



## DRILL STEM TEST REPORT

Prepared For: **Sam Gary Jr. & Assoc.inc.**

1515 Wynkoop  
Suite 700  
Denver Co. 80202

ATTN: Neil Sharp

**22-16s-16w Rush Co.**

**Hoss 1-22**

Start Date: 2010.12.03 @ 17:51:05

End Date: 2010.12.04 @ 01:20:39

Job Ticket #: 039994                      DST #: 2

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Sam Gary Jr. & Assoc.inc.

**Hoss 1-22**

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Suite 700  
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Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

## GENERAL INFORMATION:

Formation: **LKC"H"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:49:20

Time Test Ended: 01:20:39

Test Type: Conventional Bottom Hole

Tester: Andy Carreira

Unit No: 31

**Interval: 3364.00 ft (KB) To 3411.00 ft (KB) (TVD)**

Reference Elevations: 1939.00 ft (KB)

Total Depth: 3411.00 ft (KB) (TVD)

1931.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8352 Outside**

Press @ Run Depth: 30.85 psig @ 3371.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.03

End Date:

2010.12.04

Last Calib.: 2010.12.04

Start Time: 17:51:05

End Time:

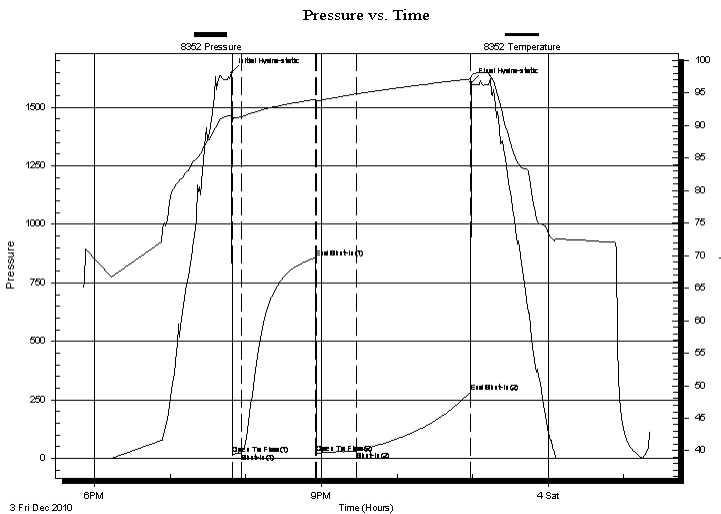
01:20:40

Time On Btm: 2010.12.03 @ 19:48:50

Time Off Btm: 2010.12.03 @ 22:58:50

**TEST COMMENT:** IF: Weak, half inch blow .  
IS: No Return  
FF: Weak, Surface blow  
FS: No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1647.53	91.47	Initial Hydro-static
1	16.49	90.51	Open To Flow (1)
8	21.94	91.35	Shut-In(1)
67	856.93	94.02	End Shut-In(1)
67	22.42	93.75	Open To Flow (2)
99	30.85	94.83	Shut-In(2)
190	282.81	97.16	End Shut-In(2)
190	1606.53	97.56	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w ith slight oil specks	0.02

## Gas Rates

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







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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Sam Gary Jr. & Assoc.inc.

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**22-16s-16w Rush Co.**

Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

## Tool Information

Drill Pipe:	Length: 3330.00 ft	Diameter: 3.80 inches	Volume: 46.71 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 30.81 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 46.86 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	31.81 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	3364.00 ft			Final	45000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	47.00 ft				
Tool Length:	82.00 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			3330.00	
Recorder	0.00	8650	Fluid	3330.00	
Blank Spacing	4.00			3334.00	
Shut In Tool	5.00			3339.00	
Sampler	3.00			3342.00	
Hydraulic tool	5.00			3347.00	
Jars	5.00			3352.00	
Safety Joint	3.00			3355.00	
Packer	5.00			3360.00	35.00 Bottom Of Top Packer
Packer	4.00			3364.00	
Stubb	1.00			3365.00	
Perforations	5.00			3370.00	
Change Over Sub	1.00			3371.00	
Recorder	0.00	8017	Inside	3371.00	
Recorder	0.00	8352	Outside	3371.00	
Drill Pipe	31.00			3402.00	
Change Over Sub	1.00			3403.00	
Perforations	5.00			3408.00	
Bullnose	3.00			3411.00	47.00 Bottom Packers & Anchor

**Total Tool Length: 82.00**



**TRILOBITE**  
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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

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**22-16s-16w Rush Co.**

Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

**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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud with slight oil specks	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Recovery= Gas=1/20th CF Oil=specks Mud=1200ML  
Pressure= 250 LBS



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**GAS RATES**

Sam Gary Jr. & Assoc.inc.

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**22-16s-16w Rush Co.**

Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

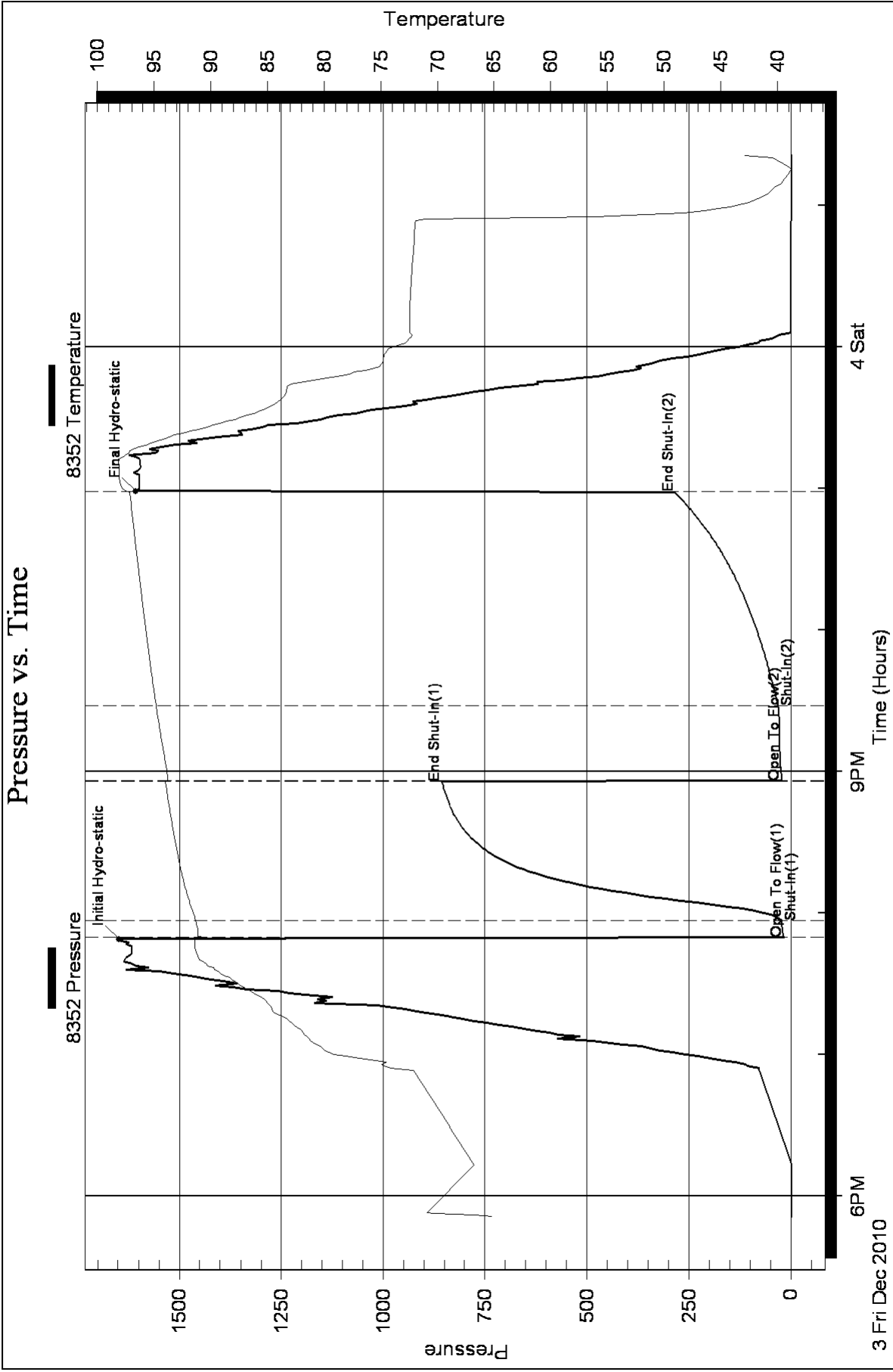
## Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

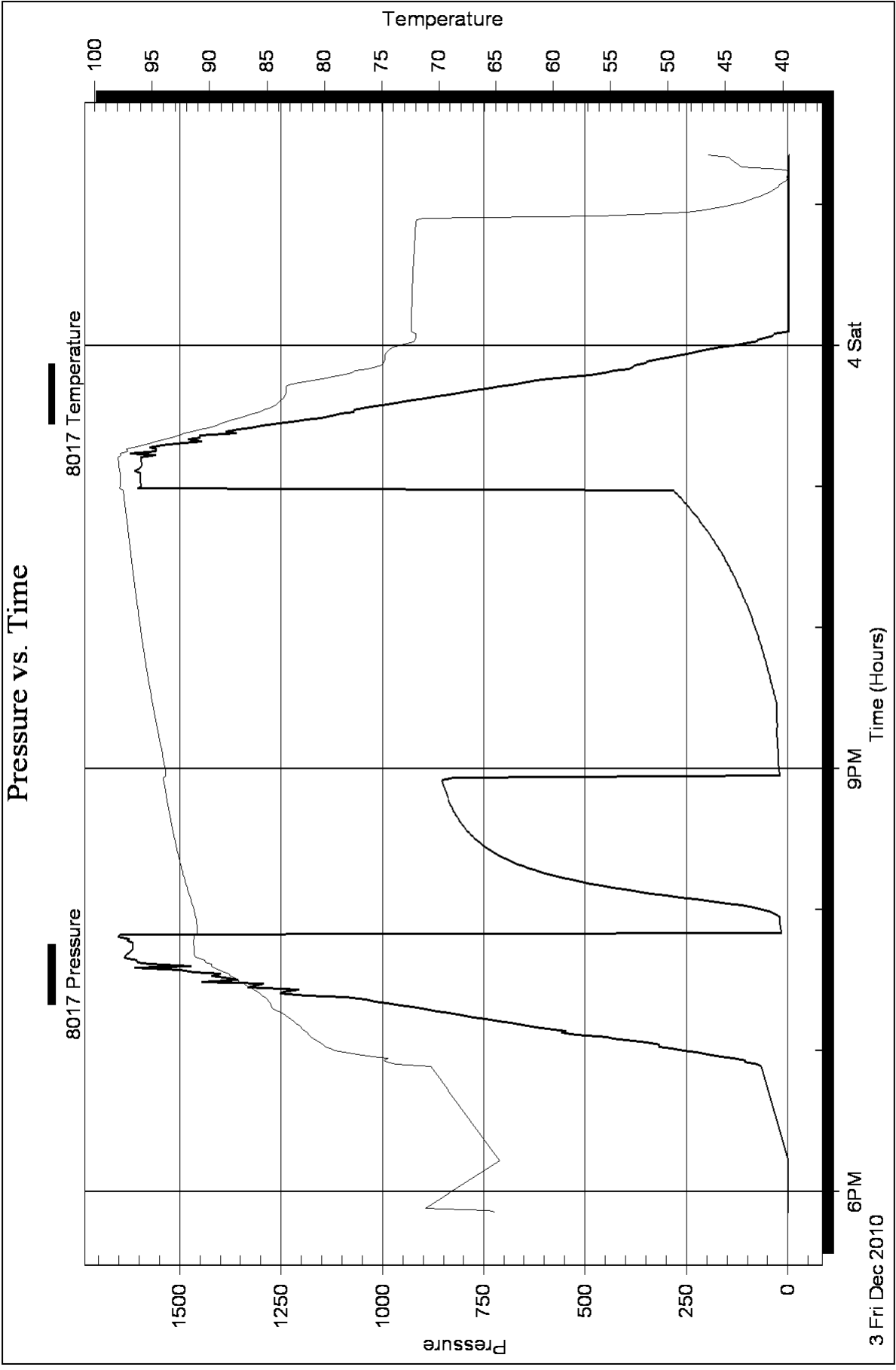
Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
		0.00	0.00	0.00

### Pressure vs. Time







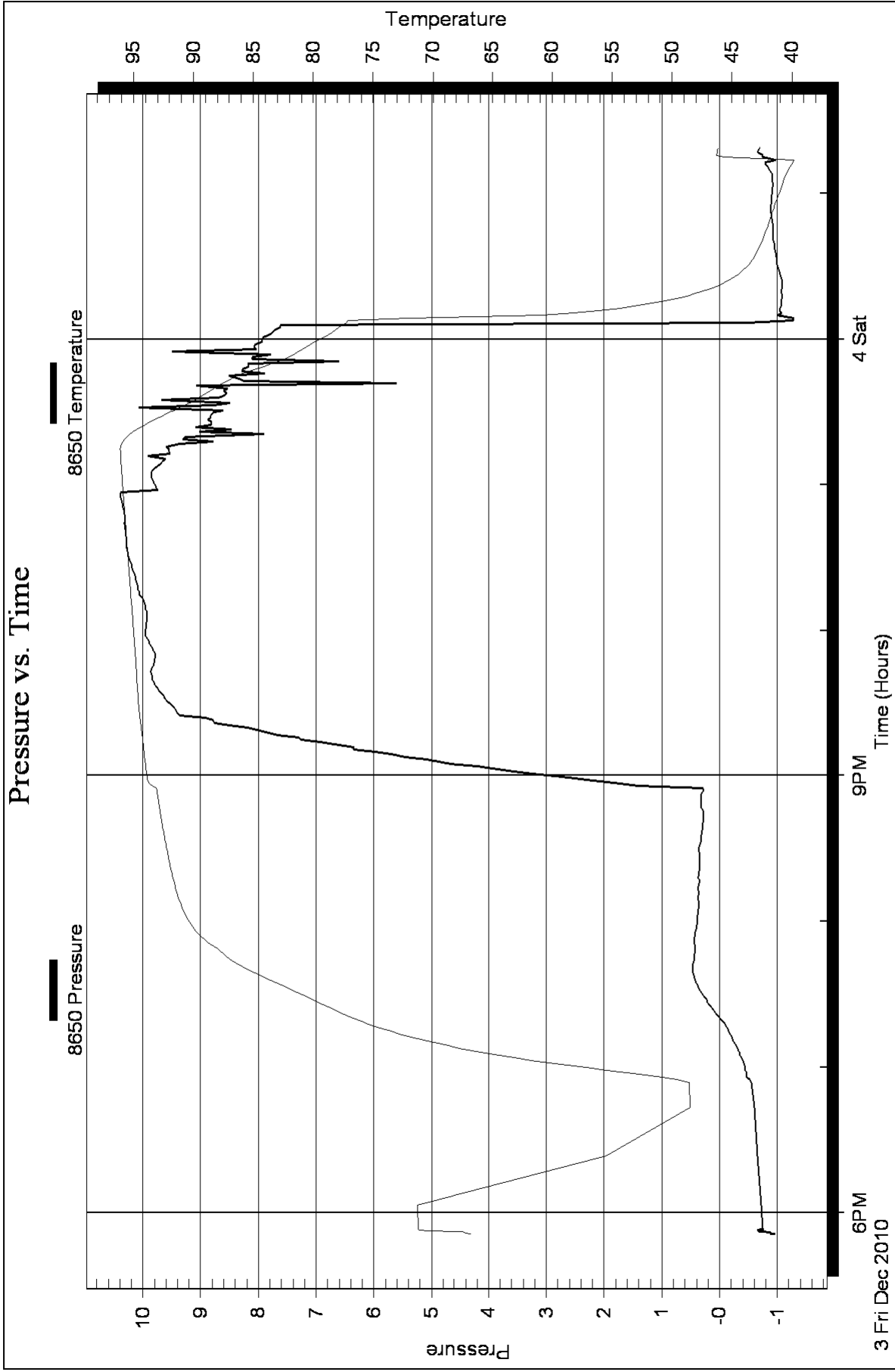
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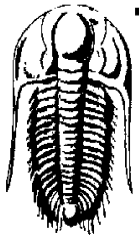
Fluid

Sam Gary Jr. & Assoc. inc.

22-16s-16w Rush Co.

DST Test Number: 2





**TRILOBITE  
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## DRILL STEM TESTING - DATA LISTING

Sam Gary Jr. & Assoc.inc.

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Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

Serial # 8352 Outside				Serial # 8352 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.61	65.2		95.6	1267.18	86.6
	0.6	-1.58	66.2		96.8	1295.85	87.0
	1.2	-1.28	69.5		97.9	1412.51	87.4
	1.8	-1.32	70.9		99.1	1456.50	87.6
	51.9	-1.50	52.4		100.3	1390.65	88.0
	62.9	77.06	74.1		101.4	1451.33	88.5
	64.1	107.99	74.9		102.6	1607.43	89.1
	65.3	137.44	74.6		103.8	1547.42	89.4
	66.4	167.20	75.6		104.9	1576.49	89.7
	67.6	232.80	77.4		106.1	1605.16	90.2
	68.8	258.27	79.2		107.3	1638.63	90.5
	69.9	289.37	79.8		108.4	1636.77	90.9
	71.1	319.07	80.2		109.6	1629.80	91.1
	72.3	372.82	80.4		110.8	1621.91	91.2
	73.4	409.90	80.9		111.9	1616.25	91.3
	74.6	484.88	81.2		113.1	1616.74	91.4
	75.8	502.53	81.5		114.3	1616.49	91.4
	76.9	584.36	81.8		115.4	1630.73	91.5
	78.1	591.15	81.9		116.6	1642.58	91.4
	79.3	683.47	82.1		117.4	1647.91	91.5
	80.4	683.70	82.4		117.6	1647.76	91.5
	81.6	756.12	82.8	Initial Hydro-static	117.8	1647.53	91.5
	82.8	776.46	83.1		117.9	1646.94	91.5
	83.9	848.82	83.4		118.1	1647.08	91.5
	85.1	868.40	83.9	Open To Flow (1)	118.3	16.49	90.5
	86.3	895.99	84.4		118.4	17.61	91.1
	87.4	950.29	84.6		118.6	17.80	91.1
	88.6	991.51	84.7		118.8	17.99	91.1
	89.8	1061.49	84.8		119.9	18.90	91.1
	90.9	1081.88	85.1		121.1	20.56	91.2
	92.1	1161.51	85.3		122.3	21.09	91.2
	93.3	1173.54	85.8		123.4	21.25	91.2
	94.4	1275.85	86.2		124.6	21.32	91.3

Printing every 7 samples

Serial # 8352 Outside				Serial # 8352 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
Shut-In(1)	125.1	21.35	91.3		167.9	817.02	93.5
	125.3	21.33	91.3		169.1	821.13	93.5
	125.4	21.94	91.4		170.3	824.82	93.6
	125.6	23.11	91.4		171.4	828.37	93.6
	125.8	24.37	91.4		172.6	831.98	93.6
	125.9	25.80	91.4		173.8	835.18	93.7
	127.1	37.58	91.5		174.9	837.91	93.7
	128.3	55.87	91.5		176.1	840.75	93.8
	129.4	84.22	91.6		177.3	843.33	93.8
	130.6	125.37	91.7		178.4	845.94	93.8
	131.8	176.98	91.8		179.6	848.27	93.9
	132.9	231.62	91.9		180.8	850.50	93.9
	134.1	284.94	91.9		181.9	852.69	93.9
	135.3	335.11	92.0		183.1	854.69	94.0
	136.4	381.61	92.1		184.1	856.68	94.0
	137.6	424.65	92.2		184.3	856.81	94.0
	138.8	464.12	92.2	End Shut-In(1)	184.4	856.92	94.0
	139.9	499.94	92.3		184.6	50.21	93.5
	141.1	532.48	92.4	Open To Flow (2)	184.8	22.42	93.7
	142.3	561.83	92.4		184.9	22.31	93.8
	143.4	588.41	92.5		186.1	22.72	93.8
	144.6	612.17	92.5		187.3	23.17	93.9
	145.8	633.71	92.6		188.4	24.05	93.9
	146.9	653.13	92.7		189.6	24.65	93.9
	148.1	670.61	92.7		190.8	25.23	94.0
	149.3	686.57	92.8		191.9	26.07	94.0
	150.4	700.92	92.8		193.1	26.12	94.0
	151.6	713.95	92.9		194.3	26.11	94.1
	152.8	725.96	92.9		195.4	26.35	94.1
	153.9	736.86	93.0		196.6	26.42	94.2
	155.1	746.72	93.0		197.8	27.02	94.2
	156.3	755.95	93.1		198.9	27.52	94.2
	157.4	764.32	93.1		200.1	27.58	94.3
	158.6	772.12	93.1		201.3	27.96	94.3
	159.8	779.28	93.2		202.4	28.07	94.4
	160.9	785.83	93.2		203.6	28.16	94.4
	162.1	792.04	93.3		204.8	28.13	94.5
	163.3	797.78	93.3		205.9	28.19	94.5
	164.4	803.17	93.4		207.1	27.98	94.5
	165.6	808.13	93.4		208.3	28.87	94.6
	166.8	812.63	93.4		209.4	28.66	94.6

Printing every 7 samples

Serial # 8352 Outside				Serial # 8352 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	210.6	28.80	94.7		253.1	92.23	95.9
	211.8	28.68	94.7		254.3	94.77	95.9
	212.9	29.63	94.7		255.4	97.32	95.9
	214.1	29.69	94.8		256.6	99.85	95.9
	215.3	29.21	94.8		257.8	102.45	96.0
	216.1	30.38	94.8		258.9	105.19	96.0
	216.3	30.64	94.8		260.1	107.93	96.0
Shut-In(2)	216.4	30.85	94.8		261.3	110.69	96.1
	216.6	31.08	94.8		262.4	113.58	96.1
	216.8	31.29	94.8		263.6	116.70	96.1
	216.9	31.60	94.9		264.8	119.43	96.2
	218.1	33.22	94.9		265.9	122.44	96.2
	219.3	34.89	94.9		267.1	125.77	96.2
	220.4	36.56	95.0		268.3	128.68	96.2
	221.6	38.33	95.0		269.4	131.84	96.3
	222.8	39.99	95.0		270.6	135.43	96.3
	223.9	41.65	95.1		271.8	138.54	96.3
	225.1	43.32	95.1		272.9	142.21	96.4
	226.3	45.24	95.1		274.1	145.75	96.4
	227.4	46.97	95.2		275.3	149.12	96.4
	228.6	48.65	95.2		276.4	152.74	96.4
	229.8	50.56	95.2		277.6	156.50	96.5
	230.9	52.34	95.3		278.8	160.38	96.5
	232.1	54.28	95.3		279.9	164.31	96.5
	233.3	56.06	95.3		281.1	168.57	96.6
	234.4	57.88	95.4		282.3	172.36	96.6
	235.6	59.83	95.4		283.4	176.53	96.6
	236.8	61.70	95.4		284.6	180.82	96.6
	237.9	63.65	95.5		285.8	185.25	96.7
	239.1	65.79	95.5		286.9	189.60	96.7
	240.3	67.71	95.5		288.1	194.22	96.7
	241.4	69.82	95.5		289.3	198.87	96.7
	242.6	71.95	95.6		290.4	203.61	96.8
	243.8	74.07	95.6		291.6	208.49	96.8
	244.9	76.17	95.6		292.8	213.47	96.8
	246.1	78.33	95.7		293.9	218.67	96.9
	247.3	80.52	95.7		295.1	223.76	96.9
	248.4	82.83	95.7		296.3	229.05	96.9
	249.6	85.19	95.8		297.4	234.48	96.9
	250.8	87.45	95.8		298.6	240.09	97.0
	251.9	89.76	95.8		299.8	245.79	97.0

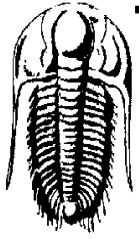
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Serial # 8352 Outside				Serial # 8352 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	300.9	251.57	97.0		339.8	1078.00	86.8
	302.1	257.53	97.0		340.9	1083.08	86.0
	303.3	263.53	97.1		342.1	1028.31	85.4
	304.4	269.70	97.1		343.3	991.04	84.9
	305.6	276.08	97.1		344.4	959.36	84.5
	306.8	282.47	97.1		345.6	885.99	84.0
	306.9	283.37	97.2		346.8	871.62	83.8
	307.1	284.25	97.2		347.9	836.29	83.5
End Shut-In(2)	307.3	282.81	97.2		349.1	743.69	83.4
	307.4	1584.12	97.7		350.3	744.36	83.3
	307.6	1609.92	97.5		351.4	671.06	83.3
Final Hydro-static	307.8	1606.53	97.6		352.6	652.53	83.1
	307.9	1604.05	97.6		353.8	622.09	81.8
	308.1	1601.99	97.7		354.9	562.94	80.6
	308.3	1600.39	97.7		356.1	530.49	79.0
	309.4	1594.34	97.9		357.3	469.29	77.7
	310.6	1597.00	98.0		358.4	439.94	76.7
	311.8	1597.66	98.0		359.6	367.17	75.6
	312.9	1596.52	98.1		360.8	352.51	75.1
	314.1	1596.54	98.1		361.9	350.54	74.9
	315.3	1614.39	98.1		363.1	320.95	74.8
	316.4	1600.97	98.1		364.3	290.29	74.8
	317.6	1595.16	98.1		365.4	226.15	74.7
	318.8	1595.40	98.1		366.6	199.32	74.6
	319.9	1596.21	98.1		367.8	169.10	74.4
	321.1	1597.40	98.1		368.9	103.56	73.9
	322.3	1601.81	97.7		370.1	76.88	73.1
	323.4	1616.80	97.3		371.3	76.91	72.7
	324.6	1550.68	97.2		372.4	40.29	72.4
	325.8	1516.51	96.7		373.6	39.82	72.3
	326.9	1476.76	95.9		374.8	-1.12	72.5
	328.1	1489.97	95.3		375.9	-1.09	72.5
	329.3	1424.99	94.4		377.1	-1.07	72.5
	330.4	1407.14	93.7		378.3	-1.05	72.5
	331.6	1396.40	93.1		379.4	-1.06	72.5
	332.8	1357.62	92.0		380.6	-1.10	72.5
	333.9	1272.49	90.9		381.8	-1.12	72.5
	335.1	1246.59	90.0		382.9	-1.12	72.5
	336.3	1213.76	89.2		384.1	-1.11	72.5
	337.4	1203.23	88.3		385.3	-1.08	72.5
	338.6	1173.49	87.5		386.4	-1.07	72.5

Printing every 7 samples

Serial # 8352 Outside				Serial # 8352 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	387.6	-1.08	72.5		435.4	-1.61	40.4
	388.8	-1.09	72.4		436.6	-1.58	40.3
	389.9	-1.10	72.4		437.8	-1.55	39.7
	391.1	-1.09	72.4		438.9	-1.54	39.5
	392.3	-1.12	72.4		440.1	-1.53	39.3
	393.4	-1.11	72.4		441.3	-1.50	39.1
	394.6	-1.07	72.4		442.4	-1.51	38.9
	395.8	-1.08	72.4		443.6	-1.54	38.8
	396.9	-1.08	72.4		444.8	-1.55	39.0
	398.1	-1.07	72.3		445.9	-1.55	39.4
	399.3	-1.08	72.3		447.1	-1.54	39.8
	400.4	-1.09	72.3		448.3	-1.59	40.2
	401.6	-1.10	72.3		449.4	-1.71	40.8
	402.8	-1.09	72.3		449.6	-1.78	43.0
	403.9	-1.09	72.3				
	405.1	-1.08	72.2				
	406.3	-1.10	72.2				
	407.4	-1.12	72.2				
	408.6	-1.11	72.2				
	409.8	-1.11	72.2				
	410.9	-1.11	72.1				
	412.1	-1.13	72.1				
	413.3	-1.14	72.1				
	414.4	-1.15	72.1				
	415.6	-1.13	72.1				
	416.8	-1.11	72.1				
	417.9	-1.10	72.1				
	419.1	-1.12	72.1				
	420.3	-1.15	72.0				
	421.4	-1.10	72.0				
	422.6	-1.22	71.9				
	423.8	-1.21	56.1				
	424.9	-1.71	50.2				
	426.1	-1.76	46.8				
	427.3	-1.75	45.0				
	428.4	-1.72	43.7				
	429.6	-1.71	42.8				
	430.8	-1.68	42.1				
	431.9	-1.65	41.5				
	433.1	-1.62	41.0				
	434.3	-1.61	40.7				

Printing every 7 samples



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TESTING - DATA LISTING**

Sam Gary Jr. & Assoc.inc.

**Hoss 1-22**

1515 Wynkoop  
Suite 700  
Denver Co. 80202  
ATTN: Neil Sharp

**22-16s-16w Rush Co.**

Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

<b>Serial # 8017 Inside</b>				<b>Serial # 8017 Inside</b>			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.75	65.1		95.6	1266.21	86.5
	0.6	-1.49	65.4		96.8	1295.05	87.0
	1.2	-1.40	68.5		97.9	1445.31	87.4
	1.8	-1.37	71.2		99.1	1376.15	87.6
	51.9	-2.32	50.8		100.3	1434.24	88.1
	62.9	75.06	73.7		101.4	1450.36	88.5
	64.1	106.06	74.7		102.6	1431.79	89.0
	65.3	135.56	74.5		103.8	1610.36	89.6
	66.4	165.58	75.9		104.9	1579.21	89.9
	67.6	212.03	77.7		106.1	1604.23	90.2
	68.8	256.53	79.1		107.3	1616.43	90.5
	69.9	287.44	79.7		108.4	1636.24	91.2
	71.1	317.26	80.1		109.6	1629.23	91.3
	72.3	432.84	80.4		110.8	1621.30	91.3
	73.4	408.44	80.9		111.9	1615.10	91.4
	74.6	444.02	81.2		113.1	1615.81	91.4
	75.8	500.97	81.4		114.3	1615.21	91.4
	76.9	563.08	81.7		115.4	1630.34	91.4
	78.1	589.73	81.9		116.6	1642.37	91.3
	79.3	606.39	82.1		117.8	1646.79	91.4
	80.4	682.29	82.5		118.9	15.69	91.1
	81.6	693.76	82.8		120.1	16.51	91.1
	82.8	775.38	83.1		121.3	18.27	91.1
	83.9	822.33	83.4		122.4	18.70	91.1
	85.1	867.36	83.9		123.6	18.87	91.1
	86.3	894.76	84.5		124.8	18.95	91.2
	87.4	941.56	84.6		125.9	22.94	91.2
	88.6	990.02	84.7		127.1	34.60	91.3
	89.8	1101.45	84.9		128.3	52.53	91.3
	90.9	1080.80	85.1		129.4	79.82	91.4
	92.1	1189.29	85.4		130.6	120.32	91.5
	93.3	1172.32	85.7		131.8	171.77	91.5
	94.4	1335.67	86.2		132.9	226.50	91.6

Printing every 7 samples



Serial # 8017 Inside				Serial # 8017 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	134.1	279.99	91.7		181.9	850.40	94.0
	135.3	330.20	91.8		183.1	852.46	94.0
	136.4	377.30	91.9		184.3	854.58	94.0
	137.6	420.55	91.9		185.4	19.72	93.8
	138.8	459.99	92.0		186.6	20.31	93.8
	139.9	496.06	92.1		187.8	21.07	93.9
	141.1	528.78	92.1		188.9	21.98	93.9
	142.3	558.26	92.2		190.1	22.70	93.9
	143.4	584.92	92.3		191.3	23.09	94.0
	144.6	608.89	92.3		192.4	23.81	94.0
	145.8	630.45	92.4		193.6	23.82	94.0
	146.9	649.99	92.5		194.8	23.89	94.1
	148.1	667.59	92.5		195.9	23.75	94.1
	149.3	683.64	92.6		197.1	24.22	94.2
	150.4	698.11	92.6		198.3	24.77	94.2
	151.6	711.25	92.7		199.4	25.50	94.3
	152.8	723.25	92.8		200.6	24.79	94.3
	153.9	734.11	92.8		201.8	25.67	94.4
	155.1	744.12	92.9		202.9	25.68	94.4
	156.3	753.36	92.9		204.1	25.67	94.5
	157.4	761.79	93.0		205.3	26.00	94.5
	158.6	769.53	93.0		206.4	25.41	94.6
	159.8	776.77	93.1		207.6	25.83	94.6
	160.9	783.52	93.1		208.8	26.35	94.7
	162.1	789.50	93.2		209.9	26.17	94.7
	163.3	795.24	93.2		211.1	26.47	94.8
	164.4	800.50	93.3		212.3	26.48	94.8
	165.6	805.58	93.3		213.4	27.02	94.9
	166.8	810.14	93.4		214.6	27.35	94.9
	167.9	814.55	93.4		215.8	27.23	94.9
	169.1	818.61	93.5		216.9	28.78	95.0
	170.3	822.43	93.5		218.1	30.42	95.0
	171.4	826.23	93.6		219.3	31.92	95.1
	172.6	829.34	93.6		220.4	33.64	95.1
	173.8	832.62	93.7		221.6	35.29	95.2
	174.9	835.49	93.7		222.8	36.83	95.2
	176.1	838.43	93.7		223.9	38.52	95.2
	177.3	841.04	93.8		225.1	40.26	95.3
	178.4	843.52	93.8		226.3	42.13	95.3
	179.6	845.90	93.9		227.4	43.78	95.4
	180.8	848.28	93.9		228.6	45.53	95.4

Printing every 7 samples

Serial # 8017 Inside				Serial # 8017 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	229.8	47.23	95.4		277.6	153.75	96.8
	230.9	49.11	95.5		278.8	157.52	96.8
	232.1	50.94	95.5		279.9	161.41	96.9
	233.3	52.93	95.6		281.1	165.48	96.9
	234.4	54.67	95.6		282.3	169.64	96.9
	235.6	56.62	95.6		283.4	173.76	96.9
	236.8	58.55	95.7		284.6	178.14	97.0
	237.9	60.39	95.7		285.8	182.43	97.0
	239.1	62.49	95.7		286.9	187.09	97.0
	240.3	64.42	95.8		288.1	191.53	97.1
	241.4	66.57	95.8		289.3	196.25	97.1
	242.6	68.66	95.8		290.4	201.01	97.1
	243.8	70.70	95.9		291.6	205.99	97.1
	244.9	72.87	95.9		292.8	210.80	97.2
	246.1	75.07	95.9		293.9	215.90	97.2
	247.3	77.37	96.0		295.1	221.19	97.2
	248.4	79.56	96.0		296.3	226.35	97.3
	249.6	81.94	96.0		297.4	231.80	97.3
	250.8	84.30	96.1		298.6	237.41	97.3
	251.9	86.73	96.1		299.8	242.93	97.3
	253.1	89.09	96.1		300.9	248.88	97.4
	254.3	91.61	96.2		302.1	254.75	97.4
	255.4	94.11	96.2		303.3	260.77	97.4
	256.6	96.73	96.2		304.4	266.91	97.5
	257.8	99.46	96.3		305.6	273.25	97.5
	258.9	102.09	96.3		306.8	279.65	97.5
	260.1	104.86	96.3		307.9	1603.72	97.9
	261.3	107.59	96.4		309.1	1593.96	97.8
	262.4	110.48	96.4		310.3	1597.55	97.8
	263.6	113.35	96.4		311.4	1596.03	97.8
	264.8	116.31	96.5		312.6	1595.74	97.8
	265.9	119.45	96.5		313.8	1596.08	97.8
	267.1	122.57	96.5		314.9	1620.85	97.8
	268.3	125.68	96.6		316.1	1603.59	97.9
	269.4	128.90	96.6		317.3	1595.90	97.9
	270.6	132.54	96.6		318.4	1591.01	97.9
	271.8	135.94	96.6		319.6	1596.67	97.9
	272.9	139.38	96.7		320.8	1594.92	97.9
	274.1	142.74	96.7		321.9	1530.85	97.7
	275.3	146.27	96.7		323.1	1620.33	97.5
	276.4	150.26	96.8		324.3	1604.48	97.2

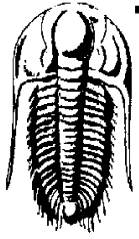
Printing every 7 samples

Serial # 8017 Inside				Serial # 8017 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	325.4	1573.25	96.7		373.3	38.22	72.0
	326.6	1489.89	95.6		374.4	-2.19	72.4
	327.8	1466.53	94.9		375.6	-2.24	72.4
	328.9	1450.97	93.9		376.8	-2.28	72.4
	330.1	1410.55	93.1		377.9	-2.34	72.4
	331.3	1360.39	92.2		379.1	-2.35	72.4
	332.4	1315.18	91.3		380.3	-2.34	72.4
	333.6	1325.87	90.2		381.4	-2.34	72.4
	334.8	1296.35	89.4		382.6	-2.34	72.4
	335.9	1264.63	88.7		383.8	-2.34	72.4
	337.1	1187.77	88.0		384.9	-2.37	72.4
	338.3	1169.61	87.1		386.1	-2.38	72.4
	339.4	1141.74	86.3		387.3	-2.37	72.4
	340.6	1051.79	85.6		388.4	-2.37	72.4
	341.8	1050.34	85.0		389.6	-2.36	72.4
	342.9	1018.05	84.5		390.8	-2.37	72.4
	344.1	985.62	84.1		391.9	-2.39	72.3
	345.3	927.41	83.8		393.1	-2.38	72.3
	346.4	887.38	83.6		394.3	-2.38	72.3
	347.6	842.34	83.4		395.4	-2.37	72.3
	348.8	803.54	83.3		396.6	-2.35	72.3
	349.9	720.72	83.3		397.8	-2.35	72.3
	351.1	712.11	83.3		398.9	-2.37	72.3
	352.3	638.44	83.1		400.1	-2.39	72.3
	353.4	620.84	81.4		401.3	-2.40	72.3
	354.6	589.43	80.2		402.4	-2.36	72.3
	355.8	527.81	78.9		403.6	-2.37	72.2
	356.9	499.41	77.7		404.8	-2.39	72.2
	358.1	434.36	77.1		405.9	-2.36	72.2
	359.3	408.66	75.6		407.1	-2.36	72.2
	360.4	378.05	75.1		408.3	-2.38	72.2
	361.6	349.72	74.8		409.4	-2.37	72.2
	362.8	319.88	74.8		410.6	-2.37	72.1
	363.9	288.67	74.7		411.8	-2.35	72.1
	365.1	257.84	74.7		412.9	-2.36	72.1
	366.3	225.88	74.5		414.1	-2.38	72.1
	367.4	166.02	74.3		415.3	-2.38	72.1
	368.6	136.51	73.6		416.4	-2.37	72.1
	369.8	105.84	72.7		417.6	-2.35	72.1
	370.9	75.68	72.1		418.8	-2.37	72.1
	372.1	53.68	72.0		419.9	-2.41	72.0

Printing every 7 samples

<b>Serial # 8017 Inside</b>				<b>Serial # 8650 Fluid</b>			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	421.1	-2.41	72.0				
	422.3	-2.30	72.0				
	423.4	-2.27	59.4				
	424.6	-2.42	51.2				
	425.8	-2.52	47.7				
	426.9	-2.55	45.9				
	428.1	-2.53	44.7				
	429.3	-2.50	43.8				
	430.4	-2.48	43.0				
	431.6	-2.46	42.3				
	432.8	-2.44	41.7				
	433.9	-2.44	41.1				
	435.1	-2.45	40.7				
	436.3	-2.44	40.4				
	437.4	-2.42	40.2				
	438.6	-2.43	39.8				
	439.8	-2.44	39.6				
	440.9	-2.43	39.6				
	442.1	-2.39	39.5				
	443.3	-2.45	39.4				
	444.4	-2.51	43.5				
	445.6	-2.47	43.9				
	446.8	-2.48	44.2				
	447.9	-2.50	44.5				
	449.1	-2.41	44.8				
	449.6	-2.69	46.5				

Printing every 3 samples



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TESTING - DATA LISTING**

Sam Gary Jr. & Assoc.inc.

**Hoss 1-22**

1515 Wynkoop  
Suite 700  
Denver Co. 80202  
ATTN: Neil Sharp

**22-16s-16w Rush Co.**

Job Ticket: 039994

**DST#: 2**

Test Start: 2010.12.03 @ 17:51:05

<b>Serial # 8650 Fluid</b>				<b>Serial # 8650 Fluid</b>			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-0.95	66.8		1.6	-0.65	71.2
	0.1	-0.91	66.9		1.7	-0.67	71.2
	0.1	-0.89	67.0		1.8	-0.67	71.2
	0.2	-0.89	67.0		1.8	-0.70	71.2
	0.2	-0.89	67.1		1.9	-0.76	71.2
	0.3	-0.88	67.1		1.9	-0.76	71.2
	0.3	-0.87	67.1		2.0	-0.75	71.2
	0.3	-0.88	67.2		12.0	-0.72	71.3
	0.4	-0.87	67.2		42.0	-0.64	51.4
	0.4	-0.88	67.2		62.5	-0.55	48.5
	0.5	-0.89	67.2		64.0	-0.50	50.2
	0.6	-0.88	67.3		65.5	-0.47	52.2
	0.6	-0.89	67.3		67.0	-0.46	54.6
	0.6	-0.90	67.3		68.5	-0.44	57.1
	0.7	-0.90	67.3		70.0	-0.43	59.5
	0.8	-0.88	67.3		71.5	-0.41	61.7
	0.8	-0.86	67.3		73.0	-0.37	63.8
	0.9	-0.81	67.4		74.5	-0.35	65.6
	0.9	-0.77	67.4		76.0	-0.32	67.2
	0.9	-0.74	67.6		77.5	-0.28	68.7
	1.0	-0.72	67.8		79.0	-0.25	70.1
	1.0	-0.70	68.1		80.5	-0.23	71.3
	1.1	-0.69	68.5		82.0	-0.20	72.4
	1.1	-0.68	68.9		83.5	-0.16	73.5
	1.2	-0.66	69.3		85.0	-0.13	74.5
	1.3	-0.66	69.8		86.5	-0.09	75.4
	1.3	-0.66	70.2		88.0	-0.03	76.2
	1.4	-0.66	70.5		89.5	0.02	77.0
	1.4	-0.66	70.7		91.0	0.07	77.7
	1.5	-0.66	70.9		92.5	0.12	78.3
	1.5	-0.65	71.0		94.0	0.16	79.0
	1.5	-0.65	71.1		95.5	0.21	79.6
	1.6	-0.64	71.1		97.0	0.24	80.3

Printing every 3 samples

Serial # 8650				Serial # 8650			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	0.29	80.9		160.0	0.34	92.3
	100.0	0.33	81.6		161.5	0.33	92.3
	101.5	0.36	82.2		163.0	0.32	92.4
	103.0	0.40	82.9		164.5	0.32	92.5
	104.5	0.42	83.5		166.0	0.30	92.5
	106.0	0.44	84.2		167.5	0.29	92.6
	107.5	0.45	84.9		169.0	0.29	92.6
	109.0	0.47	85.5		170.5	0.28	92.7
	110.5	0.47	86.1		172.0	0.28	92.7
	112.0	0.46	86.6		173.5	0.27	92.8
	113.5	0.44	87.0		175.0	0.30	92.8
	115.0	0.44	87.4		176.5	0.31	92.9
	116.5	0.42	87.8		178.0	0.31	92.9
	118.0	0.43	88.1		179.5	0.31	93.0
	119.5	0.43	88.6		181.0	0.31	93.0
	121.0	0.43	89.0		182.5	0.28	93.1
	122.5	0.43	89.3		184.0	0.38	93.1
	124.0	0.42	89.7		185.5	1.72	93.7
	125.5	0.41	89.9		187.0	2.29	93.8
	127.0	0.39	90.1		188.5	2.85	93.9
	128.5	0.39	90.3		190.0	3.39	93.9
	130.0	0.38	90.5		191.5	3.93	94.0
	131.5	0.38	90.7		193.0	4.44	94.0
	133.0	0.37	90.8		194.5	4.88	94.0
	134.5	0.35	90.9		196.0	5.33	94.1
	136.0	0.36	91.1		197.5	5.70	94.1
	137.5	0.37	91.2		199.0	6.10	94.1
	139.0	0.36	91.3		200.5	6.35	94.2
	140.5	0.36	91.4		202.0	6.76	94.2
	142.0	0.37	91.4		203.5	7.27	94.2
	143.5	0.37	91.5		205.0	7.49	94.3
	145.0	0.35	91.6		206.5	7.87	94.3
	146.5	0.36	91.7		208.0	8.12	94.4
	148.0	0.36	91.8		209.5	8.50	94.4
	149.5	0.35	91.8		211.0	9.18	94.4
	151.0	0.34	91.9		212.5	8.92	94.5
	152.5	0.35	92.0		214.0	9.39	94.5
	154.0	0.35	92.0		215.5	9.42	94.5
	155.5	0.35	92.1		217.0	9.48	94.6
	157.0	0.35	92.2		218.5	9.53	94.6
	158.5	0.35	92.2		220.0	9.60	94.6

Printing every 3 samples

Serial # 8650				Serial # 8650			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	9.64	94.6		283.0	10.28	95.5
	223.0	9.69	94.6		284.5	10.28	95.5
	224.5	9.75	94.7		286.0	10.28	95.6
	226.0	9.78	94.7		287.5	10.29	95.6
	227.5	9.81	94.7		289.0	10.29	95.6
	229.0	9.84	94.7		290.5	10.30	95.6
	230.5	9.85	94.7		292.0	10.31	95.7
	232.0	9.86	94.8		293.5	10.32	95.7
	233.5	9.84	94.8		295.0	10.31	95.7
	235.0	9.81	94.8		296.5	10.32	95.7
	236.5	9.80	94.8		298.0	10.33	95.8
	238.0	9.79	94.8		299.5	10.34	95.8
	239.5	9.80	94.9		301.0	10.35	95.8
	241.0	9.83	94.9		302.5	10.38	95.8
	242.5	9.87	94.9		304.0	10.40	95.8
	244.0	9.90	94.9		305.5	10.39	95.9
	245.5	9.93	94.9		307.0	9.74	95.9
	247.0	9.95	95.0		308.5	9.79	95.9
	248.5	9.95	95.0		310.0	9.81	95.9
	250.0	9.95	95.0		311.5	9.84	96.0
	251.5	9.94	95.0		313.0	9.86	96.0
	253.0	9.93	95.1		314.5	9.85	96.0
	254.5	9.93	95.1		316.0	9.77	96.0
	256.0	9.93	95.1		317.5	9.69	96.0
	257.5	9.95	95.1		319.0	9.63	96.1
	259.0	9.96	95.2		320.5	9.91	96.1
	260.5	9.98	95.2		322.0	9.54	96.1
	262.0	10.01	95.2		323.5	9.55	96.1
	263.5	10.05	95.2		325.0	9.60	96.1
	265.0	10.07	95.2		326.5	8.79	95.9
	266.5	10.09	95.3		328.0	9.30	95.6
	268.0	10.11	95.3		329.5	7.90	95.3
	269.5	10.12	95.3		331.0	9.12	94.9
	271.0	10.13	95.3		332.5	9.08	94.4
	272.5	10.15	95.4		334.0	8.79	93.9
	274.0	10.18	95.4		335.5	8.88	93.3
	275.5	10.19	95.4		337.0	8.81	92.7
	277.0	10.21	95.4		338.5	8.77	92.0
	278.5	10.24	95.5		340.0	8.80	91.4
	280.0	10.26	95.5		341.5	8.77	90.8
	281.5	10.26	95.5		343.0	8.27	90.1

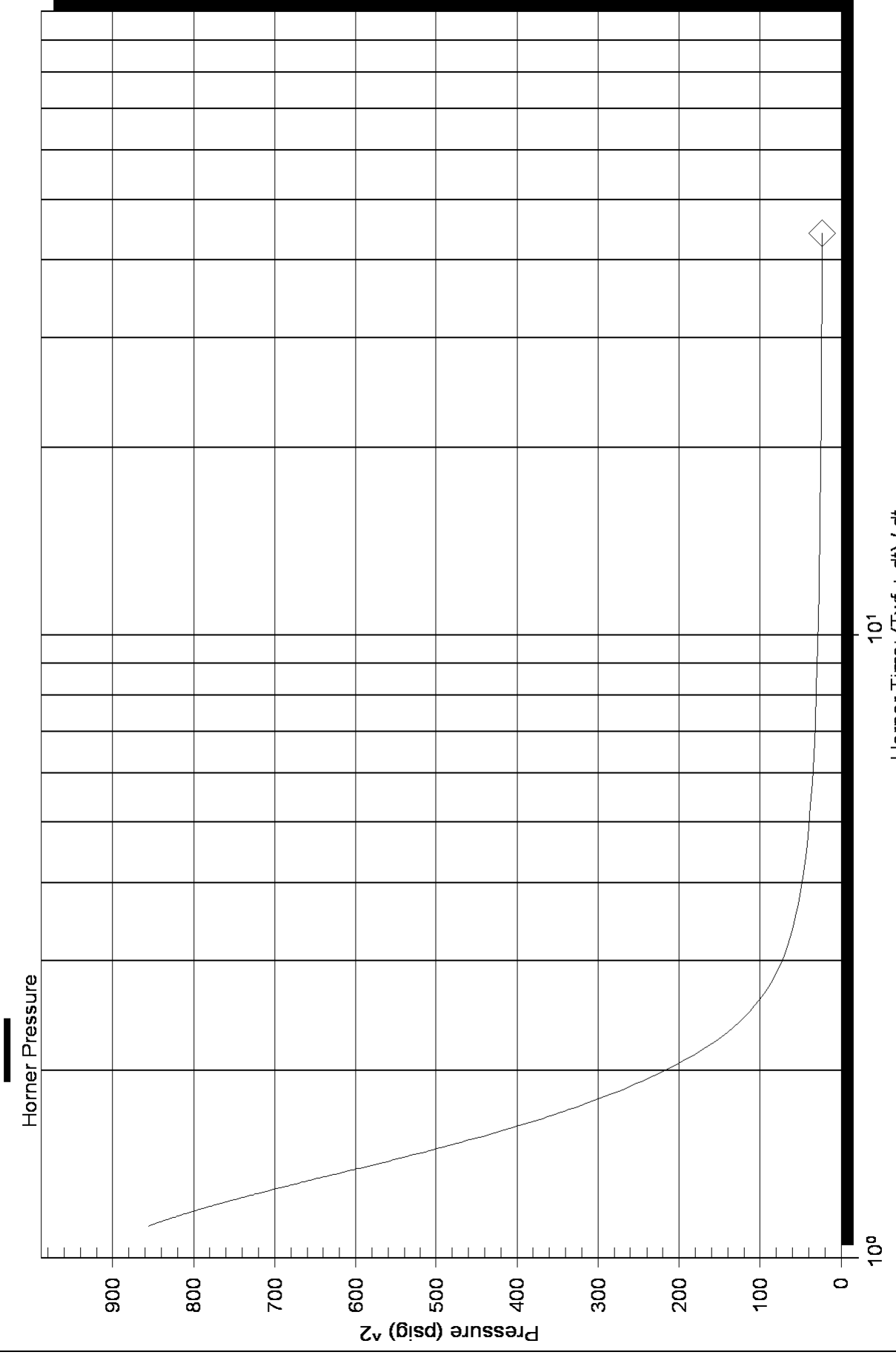
Printing every 3 samples

Serial # 8650				Serial # 8650			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	8.69	89.6		406.0	-0.95	42.8
	346.0	8.56	89.1		407.5	-0.95	42.6
	347.5	8.60	88.6		409.0	-0.93	42.5
	349.0	8.55	88.1		410.5	-0.94	42.4
	350.5	5.60	87.6		412.0	-0.94	42.3
	352.0	7.95	87.0		413.5	-0.93	42.2
	353.5	8.51	86.4		415.0	-0.93	42.0
	355.0	7.76	85.6		416.5	-0.92	41.9
	356.5	8.27	84.7		418.0	-0.91	41.8
	358.0	8.20	83.8		419.5	-0.90	41.7
	359.5	6.60	82.9		421.0	-0.89	41.6
	361.0	8.09	82.2		422.5	-0.89	41.5
	362.5	7.79	81.6		424.0	-0.90	41.4
	364.0	8.04	81.1		425.5	-0.90	41.3
	365.5	8.08	80.6		427.0	-0.90	41.2
	367.0	7.99	80.1		428.5	-0.91	41.1
	368.5	7.95	79.5		430.0	-0.91	41.0
	370.0	7.85	78.9		431.5	-0.92	40.9
	371.5	7.77	78.4		433.0	-0.92	40.8
	373.0	7.66	78.0		434.5	-0.92	40.7
	374.5	7.62	77.6		436.0	-0.92	40.6
	376.0	-0.48	77.1		437.5	-0.89	40.4
	377.5	-1.28	72.0		439.0	-0.85	40.2
	379.0	-1.04	59.4		440.5	-0.80	40.0
	380.5	-1.04	56.1		442.0	-0.91	39.9
	382.0	-1.07	53.6		443.5	-0.74	45.6
	383.5	-1.08	51.7		445.0	-0.78	46.3
	385.0	-1.08	50.1		446.5	-0.67	46.2
	386.5	-1.08	48.7		448.0	-0.76	46.2
	388.0	-1.07	47.7				
	389.5	-1.08	46.8				
	391.0	-1.09	46.1				
	392.5	-1.09	45.4				
	394.0	-1.07	44.9				
	395.5	-1.05	44.5				
	397.0	-1.03	44.1				
	398.5	-1.01	43.8				
	400.0	-0.99	43.5				
	401.5	-0.99	43.3				
	403.0	-0.98	43.1				
	404.5	-0.97	42.9				

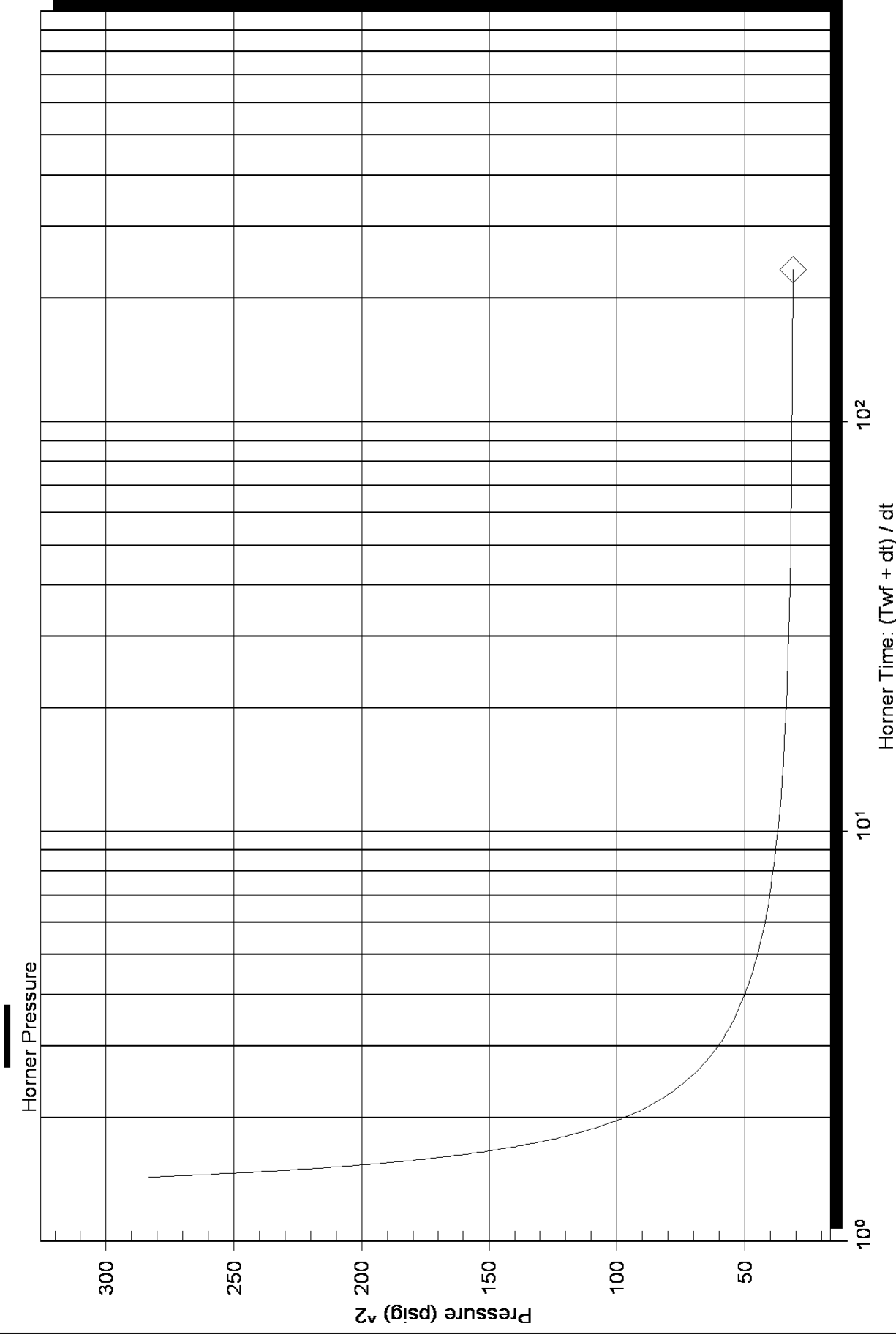
Printing every 3 samples



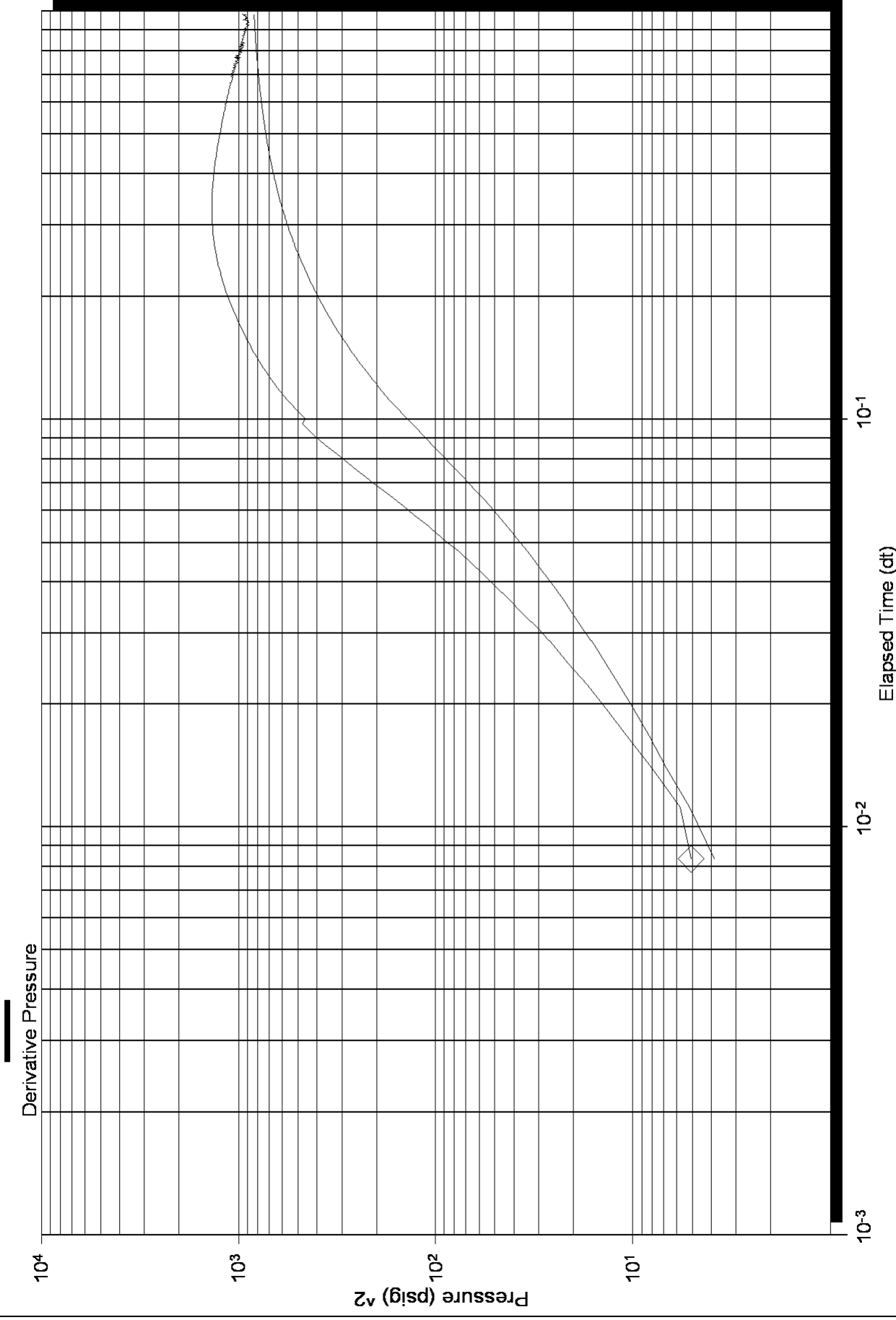
### Homer Plot



### Homer Plot



### Log-Log and Pseudo-Derivative



# Log-Log and Pseudo-Derivative

