



DRILL STEM TEST REPORT

Prepared For: **Sam Gary**

1515 Wynkoop Ste 700
Denver Co 80202

ATTN: Neil Sharp

30-16-15-Barton-Ks

Steinert et al # 1-30

Start Date: 2010.12.14 @ 18:15:50

End Date: 2010.12.15 @ 00:43:50

Job Ticket #: 041354 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
 1515 Wynkoop Ste 700
 Denver Co 80202
 ATTN: Neil Sharp

Steinert et al # 1-30
30-16-15-Barton-Ks
 Job Ticket: 041354 **DST#: 2**
 Test Start: 2010.12.14 @ 18:15:50

GENERAL INFORMATION:

Formation: **G LKC**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:00:50
 Time Test Ended: 00:43:50
 Interval: **3378.00 ft (KB) To 3394.00 ft (KB) (TVD)**
 Total Depth: 3394.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole
 Tester: Dan Bangle
 Unit No: 38
 Reference Elevations: 2005.00 ft (KB)
 1997.00 ft (CF)
 KB to GR/CF: 8.00 ft

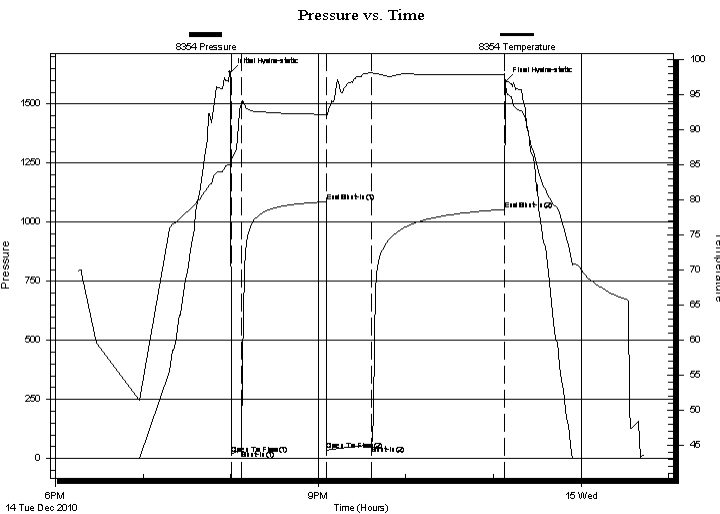
Serial #: 8354

Inside

Press @ Run Depth: 57.24 psig @ 3379.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.12.14 End Date: 2010.12.15 Last Calib.: 2010.12.15
 Start Time: 18:15:51 End Time: 00:43:50 Time On Btm: 2010.12.14 @ 19:59:35
 Time Off Btm: 2010.12.14 @ 23:08:20

TEST COMMENT: IF-Weak building to 1"

FF-Weak building to 2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1633.91	85.13	Initial Hydro-static
2	16.96	85.75	Open To Flow (1)
8	32.82	93.38	Shut-In(1)
66	1086.44	92.09	End Shut-In(1)
67	35.42	91.89	Open To Flow (2)
97	57.24	98.13	Shut-In(2)
188	1054.17	97.90	End Shut-In(2)
189	1594.14	96.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	Wtr	0.78

Gas Rates

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



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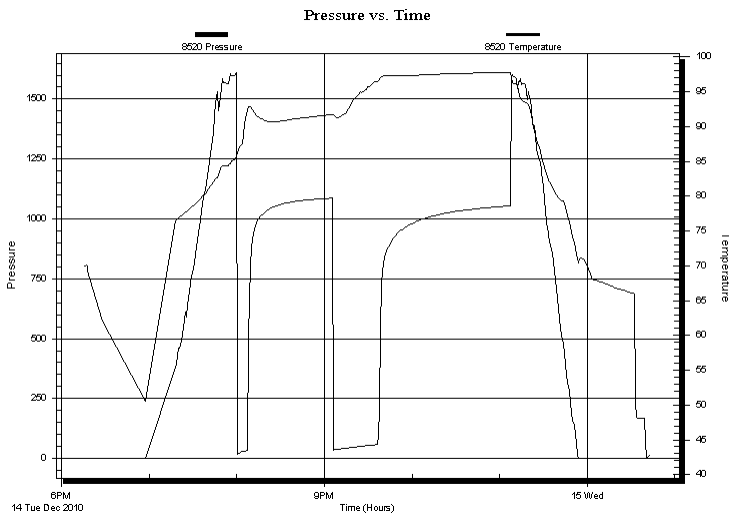
Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

GENERAL INFORMATION:

Formation: **G LKC**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole
 Time Tool Opened: 20:00:50 Tester: Dan Bangle
 Time Test Ended: 00:43:50 Unit No: 38
Interval: 3378.00 ft (KB) To 3394.00 ft (KB) (TVD) Reference Elevations: 2005.00 ft (KB)
 Total Depth: 3394.00 ft (KB) (TVD) 1997.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 8.00 ft

Serial #: 8520 Outside
 Press @ Run Depth: psig @ 3379.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.12.14 End Date: 2010.12.15 Last Calib.: 2010.12.15
 Start Time: 18:15:44 End Time: 00:43:43 Time On Btm: Time Off Btm:

TEST COMMENT: IF-Weak building to 1"
 FF-Weak building to 2"



PRESSURE SUMMARY

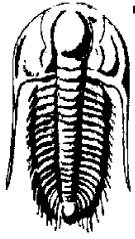
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
75.00	Wtr	0.78

Gas Rates

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



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DRILL STEM TEST REPORT

Sam Gary
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 Denver Co 80202
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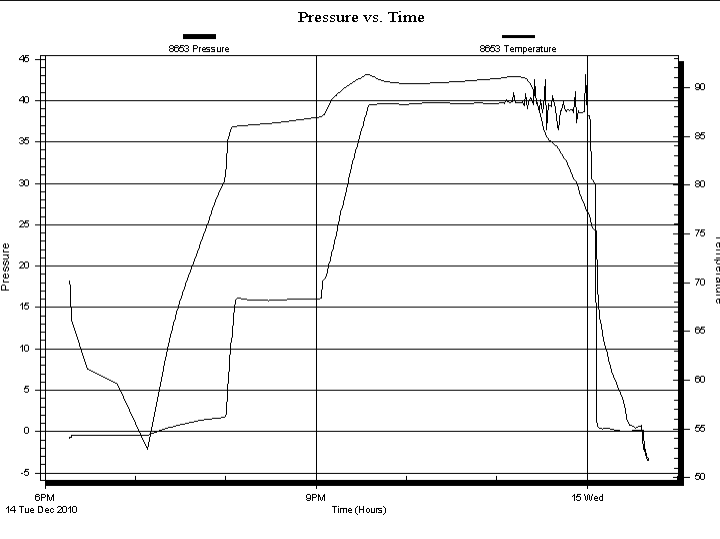
Steinert et al # 1-30
30-16-15-Barton-Ks
 Job Ticket: 041354 **DST#: 2**
 Test Start: 2010.12.14 @ 18:15:50

GENERAL INFORMATION:

Formation: **G LKC**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole
 Time Tool Opened: 20:00:50 Tester: Dan Bangle
 Time Test Ended: 00:43:50 Unit No: 38
Interval: 3378.00 ft (KB) To 3394.00 ft (KB) (TVD) Reference Elevations: 2005.00 ft (KB)
 Total Depth: 3394.00 ft (KB) (TVD) 1997.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 8.00 ft

Serial #: 8653 Inside
 Press@RunDepth: psig @ 3344.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.12.14 End Date: 2010.12.15 Last Calib.: 2010.12.15
 Start Time: 18:15:47 End Time: 00:41:16 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF-Weak building to 1"
 FF-Weak building to 2"



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
75.00	Wtr	0.78

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



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary
1515 Wynkoop Ste 700
Denver Co 80202
ATTN: Neil Sharp

Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

Tool Information

Drill Pipe:	Length: 3331.00 ft	Diameter: 3.80 inches	Volume: 46.73 bbl	Tool Weight:	3800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 46.88 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3378.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	16.00 ft				
Tool Length:	51.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3344.00	
Recorder	0.00	8653	Inside	3344.00	
Blank Spacing	4.00			3348.00	
Shut In Tool	5.00			3353.00	
Sampler	3.00			3356.00	
Hydraulic tool	5.00			3361.00	
Jars	5.00			3366.00	
Safety Joint	3.00			3369.00	
Packer	5.00			3374.00	35.00 Bottom Of Top Packer
Packer	4.00			3378.00	
Stubb	1.00			3379.00	
Recorder	0.00	8354	Inside	3379.00	
Recorder	0.00	8520	Outside	3379.00	
Perforations	12.00			3391.00	
Bullnose	3.00			3394.00	16.00 Bottom Packers & Anchor

Total Tool Length: 51.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary
1515 Wynkoop Ste 700
Denver Co 80202
ATTN: Neil Sharp

Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

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:	85000 ppm
Viscosity: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.18 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	Wtr	0.779

Total Length: 75.00 ft Total Volume: 0.779 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Sampler
 4000ml Wtr



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DRILL STEM TEST REPORT

GAS RATES

Sam Gary
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Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

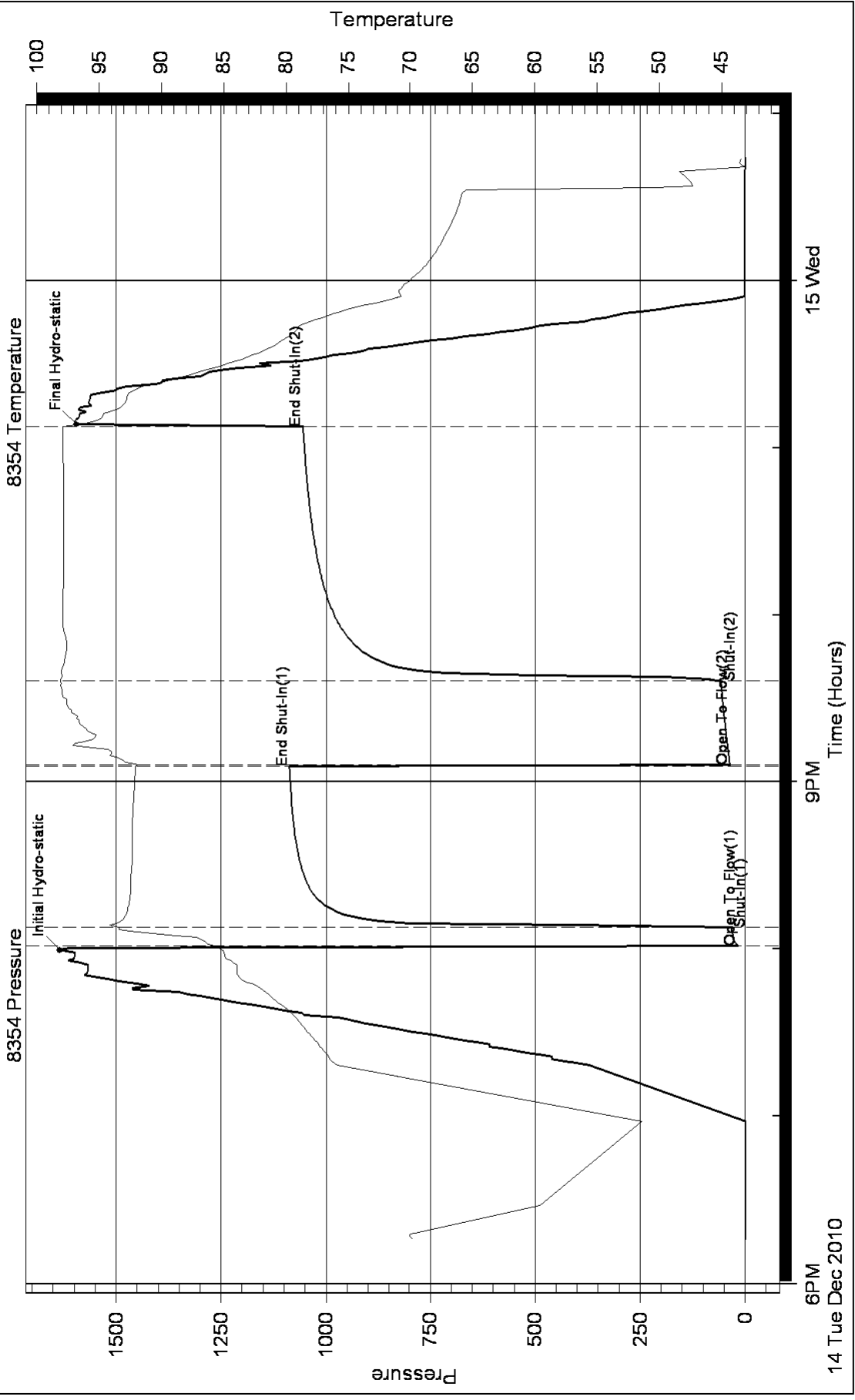
Gas Rates Information

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 ³ /d)
		0.00	0.00	0.00

Pressure vs. Time

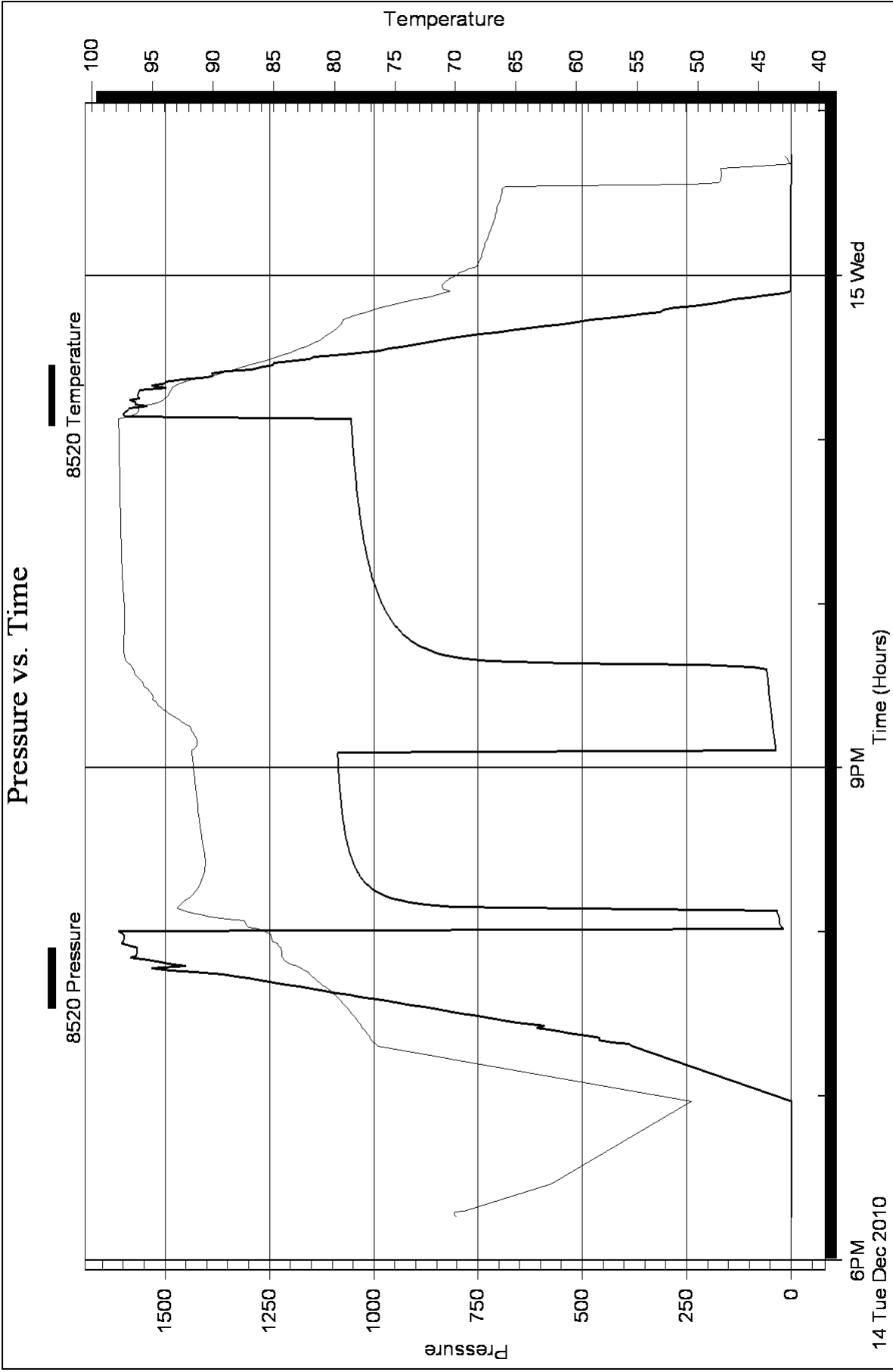


Serial #: 8520

Outside Sam Gary

30-16-15-Barton-Ks

DST Test Number: 2



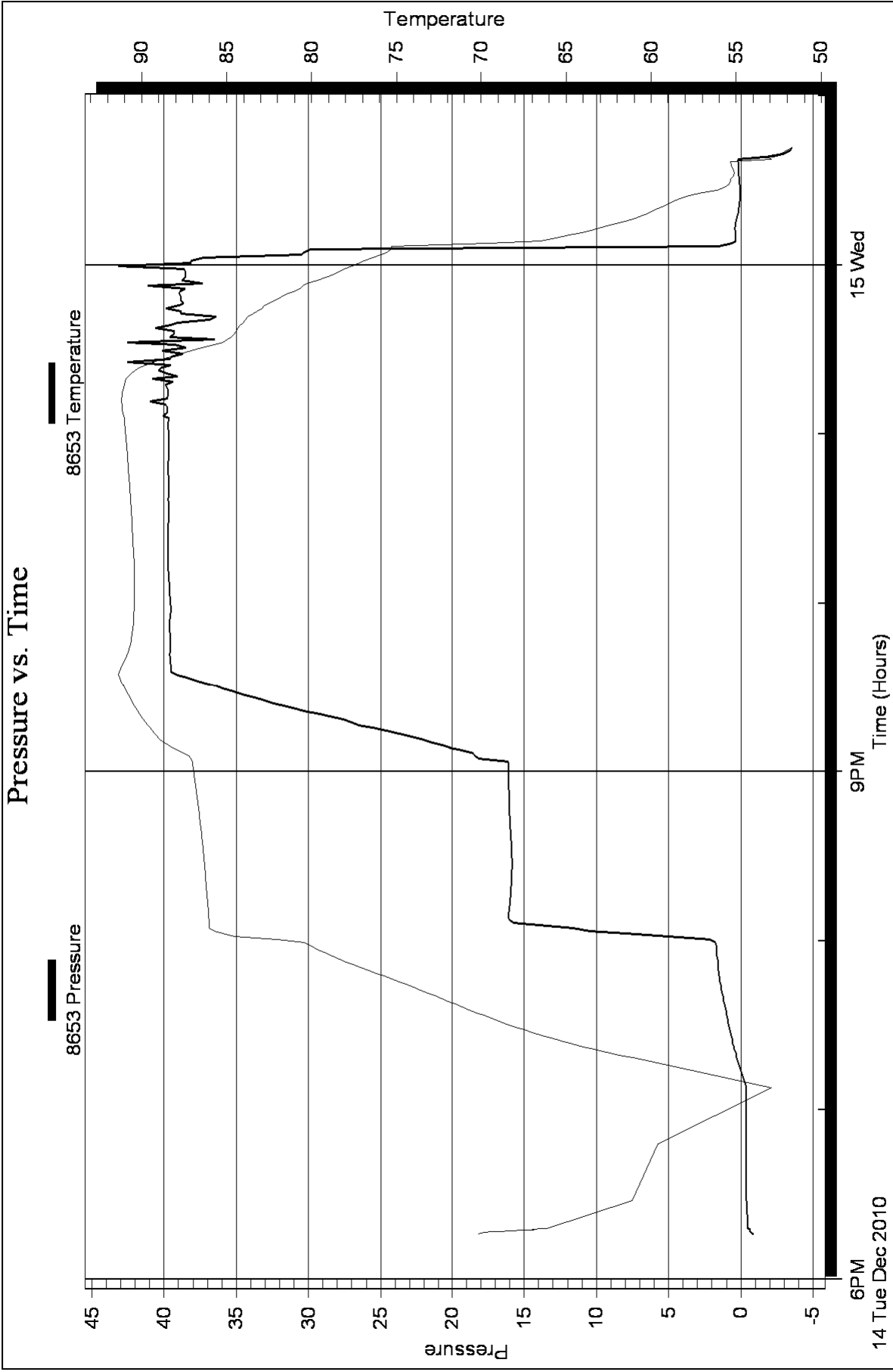
Serial #: 8653

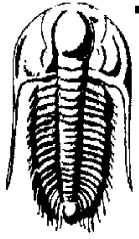
Inside

Sam Gary

30-16-15-Barton-Ks

DST Test Number: 2





**TRILOBITE
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DRILL STEM TESTING - DATA LISTING

Sam Gary
1515 Wynkoop Ste 700
Denver Co 80202
ATTN: Neil Sharp

Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.10	69.9		72.0	699.15	77.8
	0.1	-1.10	69.9		73.2	756.96	78.0
	0.2	-1.11	69.9		74.5	866.43	78.4
	0.3	-1.10	69.9		75.7	850.20	78.5
	0.3	-1.10	69.9		77.0	955.71	78.8
	0.4	-1.11	69.9		78.2	940.65	79.0
	0.5	-1.12	70.0		79.5	971.65	79.2
	0.6	-1.12	70.0		80.7	1140.19	79.6
	0.7	-1.12	70.0		82.0	1090.37	79.8
	0.8	-1.12	70.0		83.2	1147.50	80.2
	0.8	-1.12	70.0		84.5	1166.51	80.5
	0.9	-1.12	70.0		85.7	1319.89	80.9
	1.0	-1.11	70.0		87.0	1300.29	81.2
	1.1	-1.11	70.0		88.2	1458.16	81.6
	1.2	-1.11	70.0		89.5	1391.55	81.9
	1.3	-1.12	70.1		90.7	1420.80	82.3
	1.3	-1.11	70.0		92.0	1494.64	83.0
	1.4	-1.10	70.0		93.2	1510.92	83.6
	1.5	-1.09	70.0		94.5	1575.42	83.9
	1.6	-1.09	70.0		95.7	1569.48	83.9
	1.7	-1.08	70.0		97.0	1567.05	83.9
	1.8	-1.08	69.9		98.2	1566.29	84.0
	1.8	-1.15	69.8		99.5	1585.25	84.3
	1.9	-1.20	69.6		100.7	1599.92	84.8
	12.0	-1.35	59.5		102.0	1597.43	84.9
	62.0	370.81	75.8		103.2	1596.99	85.0
	63.2	442.64	76.2		103.5	1627.56	85.0
	64.5	460.27	76.5	Initial Hydro-static	103.7	1633.91	85.1
	65.7	489.64	76.6		104.0	1619.77	85.2
	67.0	562.21	76.9		104.2	1612.44	85.4
	68.2	579.51	77.1		104.5	1611.87	85.8
	69.5	608.40	77.4		104.7	1621.78	86.0
	70.7	699.74	77.6	Open To Flow (1)	105.0	16.96	85.7

Printing every 5 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	105.2	19.75	86.1		148.7	1076.52	92.3
	105.5	19.88	86.2		150.0	1077.40	92.3
	105.7	20.83	86.3		151.2	1078.13	92.3
	107.0	27.10	86.7		152.5	1079.08	92.3
	108.2	28.57	87.4		153.7	1079.75	92.3
	109.5	29.08	90.7		155.0	1080.45	92.3
	110.7	31.53	93.2		156.2	1081.09	92.2
	111.2	32.10	93.3		157.5	1081.77	92.2
	111.5	32.62	93.1		158.7	1082.37	92.2
Shut-In(1)	111.7	32.82	93.4		160.0	1082.87	92.2
	112.0	51.44	93.7		161.2	1083.42	92.2
	112.2	134.17	94.0		162.5	1083.87	92.2
	112.5	412.32	94.1		163.7	1084.32	92.1
	113.7	853.43	93.4		165.0	1084.87	92.1
	115.0	920.31	93.0		166.2	1085.33	92.1
	116.2	954.87	92.9		167.5	1086.08	92.1
	117.5	977.53	92.7		168.7	1086.30	92.1
	118.7	993.63	92.7		169.0	1086.34	92.1
	120.0	1005.94	92.6		169.2	1086.37	92.1
	121.2	1015.61	92.5	End Shut-In(1)	169.5	1086.44	92.1
	122.5	1023.60	92.5		169.7	39.41	91.5
	123.7	1030.08	92.5	Open To Flow (2)	170.0	35.42	91.9
	125.0	1035.66	92.5		170.2	35.73	92.1
	126.2	1040.43	92.5		171.5	36.50	93.0
	127.5	1044.64	92.5		172.7	37.63	93.5
	128.7	1048.25	92.5		174.0	38.67	94.0
	130.0	1051.59	92.4		175.2	39.78	94.2
	131.2	1054.46	92.4		176.5	40.96	95.9
	132.5	1057.11	92.4		177.7	41.60	96.9
	133.7	1059.61	92.4		179.0	42.52	95.6
	135.0	1061.52	92.3		180.2	43.59	95.2
	136.2	1063.54	92.3		181.5	44.73	95.6
	137.5	1065.31	92.3		182.7	45.55	96.0
	138.7	1066.91	92.3		184.0	46.58	96.4
	140.0	1068.38	92.3		185.2	47.35	96.6
	141.2	1069.82	92.3		186.5	48.39	96.7
	142.5	1071.12	92.3		187.7	49.44	96.8
	143.7	1072.39	92.3		189.0	50.25	97.2
	145.0	1073.58	92.3		190.2	51.11	97.4
	146.2	1074.61	92.3		191.5	51.85	97.5
	147.5	1075.59	92.3		192.7	52.60	97.6

Printing every 5 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	194.0	53.40	97.7		240.0	1014.20	97.8
	195.2	54.18	97.9		241.2	1015.99	97.8
	196.5	54.92	98.0		242.5	1017.70	97.8
	197.7	55.70	98.0		243.7	1019.49	97.8
	199.0	56.32	98.1		245.0	1021.09	97.8
	200.0	57.11	98.1		246.2	1022.59	97.8
	200.2	57.19	98.1		247.5	1023.98	97.8
Shut-In(2)	200.5	57.24	98.1		248.7	1025.44	97.8
	200.7	69.76	98.1		250.0	1026.87	97.8
	201.0	86.13	98.1		251.2	1028.11	97.8
	201.2	108.98	98.0		252.5	1029.42	97.8
	202.5	502.84	98.0		253.7	1030.66	97.8
	203.7	761.16	98.0		255.0	1031.85	97.8
	205.0	818.96	97.9		256.2	1032.97	97.8
	206.2	851.16	97.8		257.5	1034.06	97.8
	207.5	873.43	97.8		258.7	1035.08	97.8
	208.7	890.61	97.7		260.0	1036.11	97.8
	210.0	904.48	97.7		261.2	1037.14	97.8
	211.2	916.11	97.6		262.5	1038.07	97.8
	212.5	926.13	97.6		263.7	1039.08	97.8
	213.7	934.79	97.6		265.0	1039.90	97.8
	215.0	942.40	97.6		266.2	1040.76	97.8
	216.2	949.31	97.7		267.5	1041.65	97.8
	217.5	955.50	97.8		268.7	1042.47	97.8
	218.7	961.10	97.8		270.0	1043.26	97.8
	220.0	966.24	97.9		271.2	1044.09	97.8
	221.2	970.88	97.9		272.5	1044.79	97.8
	222.5	975.28	97.9		273.7	1045.56	97.9
	223.7	979.31	97.9		275.0	1046.15	97.9
	225.0	982.98	97.9		276.2	1046.94	97.9
	226.2	986.59	97.9		277.5	1047.60	97.9
	227.5	989.79	97.9		278.7	1048.22	97.9
	228.7	993.22	97.9		280.0	1048.93	97.9
	230.0	995.80	97.9		281.2	1049.65	97.9
	231.2	998.57	97.9		282.5	1050.13	97.9
	232.5	1001.38	97.9		283.7	1050.80	97.9
	233.7	1003.89	97.9		285.0	1051.32	97.9
	235.0	1006.12	97.9		286.2	1051.86	97.9
	236.2	1008.13	97.8		287.5	1052.49	97.9
	237.5	1010.25	97.8		288.7	1053.00	97.9
	238.7	1012.21	97.8		290.0	1053.55	97.9

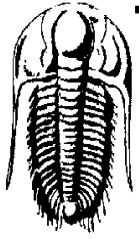
Printing every 5 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
End Shut-In(2)	291.2	1054.09	97.9		334.5	174.27	74.4
	291.5	1054.13	97.9		335.7	98.76	73.1
	291.7	1054.17	97.9		337.0	64.16	71.8
	292.0	1499.23	98.2		338.2	0.95	70.7
	292.2	1568.35	97.5		339.5	-0.19	70.9
Final Hydro-static	292.5	1594.14	96.4		340.7	-0.28	70.8
	292.7	1594.15	96.0		342.0	-0.32	70.6
	293.0	1592.96	95.8		343.2	-0.35	70.3
	293.2	1599.12	95.6		344.5	-0.37	69.9
	294.5	1592.23	94.8		345.7	-0.40	69.6
	295.7	1586.35	94.7		347.0	-0.44	69.3
	297.0	1572.44	94.2		348.2	-0.40	69.0
	298.2	1585.24	93.3		349.5	-0.42	68.7
	299.5	1565.75	93.1		350.7	-0.42	68.5
	300.7	1564.62	92.8		352.0	-0.43	68.3
	302.0	1561.92	92.7		353.2	-0.41	68.1
	303.2	1516.08	92.7		354.5	-0.35	67.9
	304.5	1500.20	92.2		355.7	-0.28	67.7
	305.7	1446.79	91.7		357.0	-0.20	67.6
	307.0	1414.43	90.6		358.2	-0.20	67.4
	308.2	1389.44	89.4		359.5	-0.15	67.3
	309.5	1317.04	88.3		360.7	-0.10	67.1
	310.7	1249.68	87.4		362.0	-0.09	67.0
	312.0	1240.32	86.4		363.2	-0.08	66.8
	313.2	1155.61	85.3		364.5	-0.06	66.7
	314.5	1126.46	84.4		365.7	-0.01	66.6
	315.7	1034.58	83.6		367.0	0.04	66.4
	317.0	1011.72	82.8		368.2	0.07	66.3
	318.2	959.52	82.2		369.5	0.09	66.2
	319.5	898.06	81.5		370.7	0.14	66.1
	320.7	823.79	80.9		372.0	0.17	66.0
	322.0	785.41	80.5		373.2	0.22	65.9
	323.2	699.29	80.1		374.5	0.19	65.9
	324.5	644.45	79.6		375.7	-0.09	65.8
	325.7	592.96	79.3		377.0	0.00	59.3
	327.0	510.56	79.1		378.2	-0.68	47.3
	328.2	465.51	78.7		379.5	-0.72	47.5
	329.5	398.19	78.0		380.7	-0.68	47.8
	330.7	333.22	77.1		382.0	-0.68	48.1
	332.0	285.97	76.3		383.2	-0.77	48.4
	333.2	195.89	75.4		384.5	-0.89	44.0

Printing every 5 samples

Serial # 8354 Inside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	385.7	-0.94	43.5				
	387.0	-0.98	43.5				
	388.0	-0.98	43.4				

Printing every 4 samples



**TRILOBITE
TESTING, INC.**

DRILL STEM TESTING - DATA LISTING

Sam Gary
1515 Wynkoop Ste 700
Denver Co 80202
ATTN: Neil Sharp

Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.07	69.9		63.7	430.31	76.8
	0.1	-1.10	69.9		64.7	459.78	77.0
	0.1	-1.12	70.0		65.7	489.50	77.1
	0.2	-1.14	70.0		66.7	518.89	77.3
	0.3	-1.14	70.0		67.7	548.48	77.4
	0.3	-1.16	70.0		68.7	609.23	77.6
	0.4	-1.16	70.0		69.7	590.17	77.8
	0.5	-1.15	70.0		70.7	652.88	77.9
	0.5	-1.18	70.0		71.7	699.07	78.1
	0.6	-1.18	70.0		72.7	729.16	78.3
	0.7	-1.18	70.0		73.7	872.58	78.5
	0.7	-1.19	70.0		74.7	819.81	78.7
	0.8	-1.18	70.1		75.7	850.17	78.9
	0.9	-1.18	70.1		76.7	880.50	79.1
	0.9	-1.17	70.1		77.7	1013.20	79.3
	1.0	-1.16	70.1		78.7	968.26	79.5
	1.1	-1.18	70.1		79.7	1000.11	79.7
	1.1	-1.19	70.1		80.7	1137.68	80.0
	1.2	-1.16	70.1		81.7	1090.14	80.1
	1.3	-1.15	70.1		82.7	1119.86	80.4
	1.3	-1.14	70.1		83.7	1219.22	80.7
	1.4	-1.15	70.1		84.7	1209.52	81.0
	1.5	-1.16	70.1		85.7	1334.01	81.3
	1.5	-1.16	70.1		86.7	1328.64	81.6
	1.6	-1.18	70.0		87.7	1330.68	81.8
	1.7	-1.21	70.0		88.7	1361.12	82.1
	1.7	-1.23	70.0		89.7	1391.10	82.4
	1.8	-1.25	69.8		90.7	1531.71	82.7
	1.9	-1.24	69.5		91.7	1542.29	83.2
	1.9	-1.22	69.3		92.7	1511.05	83.8
	12.0	-1.24	62.1		93.7	1541.50	84.2
	52.0	132.57	71.0		94.7	1570.97	84.3
	62.7	401.29	76.6		95.7	1569.09	84.3

Printing every 4 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	96.7	1567.25	84.4		137.7	1065.56	90.9
	97.7	1566.39	84.4		138.7	1066.96	90.9
	98.7	1585.69	84.6		139.7	1068.02	91.0
	99.7	1605.10	84.7		140.7	1069.32	91.0
	100.7	1599.98	85.1		141.7	1070.37	91.0
	101.7	1597.91	85.2		142.7	1071.33	91.1
	102.7	1597.00	85.2		143.7	1072.29	91.1
	103.7	1612.19	85.4		144.7	1073.27	91.1
	104.7	15.19	85.5		145.7	1074.16	91.2
	105.7	21.79	87.1		146.7	1074.98	91.2
	106.7	27.83	87.3		147.7	1075.74	91.2
	107.7	28.22	87.4		148.7	1076.47	91.2
	108.7	27.92	88.8		149.7	1077.17	91.3
	109.7	29.57	90.6		150.7	1077.82	91.3
	110.7	32.02	91.5		151.7	1078.49	91.3
	111.7	33.47	92.4		152.7	1079.17	91.3
	112.7	691.18	92.9		153.7	1079.80	91.3
	113.7	859.61	92.8		154.7	1080.24	91.4
	114.7	913.70	92.5		155.7	1080.88	91.4
	115.7	945.00	92.2		156.7	1081.35	91.4
	116.7	966.28	91.9		157.7	1081.89	91.5
	117.7	982.12	91.6		158.7	1082.36	91.5
	118.7	994.39	91.4		159.7	1082.81	91.5
	119.7	1004.18	91.3		160.7	1083.13	91.5
	120.7	1012.32	91.1		161.7	1083.59	91.5
	121.7	1019.27	91.0		162.7	1083.88	91.6
	122.7	1025.11	90.9		163.7	1084.41	91.6
	123.7	1030.12	90.8		164.7	1084.80	91.6
	124.7	1034.79	90.8		165.7	1085.20	91.6
	125.7	1038.52	90.7		166.7	1085.49	91.7
	126.7	1042.28	90.7		167.7	1086.12	91.7
	127.7	1045.46	90.7		168.7	1086.25	91.7
	128.7	1048.38	90.6		169.7	36.28	91.4
	129.7	1050.93	90.6		170.7	36.08	91.6
	130.7	1053.30	90.6		171.7	36.95	91.4
	131.7	1055.46	90.7		172.7	37.86	91.3
	132.7	1057.81	90.7		173.7	38.73	91.3
	133.7	1059.65	90.8		174.7	39.75	91.4
	134.7	1061.09	90.8		175.7	40.49	91.5
	135.7	1062.89	90.8		176.7	41.31	91.6
	136.7	1064.26	90.9		177.7	42.25	91.8

Printing every 4 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	178.7	42.88	91.8		219.7	965.45	97.3
	179.7	43.78	92.2		220.7	969.26	97.3
	180.7	44.33	92.6		221.7	972.91	97.3
	181.7	45.22	92.8		222.7	976.29	97.3
	182.7	45.98	93.3		223.7	979.46	97.3
	183.7	46.73	93.6		224.7	982.55	97.3
	184.7	47.53	93.9		225.7	985.50	97.3
	185.7	48.17	94.3		226.7	988.07	97.4
	186.7	49.11	94.5		227.7	990.63	97.4
	187.7	49.85	94.6		228.7	992.99	97.4
	188.7	50.55	94.9		229.7	995.71	97.4
	189.7	51.03	94.9		230.7	997.64	97.4
	190.7	51.77	95.0		231.7	999.71	97.4
	191.7	52.38	95.2		232.7	1001.77	97.4
	192.7	53.00	95.3		233.7	1003.70	97.4
	193.7	53.44	95.7		234.7	1005.67	97.5
	194.7	54.20	95.7		235.7	1007.46	97.5
	195.7	54.94	95.9		236.7	1009.08	97.5
	196.7	55.46	96.1		237.7	1010.73	97.5
	197.7	56.09	96.3		238.7	1012.37	97.5
	198.7	56.40	96.5		239.7	1013.90	97.5
	199.7	57.26	96.5		240.7	1015.38	97.5
	200.7	74.37	96.6		241.7	1016.82	97.5
	201.7	213.45	96.8		242.7	1018.09	97.5
	202.7	630.39	97.0		243.7	1019.50	97.5
	203.7	766.42	97.2		244.7	1020.82	97.5
	204.7	813.19	97.3		245.7	1022.14	97.6
	205.7	841.64	97.3		246.7	1023.25	97.6
	206.7	862.10	97.3		247.7	1024.43	97.6
	207.7	878.31	97.4		248.7	1025.53	97.6
	208.7	891.41	97.4		249.7	1026.65	97.6
	209.7	902.73	97.4		250.7	1027.69	97.6
	210.7	912.36	97.3		251.7	1028.73	97.6
	211.7	920.78	97.3		252.7	1029.73	97.6
	212.7	928.48	97.3		253.7	1030.72	97.6
	213.7	935.22	97.3		254.7	1031.65	97.6
	214.7	941.32	97.3		255.7	1032.47	97.6
	215.7	946.99	97.3		256.7	1033.39	97.6
	216.7	952.12	97.3		257.7	1034.34	97.6
	217.7	956.84	97.3		258.7	1034.97	97.6
	218.7	961.36	97.3		259.7	1035.98	97.6

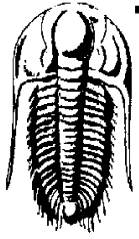
Printing every 4 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	260.7	1036.74	97.6		301.7	1562.08	93.5
	261.7	1037.62	97.7		302.7	1561.21	93.4
	262.7	1038.30	97.7		303.7	1532.70	93.1
	263.7	1038.95	97.7		304.7	1472.18	92.6
	264.7	1039.72	97.7		305.7	1439.79	91.9
	265.7	1040.62	97.7		306.7	1398.52	90.9
	266.7	1041.18	97.7		307.7	1370.64	89.8
	267.7	1041.93	97.7		308.7	1328.73	89.0
	268.7	1042.52	97.7		309.7	1292.78	88.2
	269.7	1043.03	97.7		310.7	1338.21	87.5
	270.7	1043.56	97.7		311.7	1243.19	86.7
	271.7	1044.34	97.7		312.7	1203.66	85.8
	272.7	1044.98	97.7		313.7	1165.59	85.0
	273.7	1045.56	97.7		314.7	1084.42	84.3
	274.7	1046.13	97.7		315.7	1037.28	83.7
	275.7	1046.76	97.7		316.7	1011.20	83.1
	276.7	1047.20	97.7		317.7	973.51	82.5
	277.7	1047.87	97.7		318.7	902.95	82.0
	278.7	1048.28	97.7		319.7	851.05	81.5
	279.7	1048.74	97.7		320.7	819.92	81.1
	280.7	1049.28	97.7		321.7	784.52	80.8
	281.7	1049.86	97.7		322.7	747.71	80.4
	282.7	1050.31	97.7		323.7	662.85	80.1
	283.7	1050.65	97.7		324.7	628.29	79.8
	284.7	1051.28	97.7		325.7	593.61	79.5
	285.7	1051.67	97.7		326.7	518.48	79.4
	286.7	1052.21	97.7		327.7	479.50	79.3
	287.7	1052.57	97.7		328.7	439.24	78.7
	288.7	1052.93	97.8		329.7	401.92	78.0
	289.7	1053.48	97.8		330.7	313.77	77.4
	290.7	1054.11	97.8		331.7	279.63	76.6
	291.7	1054.22	97.8		332.7	249.18	75.9
	292.7	1593.89	96.7		333.7	193.47	74.9
	293.7	1597.72	96.3		334.7	137.86	73.9
	294.7	1590.13	96.1		335.7	99.65	72.8
	295.7	1586.35	96.1		336.7	63.26	71.8
	296.7	1515.94	95.5		337.7	23.18	70.8
	297.7	1571.00	94.4		338.7	-0.04	70.8
	298.7	1582.24	94.0		339.7	-0.17	71.1
	299.7	1565.58	93.8		340.7	-0.31	71.1
	300.7	1564.41	93.6		341.7	-0.37	70.9

Printing every 4 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	342.7	-0.41	70.5		383.7	-1.30	46.3
	343.7	-0.43	70.2		384.7	-1.35	42.3
	344.7	-0.47	69.7		385.7	-1.33	42.5
	345.7	-0.52	69.1		386.7	-1.34	42.7
	346.7	-0.51	68.7		387.7	-1.33	42.9
	347.7	-0.54	68.1		388.0	-1.32	42.9
	348.7	-0.58	68.0				
	349.7	-0.63	68.0				
	350.7	-0.67	67.9				
	351.7	-0.68	67.8				
	352.7	-0.68	67.7				
	353.7	-0.66	67.7				
	354.7	-0.64	67.6				
	355.7	-0.61	67.5				
	356.7	-0.60	67.4				
	357.7	-0.61	67.3				
	358.7	-0.60	67.2				
	359.7	-0.59	67.2				
	360.7	-0.59	67.1				
	361.7	-0.59	67.0				
	362.7	-0.60	66.9				
	363.7	-0.59	66.8				
	364.7	-0.56	66.7				
	365.7	-0.55	66.7				
	366.7	-0.58	66.6				
	367.7	-0.62	66.6				
	368.7	-0.66	66.6				
	369.7	-0.66	66.5				
	370.7	-0.65	66.4				
	371.7	-0.63	66.3				
	372.7	-0.63	66.2				
	373.7	-0.67	66.2				
	374.7	-0.69	66.1				
	375.7	-0.72	66.1				
	376.7	-0.79	65.8				
	377.7	-1.06	48.5				
	378.7	-1.34	48.1				
	379.7	-1.29	48.1				
	380.7	-1.23	48.1				
	381.7	-1.24	48.0				
	382.7	-1.27	48.2				

Printing every 2 samples



**TRILOBITE
TESTING, INC.**

DRILL STEM TESTING - DATA LISTING

Sam Gary
1515 Wynkoop Ste 700
Denver Co 80202
ATTN: Neil Sharp

Steinert et al # 1-30
30-16-15-Barton-Ks
Job Ticket: 041354 **DST#: 2**
Test Start: 2010.12.14 @ 18:15:50

Serial # 8653 Inside				Serial # 8653 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-0.86	70.1		1.1	-0.65	68.3
	0.0	-0.79	70.1		1.1	-0.66	68.2
	0.1	-0.80	70.1		1.2	-0.66	68.1
	0.1	-0.80	70.1		1.2	-0.66	68.0
	0.1	-0.80	70.1		1.2	-0.66	67.8
	0.2	-0.77	70.1		1.3	-0.66	67.7
	0.2	-0.76	70.1		1.3	-0.67	67.5
	0.2	-0.75	70.0		1.3	-0.67	67.4
	0.3	-0.74	70.0		1.4	-0.66	67.2
	0.3	-0.73	70.0		1.4	-0.66	67.1
	0.3	-0.73	70.0		1.4	-0.67	67.0
	0.4	-0.72	70.0		1.5	-0.67	66.9
	0.4	-0.71	70.0		1.5	-0.67	66.9
	0.4	-0.71	69.9		1.5	-0.67	66.9
	0.5	-0.71	69.9		1.6	-0.67	66.9
	0.5	-0.70	69.9		1.6	-0.67	67.0
	0.5	-0.69	69.9		1.6	-0.68	67.0
	0.6	-0.68	69.9		1.7	-0.68	67.0
	0.6	-0.68	69.8		1.7	-0.67	67.0
	0.6	-0.68	69.8		1.7	-0.66	66.9
	0.7	-0.67	69.8		1.8	-0.65	66.8
	0.7	-0.66	69.7		1.8	-0.61	66.8
	0.7	-0.66	69.6		1.8	-0.58	66.7
	0.8	-0.65	69.5		1.9	-0.55	66.5
	0.8	-0.65	69.4		1.9	-0.53	66.4
	0.8	-0.65	69.3		1.9	-0.50	66.3
	0.9	-0.64	69.2		2.0	-0.47	66.2
	0.9	-0.64	69.0		12.0	-0.40	61.1
	0.9	-0.64	68.9		32.0	-0.40	59.6
	1.0	-0.64	68.8		52.0	-0.42	52.9
	1.0	-0.64	68.7		62.5	0.28	61.1
	1.0	-0.65	68.6		63.5	0.32	61.9
	1.1	-0.64	68.5		64.5	0.36	62.6

Printing every 2 samples

Serial # 8653 Inside				Serial # 8653 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	65.5	0.42	63.3		106.5	7.98	85.2
	66.5	0.48	64.0		107.5	10.47	85.7
	67.5	0.53	64.6		108.5	11.64	86.0
	68.5	0.57	65.3		109.5	13.99	86.0
	69.5	0.62	65.9		110.5	15.76	86.0
	70.5	0.67	66.4		111.5	16.03	86.0
	71.5	0.72	67.0		112.5	16.10	86.0
	72.5	0.76	67.5		113.5	16.09	86.1
	73.5	0.81	68.0		114.5	16.05	86.1
	74.5	0.85	68.5		115.5	16.02	86.1
	75.5	0.88	68.9		116.5	15.99	86.1
	76.5	0.93	69.4		117.5	15.96	86.1
	77.5	0.96	69.8		118.5	15.94	86.1
	78.5	0.99	70.3		119.5	15.93	86.1
	79.5	1.03	70.7		120.5	15.93	86.2
	80.5	1.07	71.1		121.5	15.92	86.2
	81.5	1.12	71.5		122.5	15.91	86.2
	82.5	1.16	71.9		123.5	15.89	86.2
	83.5	1.20	72.4		124.5	15.88	86.2
	84.5	1.25	72.8		125.5	15.87	86.2
	85.5	1.28	73.2		126.5	15.86	86.2
	86.5	1.31	73.6		127.5	15.85	86.3
	87.5	1.35	74.0		128.5	15.84	86.3
	88.5	1.39	74.4		129.5	15.84	86.3
	89.5	1.43	74.9		130.5	15.83	86.3
	90.5	1.46	75.3		131.5	15.84	86.3
	91.5	1.49	75.7		132.5	15.83	86.3
	92.5	1.52	76.2		133.5	15.83	86.3
	93.5	1.54	76.7		134.5	15.85	86.3
	94.5	1.55	77.1		135.5	15.86	86.4
	95.5	1.57	77.6		136.5	15.87	86.4
	96.5	1.57	78.0		137.5	15.88	86.4
	97.5	1.58	78.4		138.5	15.88	86.4
	98.5	1.62	78.8		139.5	15.90	86.4
	99.5	1.64	79.1		140.5	15.91	86.4
	100.5	1.65	79.5		141.5	15.92	86.5
	101.5	1.67	79.8		142.5	15.92	86.5
	102.5	1.70	80.1		143.5	15.94	86.5
	103.5	1.77	80.4		144.5	15.95	86.5
	104.5	2.10	82.0		145.5	15.97	86.5
	105.5	5.01	84.5		146.5	15.98	86.6

Printing every 2 samples

Serial # 8653 Inside				Serial # 8653 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	147.5	15.98	86.6		188.5	32.59	90.5
	148.5	15.99	86.6		189.5	33.23	90.6
	149.5	15.99	86.6		190.5	33.91	90.7
	150.5	15.99	86.6		191.5	34.58	90.8
	151.5	15.99	86.7		192.5	35.19	90.9
	152.5	16.00	86.7		193.5	35.96	90.9
	153.5	16.01	86.7		194.5	36.47	91.0
	154.5	16.02	86.7		195.5	37.13	91.1
	155.5	16.03	86.7		196.5	37.82	91.2
	156.5	16.04	86.8		197.5	38.46	91.3
	157.5	16.06	86.8		198.5	39.02	91.3
	158.5	16.08	86.8		199.5	39.48	91.3
	159.5	16.07	86.8		200.5	39.51	91.2
	160.5	16.07	86.9		201.5	39.52	91.2
	161.5	16.07	86.9		202.5	39.53	91.1
	162.5	16.07	86.9		203.5	39.54	91.0
	163.5	16.08	86.9		204.5	39.56	90.9
	164.5	16.07	86.9		205.5	39.58	90.9
	165.5	16.06	87.0		206.5	39.58	90.8
	166.5	16.06	87.0		207.5	39.57	90.7
	167.5	16.10	87.0		208.5	39.58	90.7
	168.5	18.19	87.1		209.5	39.58	90.7
	169.5	18.42	87.2		210.5	39.58	90.6
	170.5	18.54	87.5		211.5	39.57	90.6
	171.5	19.31	87.9		212.5	39.57	90.6
	172.5	20.09	88.2		213.5	39.60	90.5
	173.5	20.73	88.4		214.5	39.62	90.5
	174.5	21.58	88.7		215.5	39.62	90.5
	175.5	22.21	88.9		216.5	39.61	90.5
	176.5	23.01	89.1		217.5	39.60	90.5
	177.5	23.72	89.2		218.5	39.58	90.5
	178.5	24.60	89.4		219.5	39.55	90.5
	179.5	25.54	89.5		220.5	39.52	90.5
	180.5	26.49	89.6		221.5	39.52	90.4
	181.5	27.01	89.8		222.5	39.51	90.4
	182.5	27.60	89.9		223.5	39.52	90.4
	183.5	28.56	90.0		224.5	39.53	90.4
	184.5	29.24	90.1		225.5	39.55	90.4
	185.5	30.31	90.2		226.5	39.58	90.4
	186.5	31.08	90.3		227.5	39.60	90.4
	187.5	31.93	90.4		228.5	39.61	90.4

Printing every 2 samples

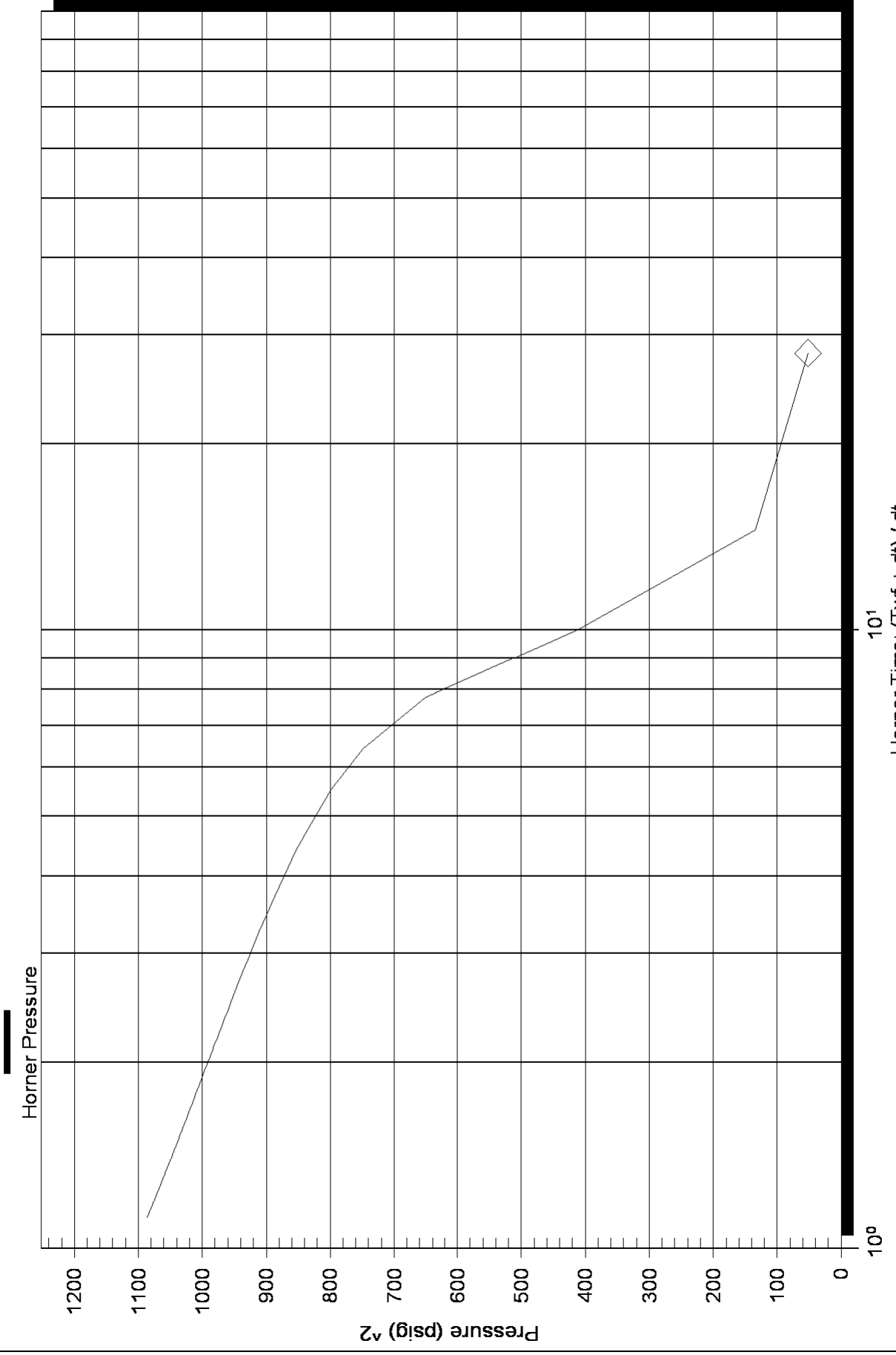
Serial # 8653 Inside				Serial # 8653 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	229.5	39.62	90.4		270.5	39.70	90.8
	230.5	39.62	90.4		271.5	39.70	90.8
	231.5	39.64	90.4		272.5	39.70	90.8
	232.5	39.64	90.4		273.5	39.70	90.8
	233.5	39.65	90.4		274.5	39.69	90.8
	234.5	39.66	90.4		275.5	39.68	90.8
	235.5	39.68	90.4		276.5	39.67	90.8
	236.5	39.69	90.4		277.5	39.67	90.8
	237.5	39.69	90.4		278.5	39.66	90.9
	238.5	39.69	90.4		279.5	39.66	90.9
	239.5	39.69	90.4		280.5	39.66	90.9
	240.5	39.70	90.5		281.5	39.66	90.9
	241.5	39.70	90.5		282.5	39.68	90.9
	242.5	39.70	90.5		283.5	39.67	90.9
	243.5	39.70	90.5		284.5	39.68	90.9
	244.5	39.71	90.5		285.5	39.68	90.9
	245.5	39.71	90.5		286.5	39.69	91.0
	246.5	39.72	90.5		287.5	39.69	91.0
	247.5	39.72	90.5		288.5	39.70	91.0
	248.5	39.70	90.5		289.5	39.65	91.0
	249.5	39.69	90.5		290.5	40.09	91.0
	250.5	39.69	90.5		291.5	39.84	91.1
	251.5	39.70	90.5		292.5	39.76	91.1
	252.5	39.69	90.6		293.5	39.77	91.1
	253.5	39.68	90.6		294.5	39.91	91.1
	254.5	39.67	90.6		295.5	40.96	91.2
	255.5	39.67	90.6		296.5	39.76	91.2
	256.5	39.68	90.6		297.5	39.78	91.1
	257.5	39.68	90.6		298.5	39.71	91.1
	258.5	39.68	90.6		299.5	39.71	91.1
	259.5	39.68	90.6		300.5	39.78	91.1
	260.5	39.68	90.6		301.5	39.89	91.0
	261.5	39.68	90.7		302.5	39.40	91.0
	262.5	39.68	90.7		303.5	40.83	90.9
	263.5	39.67	90.7		304.5	39.08	90.8
	264.5	39.67	90.7		305.5	39.80	90.6
	265.5	39.67	90.7		306.5	40.40	90.4
	266.5	39.67	90.7		307.5	40.17	90.1
	267.5	39.68	90.7		308.5	39.56	89.8
	268.5	39.68	90.7		309.5	42.52	89.3
	269.5	39.69	90.7		310.5	39.59	88.8

Printing every 2 samples

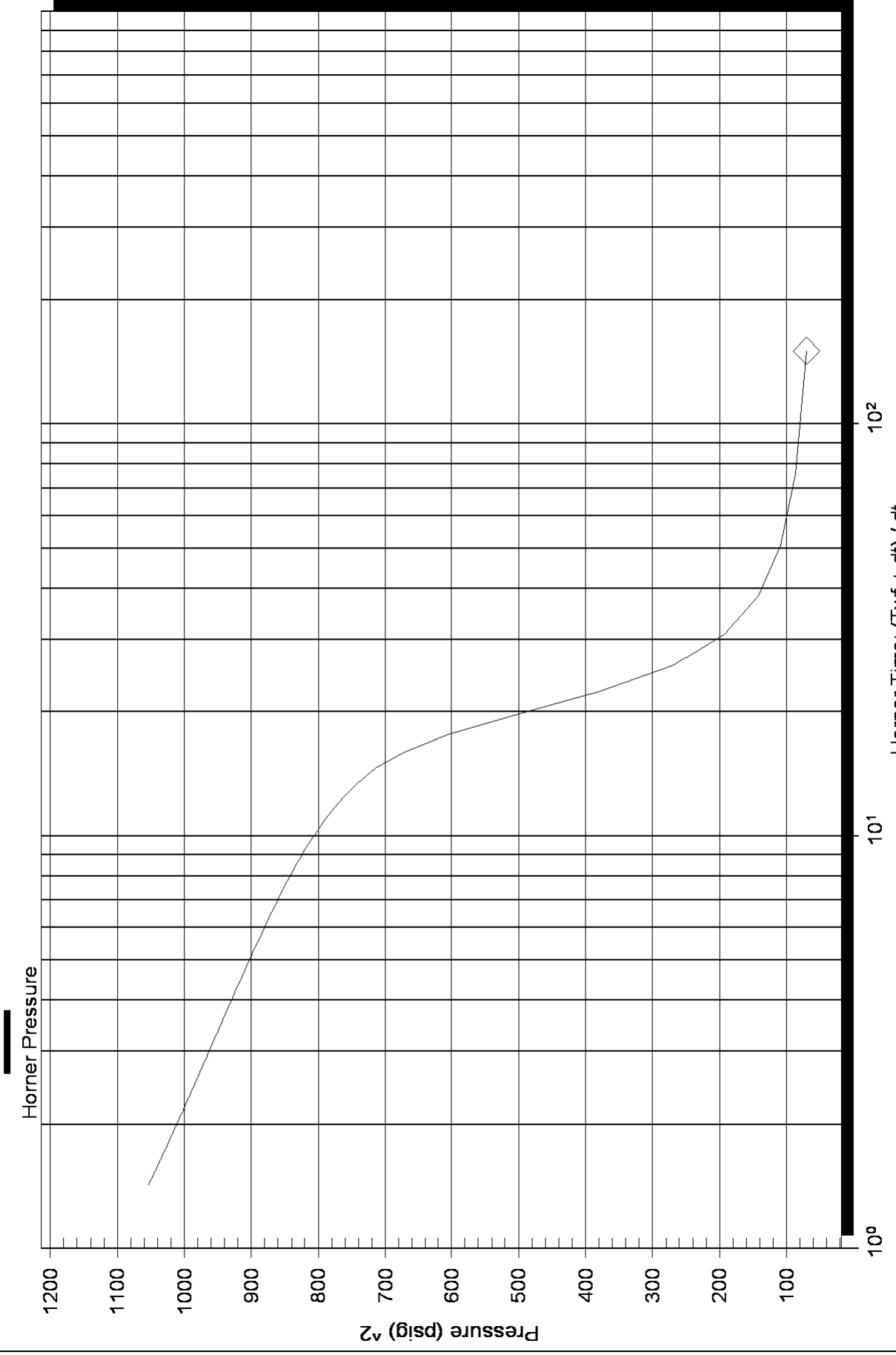
Serial # 8653 Inside				Serial # 8653 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	311.5	39.50	88.3		352.5	0.35	66.5
	312.5	38.71	87.7		353.5	0.38	65.6
	313.5	40.13	87.1		354.5	0.34	64.8
	314.5	38.49	86.4		355.5	0.36	64.1
	315.5	39.25	85.7		356.5	0.38	63.4
	316.5	42.54	85.2		357.5	0.38	62.8
	317.5	36.49	84.9		358.5	0.36	62.1
	318.5	39.61	84.7		359.5	0.33	61.5
	319.5	39.33	84.5		360.5	0.29	60.9
	320.5	39.31	84.4		361.5	0.24	60.5
	321.5	40.59	84.3		362.5	0.19	60.1
	322.5	39.58	84.2		363.5	0.14	59.8
	323.5	39.07	84.0		364.5	0.12	59.4
	324.5	36.90	83.9		365.5	0.10	59.0
	325.5	36.42	83.7		366.5	0.07	58.7
	326.5	38.82	83.5		367.5	0.06	58.3
	327.5	38.79	83.2		368.5	0.05	57.8
	328.5	39.87	82.9		369.5	0.04	57.0
	329.5	38.96	82.8		370.5	0.03	56.1
	330.5	38.68	82.5		371.5	0.04	55.7
	331.5	38.89	82.2		372.5	0.06	55.4
	332.5	38.80	81.8		373.5	0.08	55.3
	333.5	38.93	81.5		374.5	0.10	55.3
	334.5	38.91	81.1		375.5	0.11	55.2
	335.5	38.57	80.7		376.5	0.12	55.1
	336.5	41.13	80.5		377.5	0.14	55.2
	337.5	37.33	80.3		378.5	0.14	55.2
	338.5	38.76	79.7		379.5	0.11	55.3
	339.5	38.58	79.2		380.5	0.20	55.4
	340.5	38.52	78.7		381.5	0.18	52.9
	341.5	38.51	78.5		382.5	-2.21	53.2
	342.5	38.61	78.1		383.5	-3.06	52.3
	343.5	43.15	77.6		384.5	-3.44	52.0
	344.5	38.12	77.3		385.5	-3.53	51.7
	345.5	38.14	76.9				
	346.5	37.30	76.4				
	347.5	30.49	75.9				
	348.5	30.34	75.6				
	349.5	29.84	75.3				
	350.5	1.53	75.3				
	351.5	0.63	69.6				

Printing every 2 samples

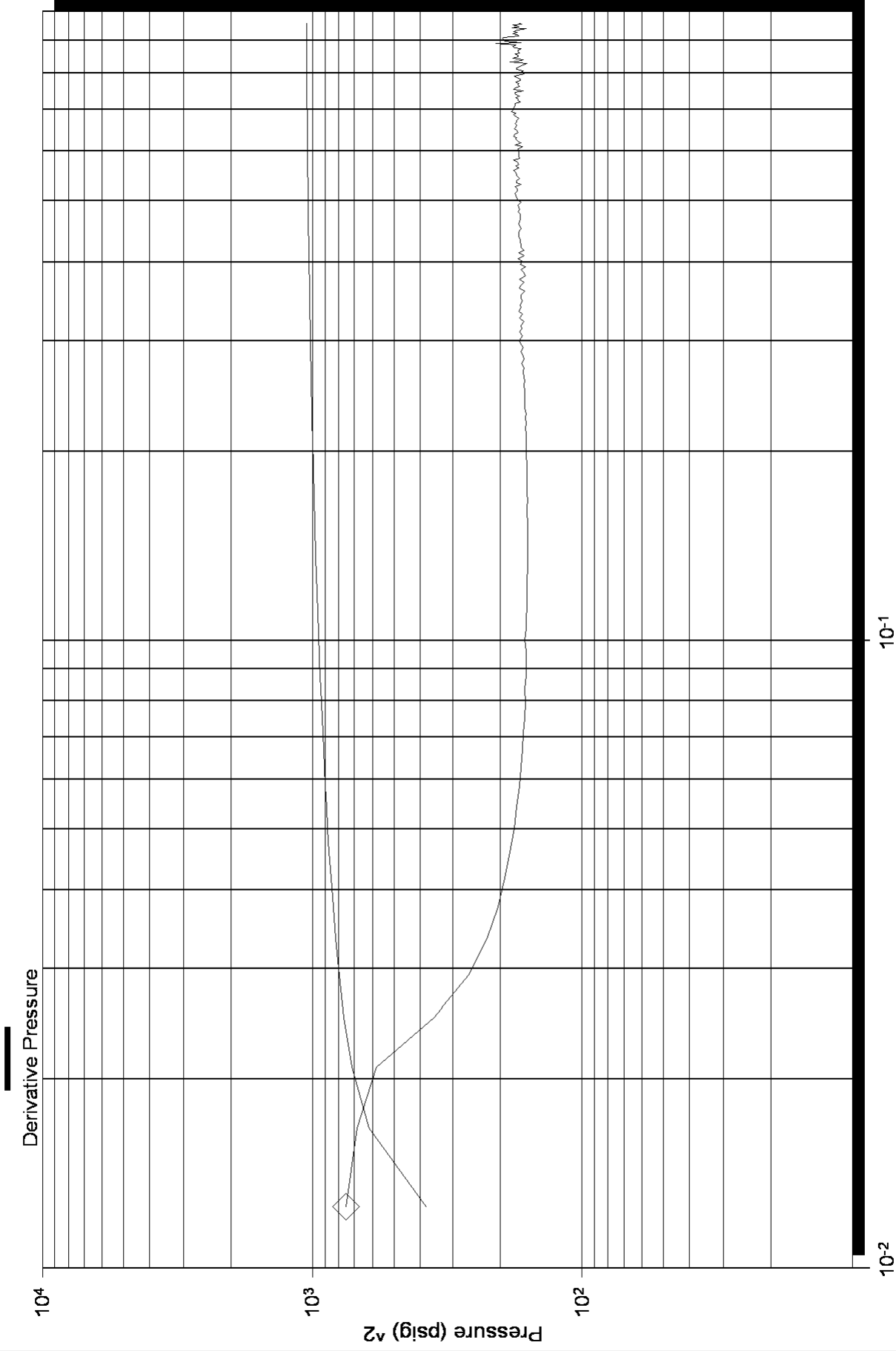
Homer Plot



Homer Plot



Log-Log and Pseudo-Log-Derivative



Log-Log and Pseudo-Derivative

