

DRILL STEM TEST REPORT

Prepared For: **Sam Gary**

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Tom Fertal

34 18S 10W Rice KS

Zink #2-34

Start Date: 2007.02.12 @ 05:10:07

End Date: 2007.02.12 @ 15:26:22

Job Ticket #: 27050 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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TESTING, INC.

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Zink #2-34

34 18S 10W Rice KS

Job Ticket: 27050

DST#: 1

Test Start: 2007.02.12 @ 05:10:07

GENERAL INFORMATION:

Formation: **Arbuckle**

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

Time Tool Opened: 07:18:52

Time Test Ended: 15:26:22

Test Type: **Conventional Straddle**

Tester: **Zach Stover**

Unit No: **23**

Interval: **3270.00 ft (CF) To 3294.00 ft (CF) (TVD)**

Total Depth: **3294.00 ft (CF) (TVD)**

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

Reference Elevations: **1736.00 ft (KB)**

1730.00 ft (CF)

KB to GRVCF: **6.00 ft**

Serial #: 8289 **Inside**

Press@RunDepth: **306.47 psig @ 3276.00 ft (CF)**

Start Date: **2007.02.12**

End Date:

2007.02.12

Start Time: **05:10:12**

End Time:

15:26:22

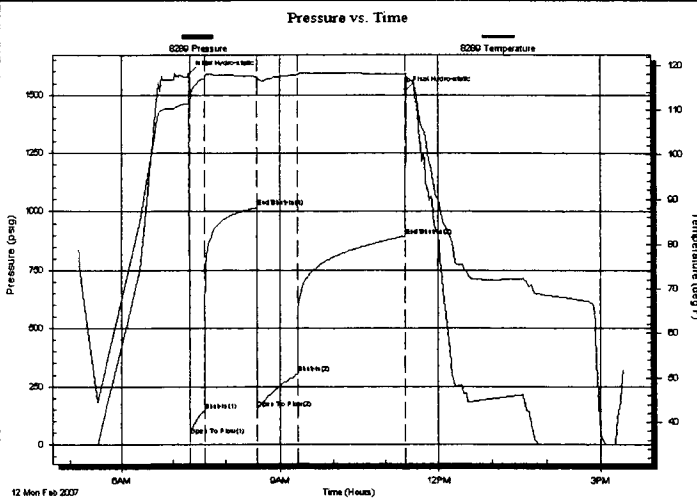
Capacity: **7000.00 psig**

Last Calib.: **2007.02.12**

Time On Btm: **2007.02.12 @ 07:18:37**

Time Off Btm: **2007.02.12 @ 11:23:21**

TEST COMMENT: IF Strong blow BOB in 4 min.
ISI No blow
FF Strong blow BOB in 6 min.
FSI No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1588.08	111.16	Initial Hydro-static
1	35.83	110.75	Open To Flow (1)
17	147.00	117.12	Shut-In (1)
76	1016.59	117.44	End Shut-In (1)
77	154.26	117.07	Open To Flow (2)
122	306.47	117.87	Shut-In (2)
245	896.42	117.94	End Shut-In (2)
245	1520.33	118.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GSY OCM 30%G 30%O 40%M	0.59
120.00	GSY MCO 30%G 50%O 20%M	0.59
120.00	GSY MCO 10%G 70%O 20%M	0.88
480.00	GSY O 15%G 85%O	3.53
0.00	120' Gas in Pipe	0.00

Gas Rates

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

Sam Gary

Zink #2-34

1670 Broadway Ste 3300
Denver CO 80202

34 18S 10W Rice KS

Job Ticket: 27050

DST#: 1

ATTN: Tom Fertal

Test Start: 2007.02.12 @ 05:10:07

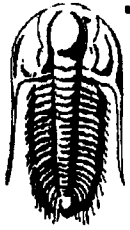
Tool Information

Drill Pipe:	Length: 3029.00 ft	Diameter: 2.75 inches	Volume: 22.25 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 208.00 ft	Diameter: 2.25 inches	Volume: 1.02 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	44000.00 lb
		Total Volume:	23.42 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3270.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	3294.00 ft				
Interval between Packers:	24.00 ft				
Tool Length:	119.00 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			3244.00	
Shut In Tool	5.00			3249.00	
Hydraulic tool	5.00			3254.00	
Jars	5.00			3259.00	
Safety Joint	2.00			3261.00	
Packer	4.00			3265.00	27.00 Bottom Of Top Packer
Packer	5.00			3270.00	
Stubb	1.00			3271.00	
Perforations	5.00			3276.00	
Recorder	0.00	8289	Inside	3276.00	
Perforations	15.00			3291.00	
Recorder	0.00	13290	Outside	3291.00	
Blank Off Sub	3.00			3294.00	24.00 Tool Interval
Packer	5.00			3299.00	
Change Over Sub	1.00			3300.00	
Blank Spacing	59.00			3359.00	
Recorder	0.00	13789	Outside	3359.00	
Change Over Sub	1.00			3360.00	
Bullnose	2.00			3362.00	68.00 Bottom Packers & Anchor

Total Tool Length: 119.00



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FLUID SUMMARY

Sam Gary

Zink #2-34

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Denver CO 80202

34 18S 10W Rice KS

Job Ticket: 27050

DST#: 1

ATTN: Tom Fertal

Test Start: 2007.02.12 @ 05:10:07

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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GSY OCM 30%G 30%O 40%M	0.590
120.00	GSY MCO 30%G 50%O 20%M	0.593
120.00	GSY MCO 10%G 70%O 20%M	0.882
480.00	GSY O 15%G 85%O	3.526
0.00	120' Gas in Pipe	0.000

Total Length: 840.00 ft

Total Volume: 8.176 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

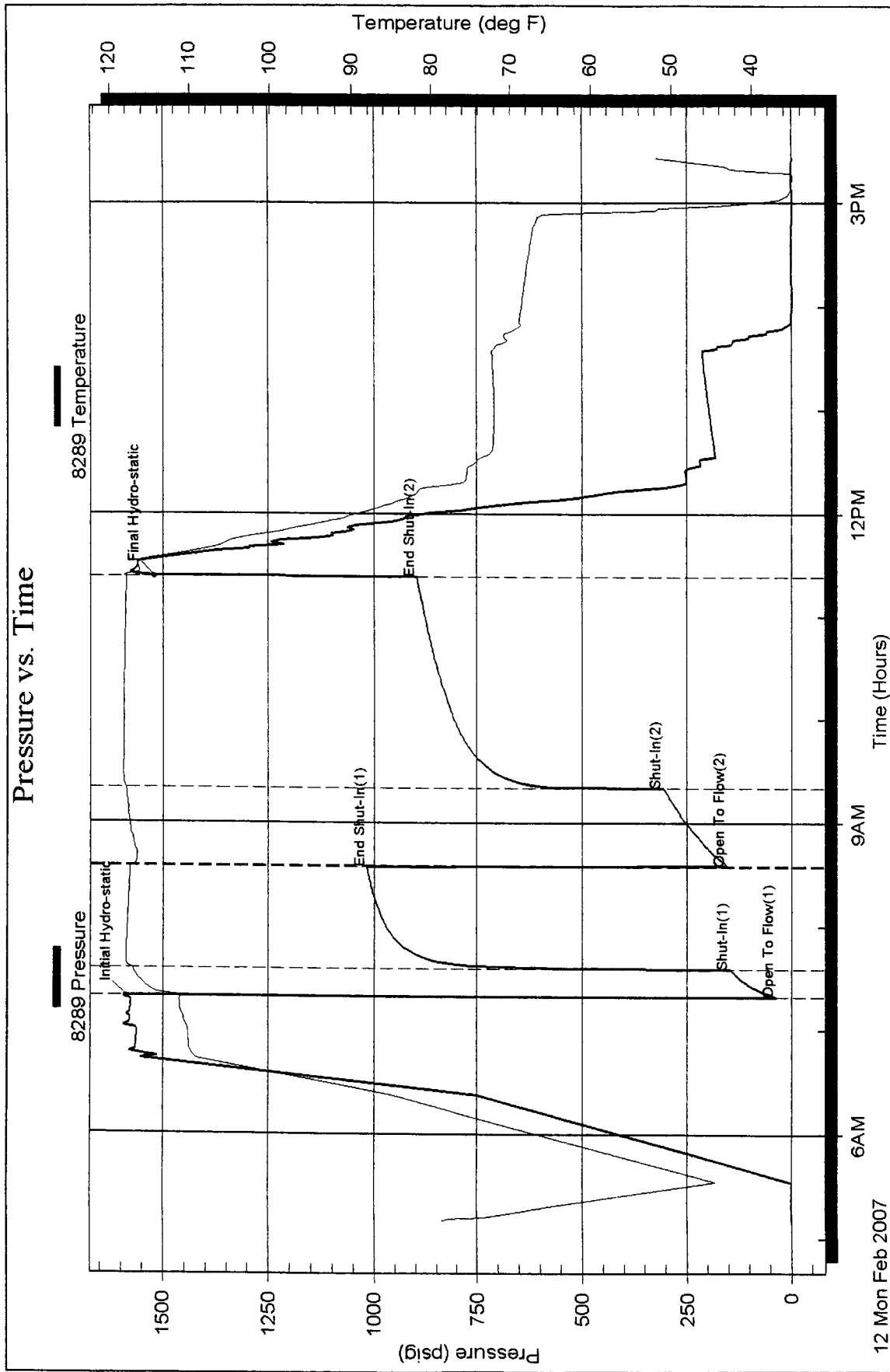
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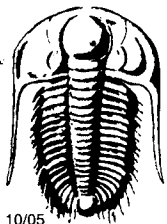
Inside

Sam Gary

34 18S 10W Rice KS

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

27050

NO COST

Test Ticket

Well Name & No. Link # 2-34 Test No. 1 Date 2-11-07
 Company Sam Mary Zone Tested Arbuckle
 Address 1670 Broadway Suite 3300 Denver Co 80202 Elevation 1736 KB 1730 GL
 Co. Rep / Geo. Tom Ferial Rig Excell #10
 Location: Sec. 34 Twp. 18S Rge. 10W Co. Rice State KS
 Comment: _____ Release date / time: _____

Interval Tested 3270 - 3294 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. 44000
 Anchor Length 24' Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 44000
 Top Packer Depth 3265 Tool Weight 2100
 Bottom Packer Depth 3270 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3360 Wt. Pipe Run 214 Drill Collar Run 239/180
 Mud Wt. 9.3 LCM - Vis. 54 WL 7.6 Drill Pipe Size 4" Ft. Run 2815 2823
 Blow Description IF: Strong blow. BOB in 4 min.
ISI: No blow.
FF: Strong blow. BOB in 6 min.
FSI: No blow.

Recovery - Total Feet 840 GIP 120 Ft. in DC 239 180 Ft. in DP 600 659
 Rec. 120 Feet of GSY OCM 30% gas 30% oil %water 40% mud
 Rec. 120 Feet of GSY MCO 30% gas 50% oil %water 20% mud
 Rec. 120 Feet of GSY MCO 10% gas 70% oil %water 20% mud
 Rec. 480 Feet of GSY O 15% gas 85% oil %water %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 BHT 118 °F Gravity 27 °API D @ 50 °F Corrected Gravity 27.6 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 6000 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud		<u>1576</u> PSI	Recorder No.	<u>8289</u>	Test	☒
(B) First Initial Flow Pressure		<u>36</u> PSI	(depth)	<u>3276</u>	Jars	☒
(C) First Final Flow Pressure		<u>147</u> PSI	Recorder No.	<u>13290</u>	Safety Jt.	☒
(D) Initial Shut-In Pressure		<u>1017</u> PSI	(depth)	<u>3291</u>	Circ Sub	
(E) Second Initial Flow Pressure		<u>154</u> PSI	Recorder No.	<u>13789</u>	Sampler	
(F) Second Final Flow Pressure		<u>306</u> PSI	(depth)	<u>3352</u>	Straddle	☒
(G) Final Shut-In Pressure		<u>896</u> PSI	Initial Opening	<u>15</u>	Ext. Packer	
(Q) Final Hydrostatic Mud		<u>1578</u> PSI	Initial Shut-In	<u>60</u>	Shale Packer	

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Approved By [Signature]
 Our Representative Zachary R. Oliver
 T-On Location 2:45
 T-Started 5:10
 T-Open 7:22
 T-Pulled 11:22
 T-Out 15:26
 Final Flow 45
 Final Shut-In 120
 Sub Total: _____
 Std. By M/C
 Acc. Chg: _____
 Other: _____
 Total: _____

7 copies

CHART PAGE

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

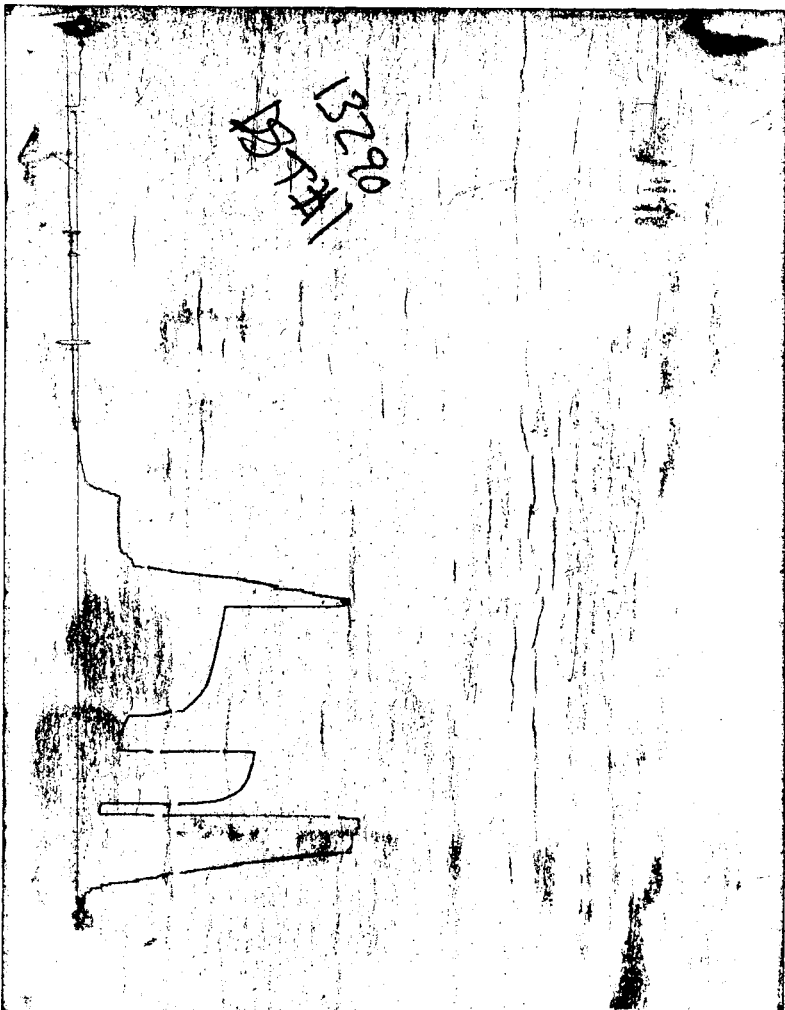


CHART PAGE

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

