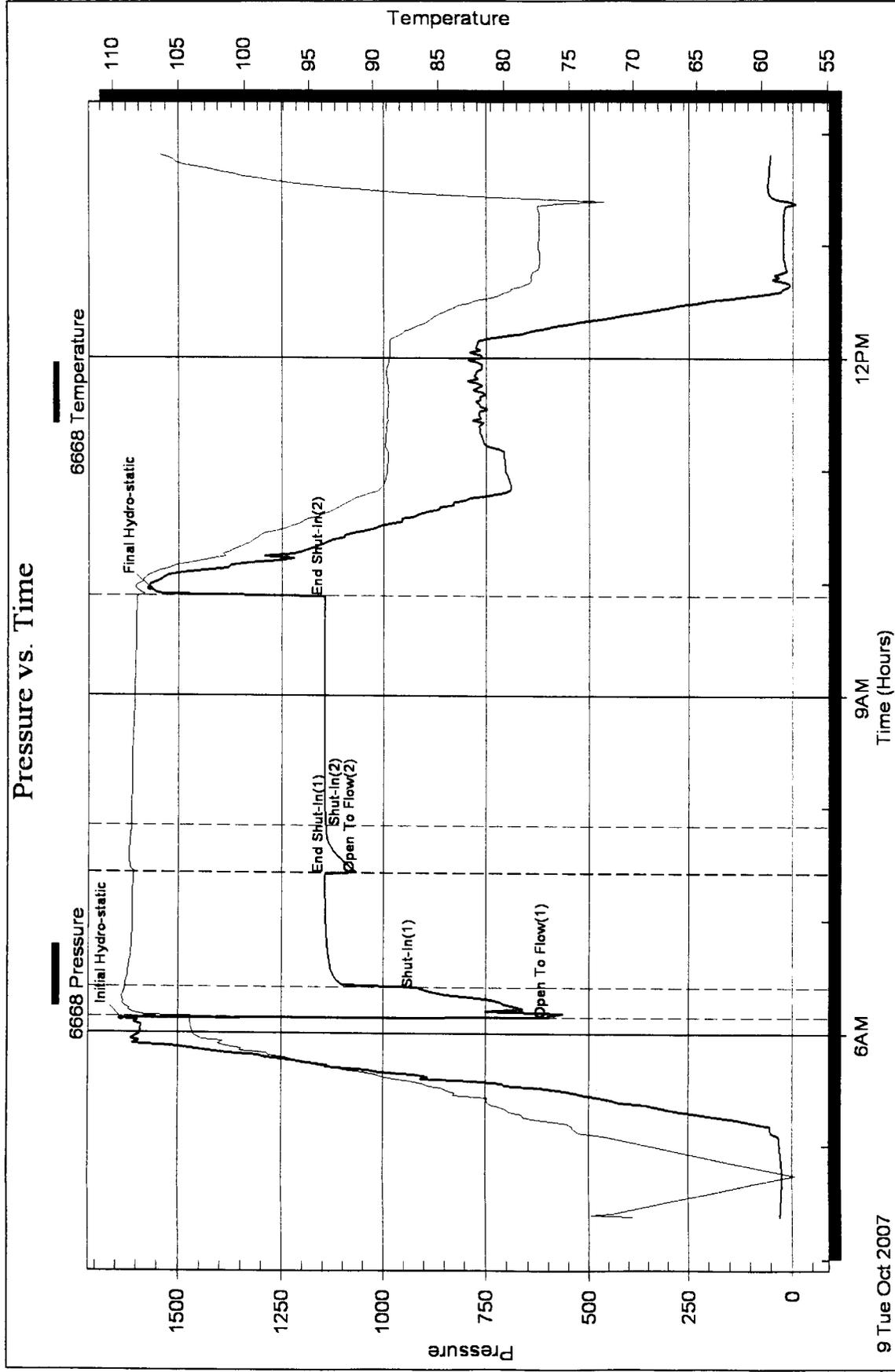
Num Gas Bombs: 0

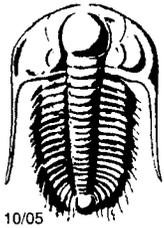
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2,542' total recovery The four shown is out of the stands before dropping bar to circulate out





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

26935
RECEIVED
OCT 15 2007

10747

Test Ticket

BY: _____

Well Name & No. Stumps 3-4 Test No. #1 Date 10-7-07
 Company Sam Gary JR. & Associates. Zone Tested Aubuckle
 Address 1670 Broadway, Suite 3300 DENVER CO 80202 Elevation 1783' KB 1775' GL
 Co. Rep / Geo. Justin CARTER. Rig Southwind Rig #2
 Location: Sec. 4 Twp. 18S Rge. 10W Co. Rice State KS
 Comment: _____ Release date / time: _____

Interval Tested 3214' - 3274' Initial Str Wt./Lbs. 48,000 Unseated Str Wt./Lbs. 56,000
 Anchor Length _____ Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 60,000
 Top Packer Depth _____ 3209' Tool Weight 2,100 lbs.
 Bottom Packer Depth _____ 3214 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth _____ 3274' Wt. Pipe Run NONE Drill Collar Run ~~124'~~ 124'
 Mud Wt. 9.1 LCM 2 Vis. 58 WL 8.0 Drill Pipe Size 4 1/2 XH Ft. Run 3068'

Blow Description IF: Strong blow. B.O.B. 45 SECS.
ISI: Bled off. No blow back.
FF: Strong blow. B.O.B. in 30 SECS.
FSI: Bled off. No blow back.

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>1,662'</u>	<u>—</u>	<u>124'</u>	<u>1,488</u>
Rec. <u>60 248'</u>	Feet of <u>Gassy Oil cut Watery Mud</u>	%gas <u>10</u>	%oil <u>10</u> %water <u>40</u> %mud <u>40</u>
Rec. _____	Feet of _____	%gas _____	%oil _____ %water _____ %mud _____
Rec. _____	Feet of <u>DROPPED BAR.</u>	%gas _____	%oil _____ %water _____ %mud _____
Rec. _____	Feet of <u>Circulated Out.</u>	%gas _____	%oil _____ %water _____ %mud _____
BHT <u>109</u>	°F Gravity _____	°API D @ _____	°F Corrected Gravity _____ °API _____
RW <u>.5</u>	@ <u>50</u> °F	Chlorides _____ ppm Recovery <u>19,000</u>	Chlorides <u>4,500</u> ppm System _____

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1,617</u>	PSI	<u>16668</u>	<u>✓ 11009</u>
(B) First Initial Flow Pressure	<u>433</u>	PSI	(depth) <u>3214'</u>	Jars <u>✓ 250</u>
(C) First Final Flow Pressure	<u>457</u>	PSI	Recorder No. <u>13200</u>	Safety Jt. <u>✓ 75</u>
(D) Initial Shut-In Pressure	<u>1,037</u>	PSI	(depth) <u>3271'</u>	Circ Sub <u>✓ 50</u>
(E) Second Initial Flow Pressure	<u>625</u>	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>736</u>	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>1,080</u>	PSI	Initial Opening <u>15 mins</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1,593</u>	PSI	Initial Shut-In <u>60 mins</u>	Shale Packer _____
			Final Flow <u>30 mins</u>	Ruined Packer _____
			Final Shut-In <u>120 mins</u>	Mileage <u>✓ 156 miles</u>
			T-On Location <u>20:00</u>	Sub Total: _____
			T-Started <u>21:07</u>	Std. By <u>✓ 3 1/2 hrs 35</u>
			T-Open <u>23:09</u>	Acc. Chg: <u>2020</u>
			T-Pulled <u>02:54</u>	Other: _____
			T-Out <u>08:34 08:34</u>	Total: _____

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Approved By [Signature]
 Our Representative Travis L. Bentley

12
7 copies

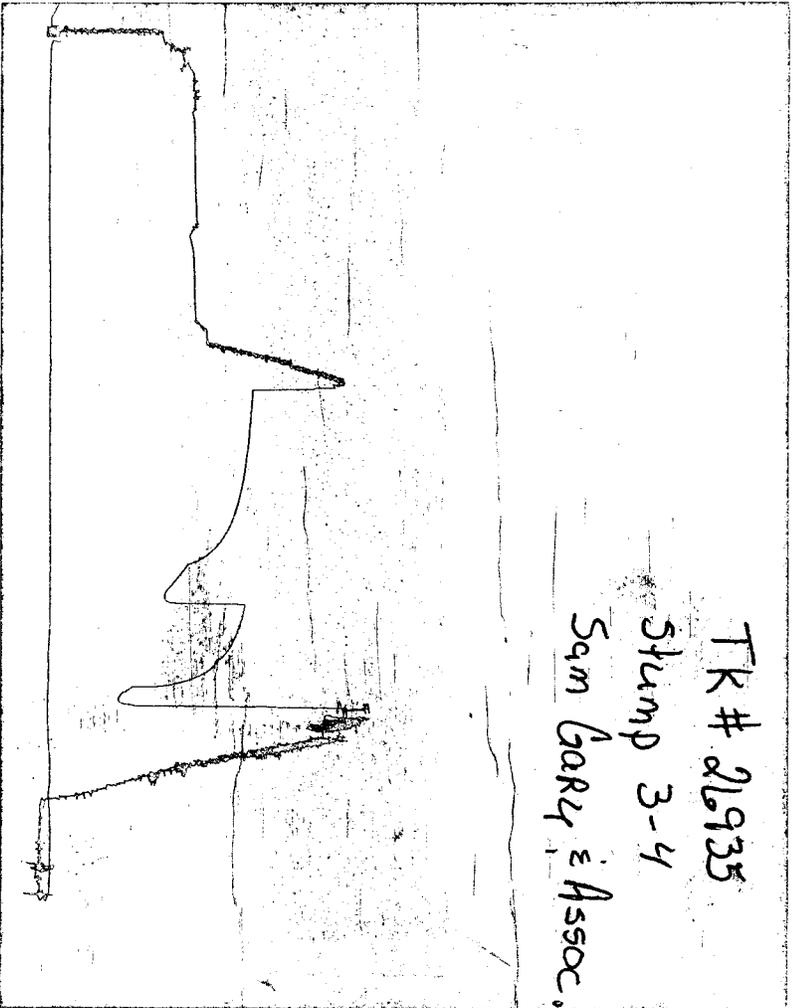
CHART PAGE

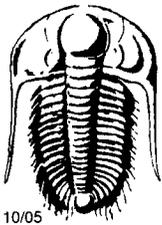
This is a photocopy of the actual AK-1 recorder chart

TR # 26935

Stump 3-4

Sam Gary & Assoc.





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

26936
RECEIVED
OCT 18 2007
BY: _____

Test Ticket

Well Name & No. Stumps 3-4 Test No. #2 Date 10-8-07
 Company Sam Gary Jr. & Associates Zone Tested Albuckle
 Address 1670 Broadway Suite 3300 DENVER CO 80202 Elevation 1785' KB 1775' GL
 Co. Rep / Geo. Justin Carter Rig Southwind Rig #2
 Location: Sec. 4 Twp. 18s Rge. 104 Co. Rice State Ks
 Comment: _____ Release date / time: _____

Interval Tested 3258' - 3268' Initial Str Wt./Lbs. 50,000 Unseated Str Wt./Lbs. 60,000
 Anchor Length 10' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 70,000
 Top Packer Depth (STRADDLE) 3253' Tool Weight 2,100 lbs.
 Bottom Packer Depth 3258' 3268' Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3342' Wt. Pipe Run none Drill Collar Run 124'
 Mud Wt. 9.1 LCM 2# Vis. 49 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 3,125'

Blow Description IF: Strong blow B.O.B. in 30 SECS.
ISI: Bled off, no blow back.
EF: Strong blow B.O.B. immediately. After 20 mins. blow decreased to 7" in bucket.
F5I: Bled off, no blow back.

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>2,542</u>	<u>—</u>	<u>124'</u>	<u>2418'</u>
Rec. <u>124'</u>	Feet of <u>Mud w/ seum of oil</u>	0 %gas 0 %oil 0 %water 100 %mud	
Rec. <u>310'</u>	Feet of <u>Watery Mud</u>	0 %gas 0 %oil 30 %water 70 %mud	
Rec. <u>310'</u>	Feet of <u>Muddy Water</u>	0 %gas 0 %oil 40 %water 30 %mud	
Rec. <u>248'</u>	Feet of <u>Muddy Water</u>	0 %gas 0 %oil 90 %water 10 %mud	
Rec. _____	Feet of _____	%gas %oil %water %mud	

BHT 108 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .4 @ 65 °F Chlorides _____ ppm Recovery 1,000 Chlorides 7,000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1,635</u>	PSI	<u>6668</u>	<u>✓ 1100'</u>
(B) First Initial Flow Pressure	<u>600</u>	PSI	(depth) <u>3258'</u>	Jars <u>✓ 250'</u>
(C) First Final Flow Pressure	<u>921</u>	PSI	Recorder No. <u>13260</u>	Safety Jt. <u>✓ 75'</u>
(D) Initial Shut-In Pressure	<u>1,143</u>	PSI	(depth) <u>3268'</u>	Circ Sub <u>✓ Strapped Bar</u>
(E) Second Initial Flow Pressure	<u>1,060</u>	PSI	Recorder No. <u>13260 13363</u>	Sampler _____
(F) Second Final Flow Pressure	<u>1,140</u>	PSI	(depth) <u>3339'</u>	Straddle <u>✓ 600'</u>
(G) Final Shut-In Pressure	<u>1,143</u>	PSI	Initial Opening <u>15 mins.</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1,568</u>	PSI	Initial Shut-In <u>60 mins.</u>	Shale Packer _____
			Final Flow <u>30 mins.</u>	Ruined Packer <u>145'</u>
			Final Shut-In <u>120 mins.</u>	Mileage <u>✓ 156 miles</u>

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Approved By [Signature]
 Our Representative Travis C. [Signature]

T-On Location 00:57
 T-Started 04:22
 T-Open 06:06
 T-Pulled 09:51
 T-Out 13:48
 Sub Total: _____
 Std. By ✓ 14
 Acc. Chg: _____
 Other: _____
 Total: _____

CHART PAGE

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

TK # 2693L

Rec. 13224

Anchor.

Sam Gary & Assoc.

Stumps 3-4

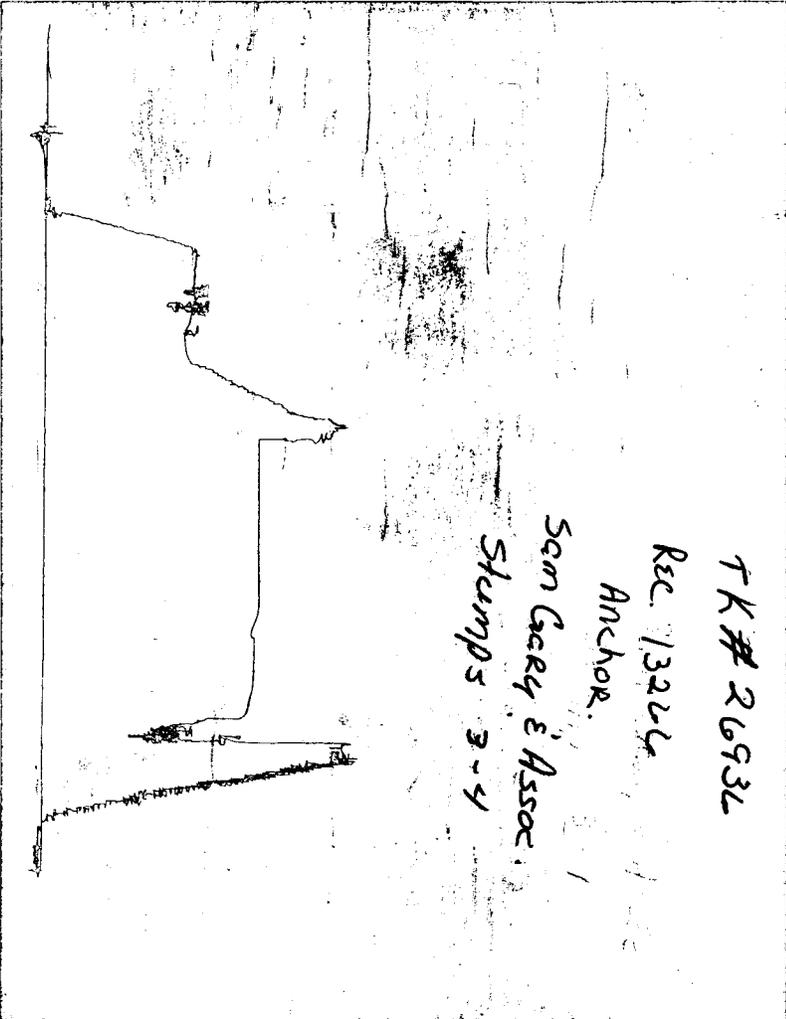


CHART PAGE

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

TK # 20932

Rec. 10330

Tail Pipe

Sam Gary & Assoc.

Stumps 3-4

