

15-165-21836

27-16s-16w

IND



DRILL STEM TEST REPORT

Prepared For: **SAMUEL GARY JR. & ASSC. INC**

1560 BROADWAY
SUITE 2100
DENVER CO. 80202

ATTN: CLAYTON CAMOZZI

27 **21-16S-16W RUSH**

ALLENBOUGH-JME #1-27

Start Date: 2008.09.19 @ 16:00:01

End Date: 2008.09.20 @ 00:00:10

Job Ticket #: 16142 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2008.09.23 @ 14:32:02

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

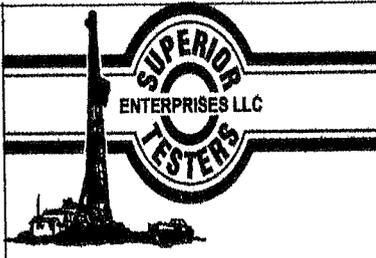
21-16S-16W RUSH

DST # 1

LANSING

2008.09.19

Section is 27, not 21 as printed



DRILL STEM TEST REPORT

TOOL DIAGRAM

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH
 Job Ticket: 16142 DST#: 1
 Test Start: 2008.09.19 @ 16:00:01

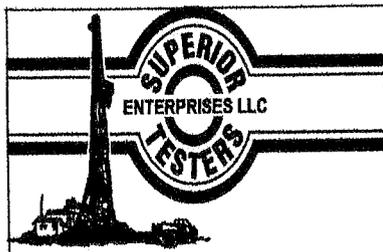
Tool Information

Drill Pipe:	Length: 3205.00 ft	Diameter: 3.88 inches	Volume: 46.87 bbl	Tool Weight:	20000.00 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:	40000.00 lb
			<u>Total Volume: 46.87 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	0.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3232.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	57.77 ft				
Tool Length:	84.77 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3210.00	
HYD S.I. Tool	5.00			3215.00	
Jars	5.00			3220.00	
Safety Joint	2.00			3222.00	
Packer	5.00			3227.00	27.00 Bottom Of Top Packer
Packer	5.00			3232.00	
C.O. Sub	0.75			3232.75	
Drill Pipe	31.27			3264.02	
C.O. Sub	0.75			3264.77	
Perforations	20.00			3284.77	
Bullnose	5.00			3289.77	57.77 Bottom Packers & Anchor

Total Tool Length: 84.77



DRILL STEM TEST REPORT

FLUID SUMMARY

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
SUITE 2100
DENVER CO. 80202
ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH
Job Ticket: 16142 DST#: 1
Test Start: 2008.09.19 @ 16:00:01

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 56.00 sec/qt
Water Loss: 11.17 in³
Resistivity: ohm.m
Salinity: 6000.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: 50000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
795.00	MUDDY WATER 50 % MUD 50 % WATER	11.626

Total Length: 795.00 ft Total Volume: 11.626 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

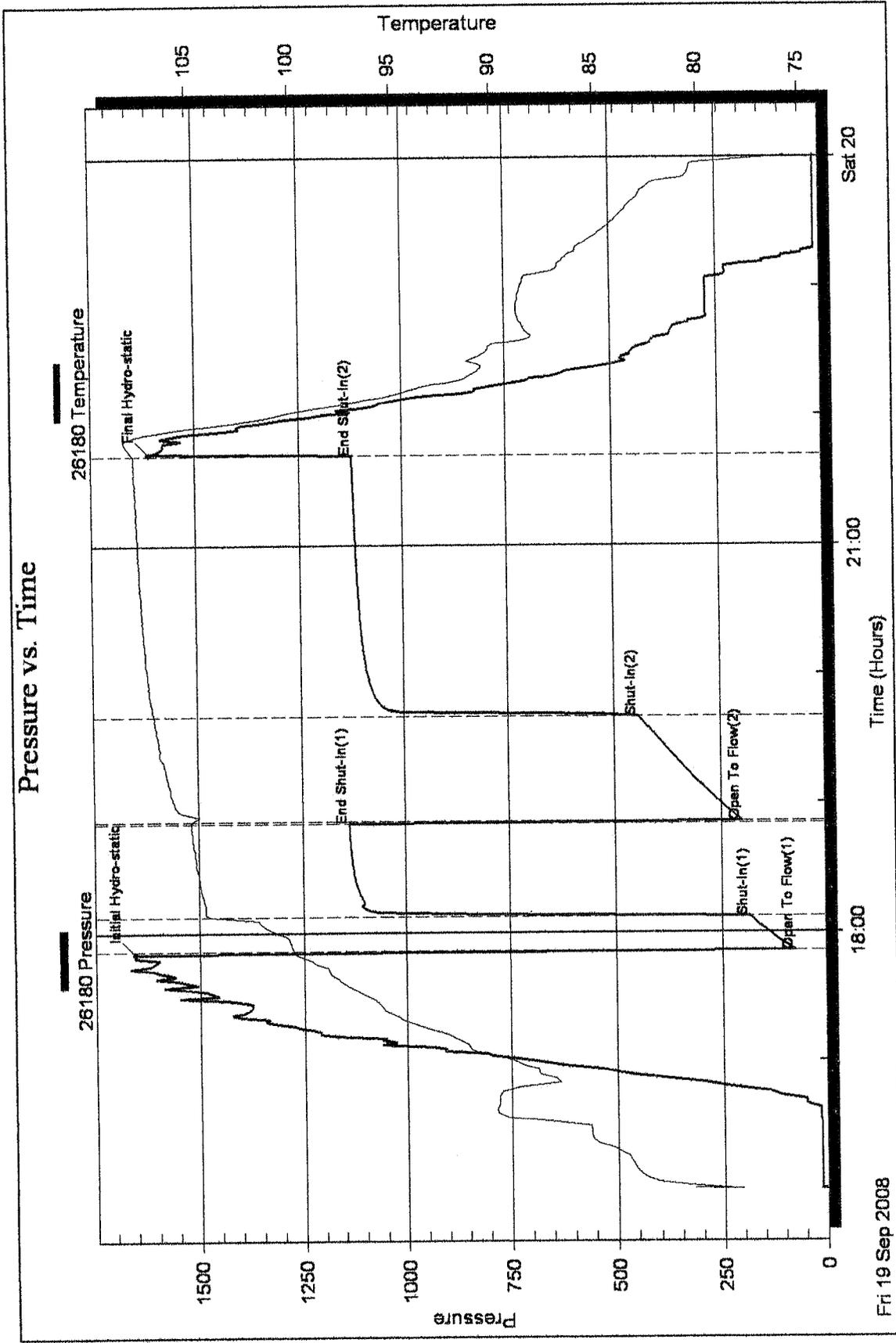
DST Test Number: 1

21-16S-16W RUSH

SAMUEL GARY JR. & ASSC. INC

Serial #: 26180

Pressure vs. Time



Printed: 2008.09.23 @ 14:32:03

Ref. No: 16142

Superior Testers Enterprises LLC

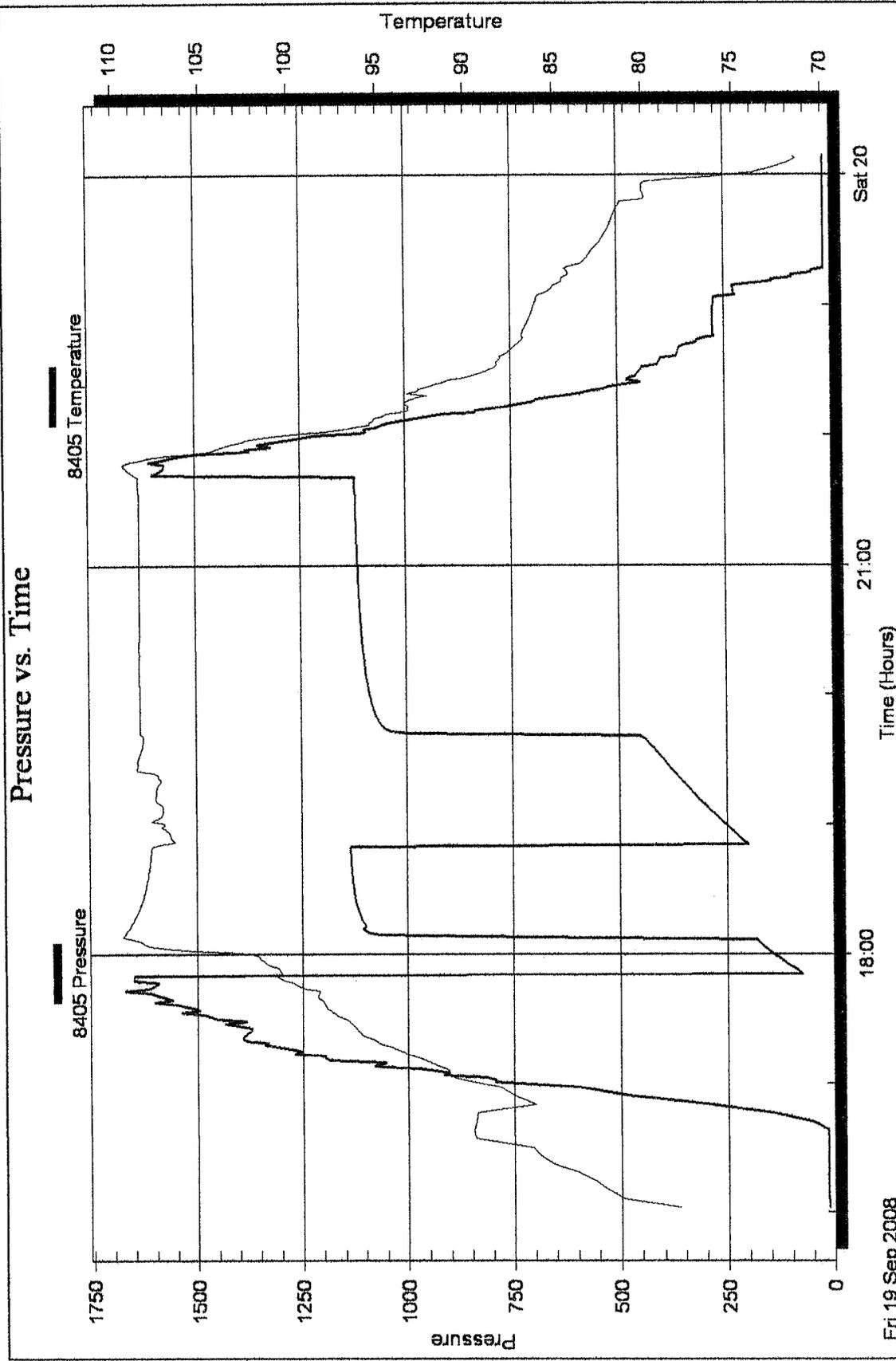
DST Test Number: 1

21-16S-16W RUSH

SAMUEL GARY JR. & ASSC. INC

Serial #: 8405

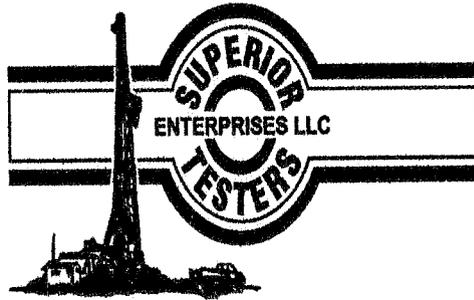
Pressure vs. Time



Printed: 2008.09.23 @ 14:32:03

Ref. No: 16142

Superior Testers Enterprises LLC



DRILL STEM TEST REPORT

Prepared For: **SAMUEL GARY JR. & ASSC. INC**

1560 BROADWAY
SUITE 2100
DENVER CO. 80202

ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

ALLENBOUGH-JME #1-27

Start Date: 2008.09.21 @ 09:00:00

End Date: 2008.09.21 @ 16:35:30

Job Ticket #: 16143 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2008.09.23 @ 14:32:27

SAMUEL GARY JR. & ASSC. INC

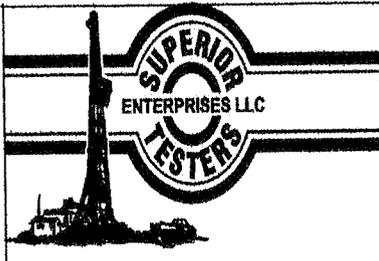
ALLENBOUGH-JME #1-27

21-16S-16W RUSH

DST # 2

LANSING "F"

2008.09.21



DRILL STEM TEST REPORT

SAMUEL GARY JR. & ASSC. INC
 1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

ALLENBOUGH-JME #1-27
21-16S-16W RUSH
 Job Ticket: 16143 DST#: 2
 Test Start: 2008.09.21 @ 09:00:00

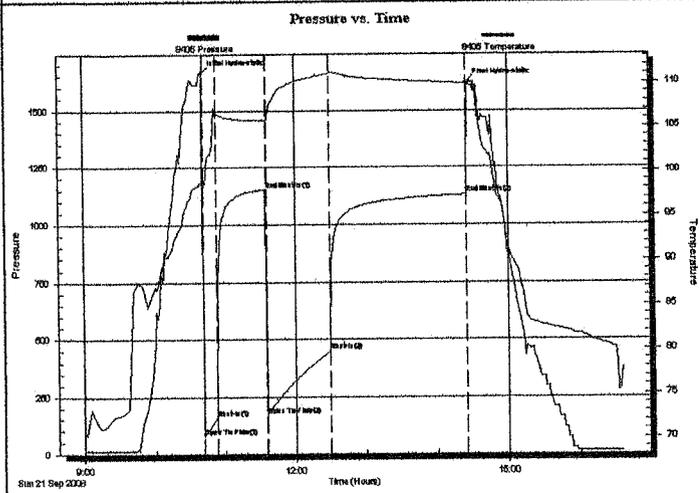
GENERAL INFORMATION:

Formation: **LANSING "F"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 10:41:30
 Tester: FANK ZAMARRIPA
 Time Test Ended: 16:35:30
 Unit No: 3335 62 GB
 Interval: **3305.00 ft (KB) To 3350.00 ft (KB) (TVD)**
 Reference Elevations: 1965.00 ft (KB)
 Total Depth: 3350.00 ft (KB) (TVD) 1958.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8405

Press@RunDepth: 453.65 psig @ ft (KB) Capacity: 2000.00 psig
 Start Date: 2008.09.21 End Date: 2008.09.21 Last Calib.: 1899.12.30
 Start Time: 09:02:00 End Time: 16:35:30 Time On Btm: 2008.09.21 @ 10:40:30
 Time Off Btm: 2008.09.21 @ 14:25:30

TEST COMMENT: 10-INITIAL OPEN:FAIR BLOW TO BOTTOM OF 5 GALLON BUCKET IN 5 MINUTES
 45-INITIAL SHUT-IN:NO BLOW BACK
 50-FINAL OPEN:FAIR BLOW TO BOTTOM OF 5 GALLON BUCKET IN 5 MINUTES
 120-FINAL SHUT-IN:NO BLOW BACK



PRESSURE SUMMARY

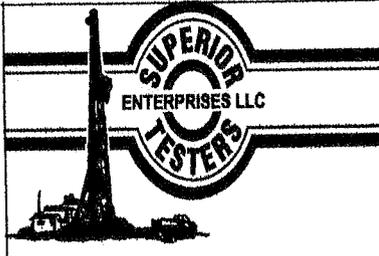
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1662.78	98.55	Initial Hydro-static
2	78.01	98.07	Open To Flow (1)
12	159.86	106.05	Shut-In(1)
54	1153.81	105.71	End Shut-In(1)
56	173.74	105.32	Open To Flow (2)
110	453.65	111.02	Shut-In(2)
224	1130.38	109.89	End Shut-In(2)
225	1619.46	109.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
810.00	MUDDY WATER 30% MUD 70% WA	111.85

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

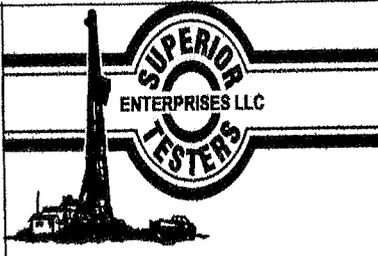
SAMUEL GARY JR. & ASSC. INC
 1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

ALLENBOUGH-JME #1-27
21-16S-16W RUSH
 Job Ticket: 16143 DST#: 2
 Test Start: 2008.09.21 @ 09:00:00

Tool Information

Drill Pipe:	Length: 3278.00 ft	Diameter: 3.88 inches	Volume: 47.94 bbl	Tool Weight: 20000.00 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: 40000.00 lb
			<u>Total Volume: 47.94 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3305.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	74.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Safety Joint	2.00			3278.00	
S.I. Tool	5.00			3283.00	
HYD S.I. Tool	5.00			3288.00	
Jars	6.00			3294.00	
Safety Joint	1.00			3295.00	
Packer	5.00			3300.00	29.00 Bottom Of Top Packer
Packer	5.00			3305.00	
Perforations	40.00			3345.00	
Bullnose	5.00			3350.00	45.00 Bottom Packers & Anchor
Total Tool Length:	74.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

SAMUEL GARY JR. & ASSC. INC
 1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

ALLENBOUGH-JME #1-27
 21-16S-16W RUSH
 Job Ticket: 16143 DST#: 2
 Test Start: 2008.09.21 @ 09:00:00

Mud and Cushion Information

Mud Type: Air
 Mud Weight: 9.00 lb/gal
 Viscosity: 47.00 sec/qt
 Water Loss: 7.99 in⁹
 Resistivity: ohm.m
 Salinity: 6000.00 ppm
 Filter Cake: 1.00 inches

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

Oil API: deg API
 Water Salinity: 48000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
810.00	MUDDY WATER 30% MUD 70% WATER	11.846

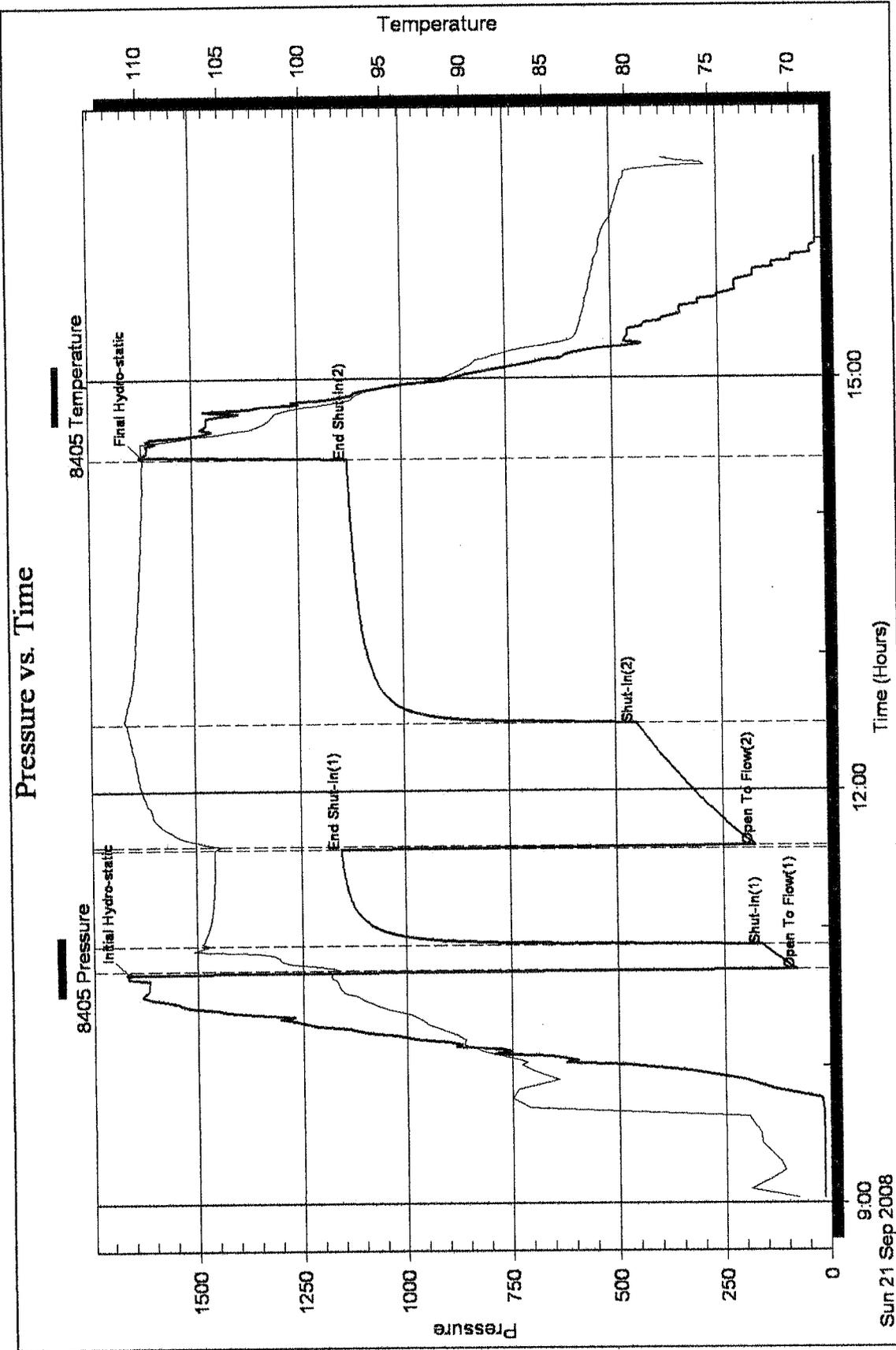
Total Length: 810.00 ft Total Volume: 11.846 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



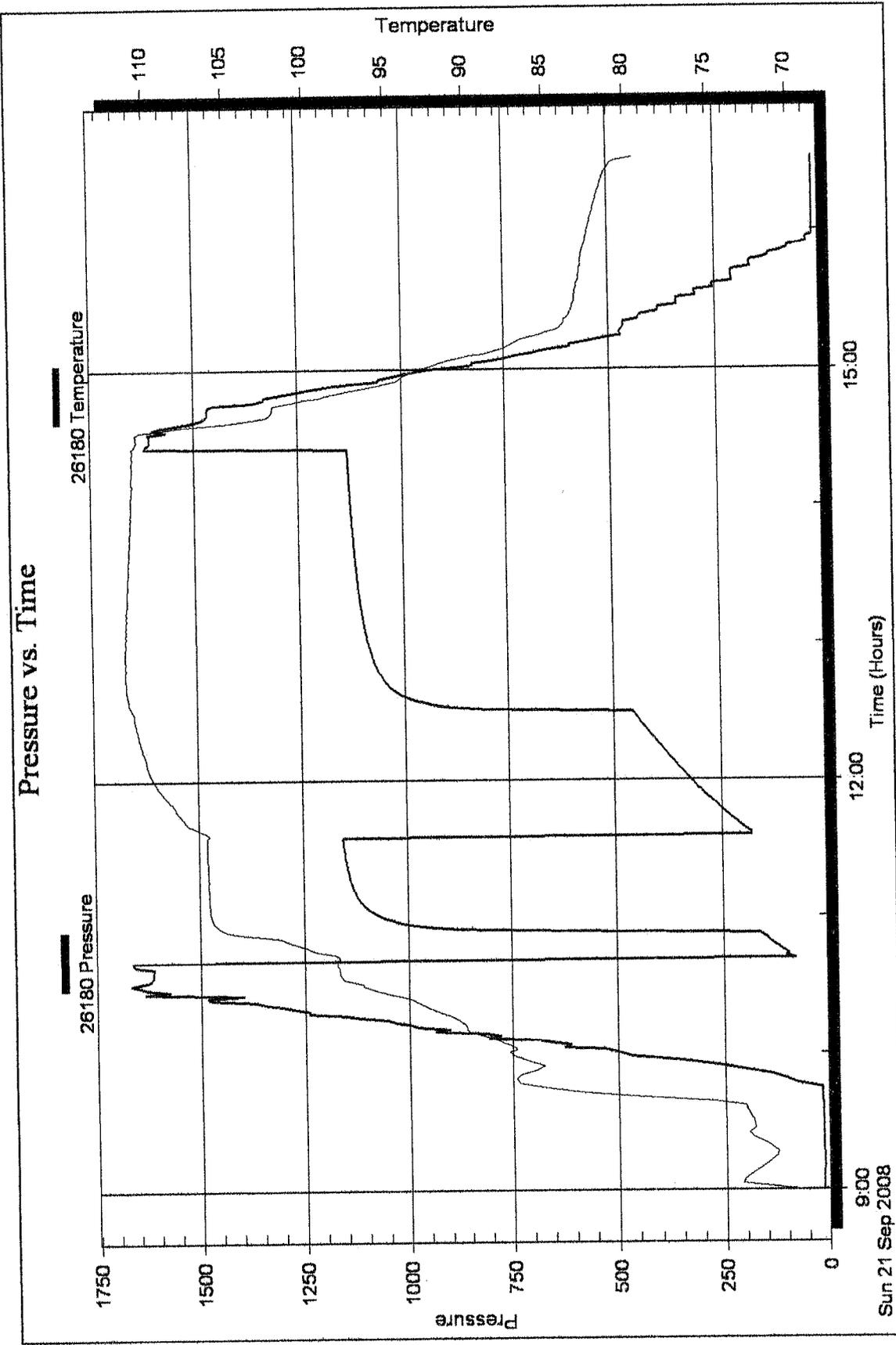
DST Test Number: 2

21-16S-16W RUSH

SAMUEL GARY JR. & ASSC. INC

Serial #: 26180

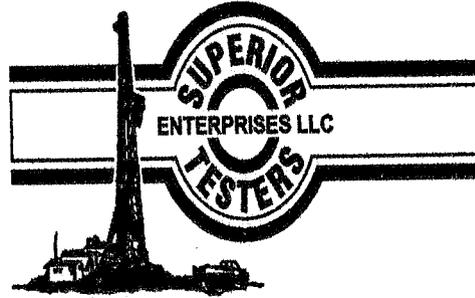
Pressure vs. Time



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Ref. No: 16143

Superior Testers Enterprises LLC



DRILL STEM TEST REPORT

Prepared For: **SAMUEL GARY JR. & ASSC. INC**

1560 BROADWAY
SUITE 2100
DENVER CO. 80202

ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

ALLENBOUGH-JME #1-27

Start Date: 2008.09.22 @ 07:00:00

End Date: 2008.09.22 @ 15:18:30

Job Ticket #: 16144 DST #: 3

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2008.09.23 @ 14:32:42

SAMUEL GARY JR. & ASSC. INC

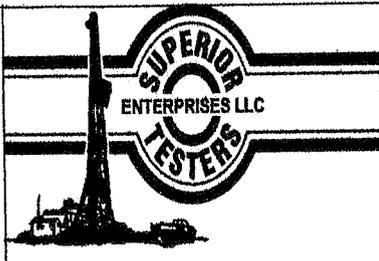
ALLENBOUGH-JME #1-27

21-16S-16W RUSH

DST # 3

LANSING "H-I"

2008.09.22



DRILL STEM TEST REPORT

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
SUITE 2100
DENVER CO. 80202
ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH
Job Ticket: 16144 **DST#: 3**
Test Start: 2008.09.22 @ 07:00:00

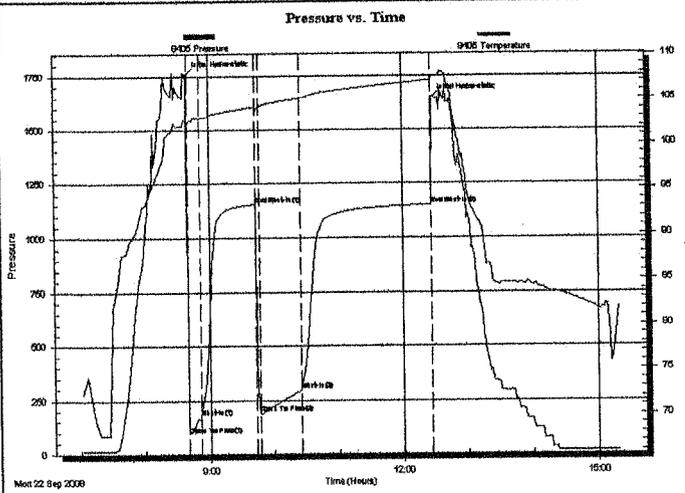
GENERAL INFORMATION:

Formation: **LANSING "H-I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:40:30
Time Test Ended: 15:18:30
Test Type: Conventional Bottom Hole (Initial)
Tester: FRANK ZAMARRIPA
Unit No: 3335 62 GB
Interval: **3383.00 ft (KB) To 3435.00 ft (KB) (TVD)**
Reference Elevations: 1965.00 ft (KB)
Total Depth: 3435.00 ft (KB) (TVD) 1958.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8405

Press@RunDepth: 297.46 psig @ ft (KB) Capacity: 2000.00 psig
Start Date: 2008.09.22 End Date: 2008.09.22 Last Calib.: 1899.12.30
Start Time: 07:02:00 End Time: 15:18:30 Time On Btm: 2008.09.22 @ 08:39:30
Time Off Btm:

TEST COMMENT: 10-INITIAL OPEN:FAIR BLOW OFF BOTTOM OF 5 GALLON BUCKET IN 4 MINUTES
45-INITIAL SHUT-IN:WEAK BLOW BACK
40-FINAL OPEN:STRONG BLOW TO BOTTOM OF 5 GALLON BUCKET IN 1 MINUTE
120-FINAL SHUT-IN:FAIR BLOW BACK



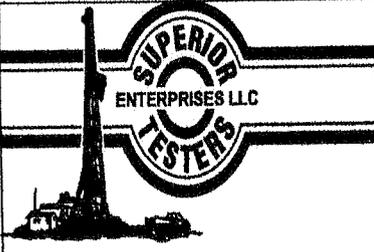
PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.67	102.58	Initial Hydro-static
2	93.04	102.20	Open To Flow (1)
12	172.76	102.86	Shut-In(1)
65	1154.33	104.14	End Shut-In(1)
68	192.17	104.14	Open To Flow (2)
107	297.46	105.09	Shut-In(2)
228	1150.53	107.06	End Shut-In(2)
228	1646.13	107.41	Initial Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2445.00	GAS IN PIPE 100% GAS	34.30
255.00	OIL 100% OIL	3.58
420.00	MCGO 25% MUD 25%GAS 50%OIL	5.89

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

SAMUEL GARY JR. & ASSC. INC
 1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

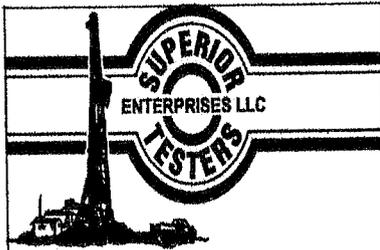
ALLENBOUGH-JME #1-27
21-16S-16W RUSH
 Job Ticket: 16144 DST#: 3
 Test Start: 2008.09.22 @ 07:00:00

Tool Information

Drill Pipe:	Length: 3356.00 ft	Diameter: 3.80 inches	Volume: 47.08 bbl	Tool Weight: 20000.00 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 Full Loose: 40000.00 lb
			<u>Total Volume: 47.08 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3383.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.69 ft			
Tool Length:	81.69 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Safety Joint	2.00			3356.00	
S.I. Tool	5.00			3361.00	
HYD S.I. Tool	5.00			3366.00	
Jars	5.00			3371.00	
Safety Joint	2.00			3373.00	
Packer	5.00			3378.00	29.00 Bottom Of Top Packer
Packer	5.00			3383.00	
C.O. Sub	0.75			3383.75	
Drill Pipe	31.19			3414.94	
C.O. Sub	0.75			3415.69	
Perforations	15.00			3430.69	
Bullnose	5.00			3435.69	52.69 Bottom Packers & Anchor

Total Tool Length: 81.69



DRILL STEM TEST REPORT

FLUID SUMMARY

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
SUITE 2100
DENVER CO. 80202

21-16S-16W RUSH

Job Ticket: 16144 DST#: 3

ATTN: CLAYTON CAMOZZI

Test Start: 2008.09.22 @ 07:00:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 7.99 in³
Resistivity: ohm.m
Salinity: 6000.00 ppm
Filter Cake: 1.00 inches

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

Oil API: 39 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2445.00	GAS IN PIPE 100% GAS	34.297
255.00	OIL 100% OIL	3.577
420.00	MCOGO 25% MUD 25% GAS 50% OIL	5.891

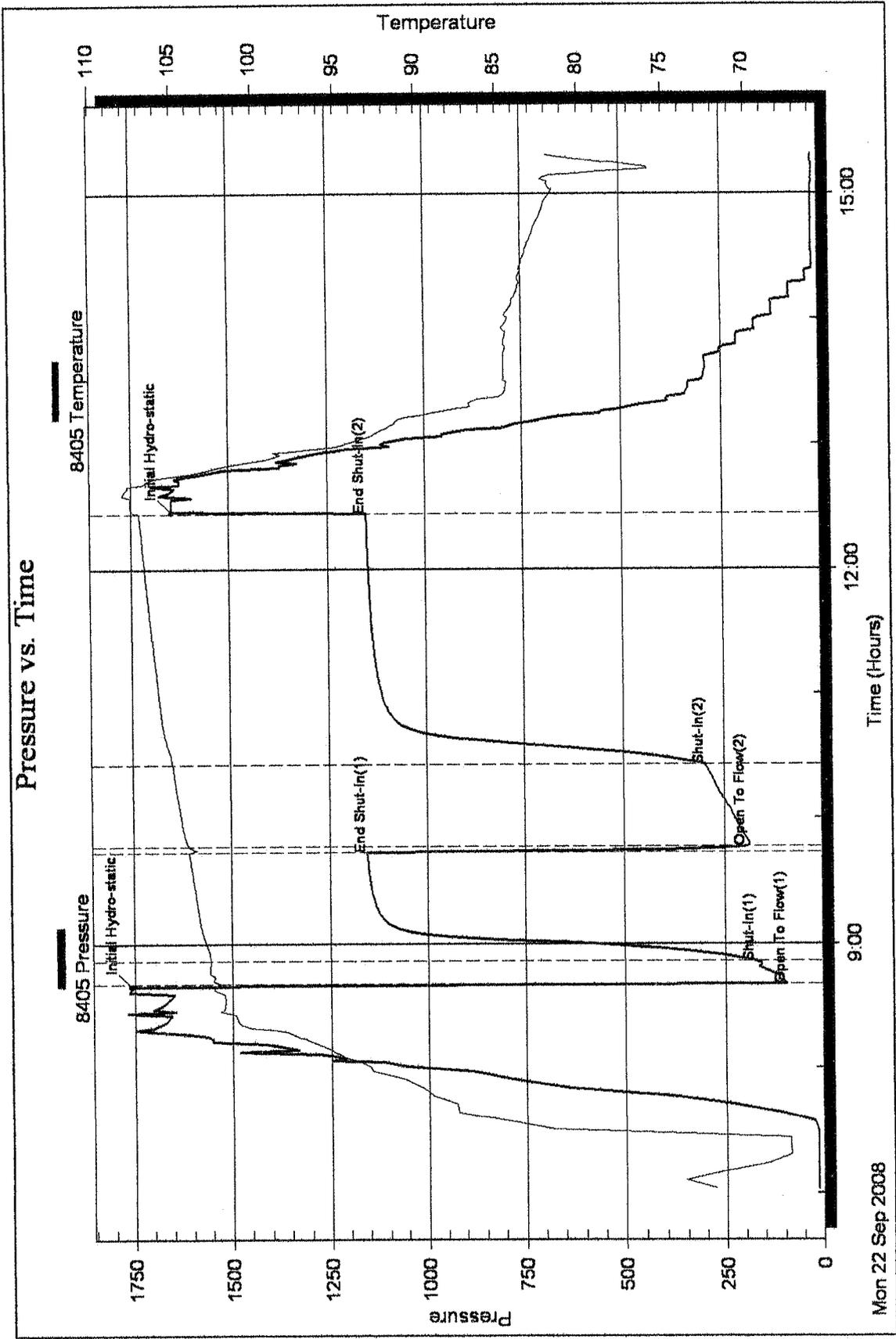
Total Length: 3120.00 ft Total Volume: 43.765 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



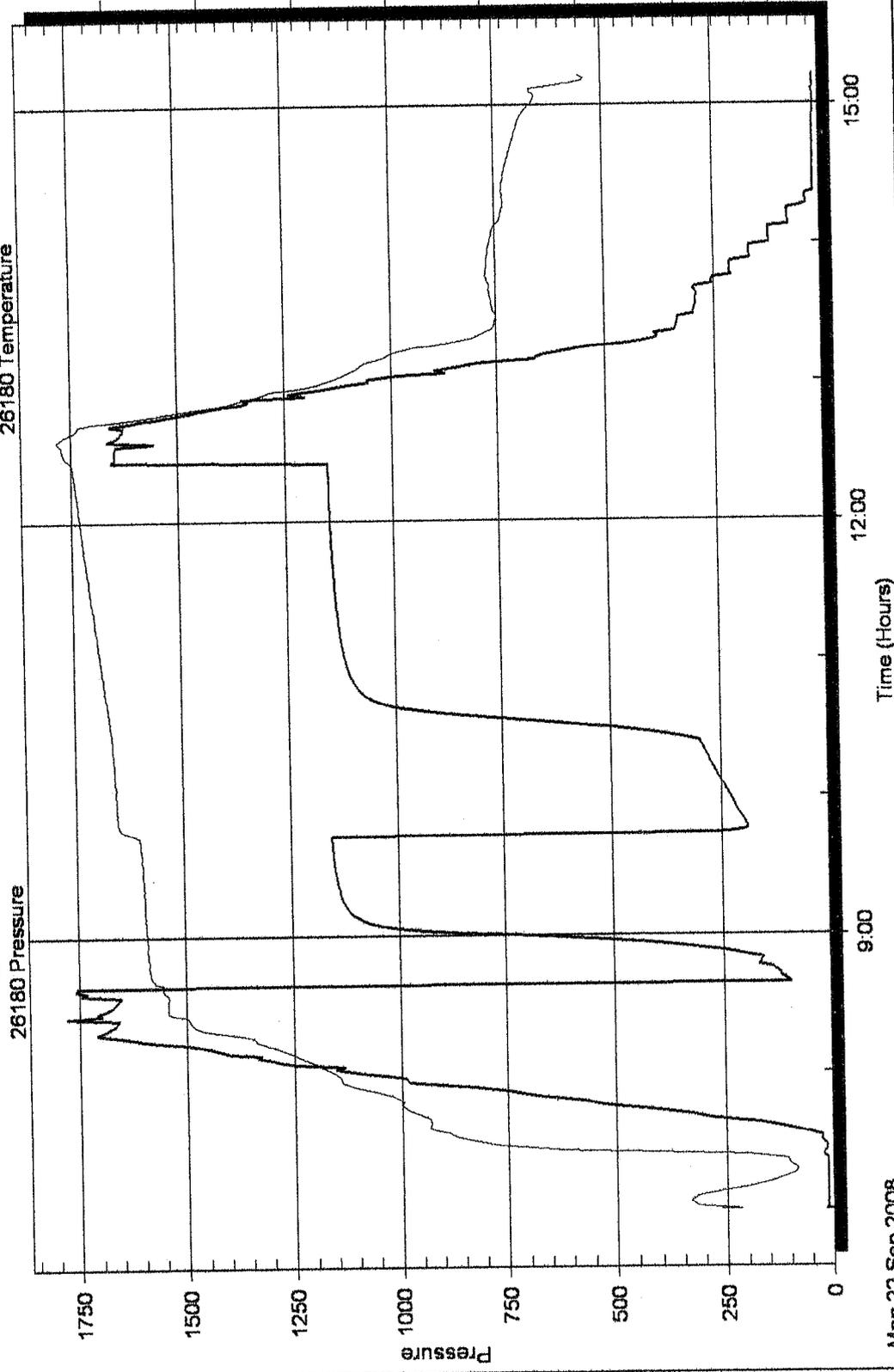
DST Test Number: 3

21-16S-16W RUSH

SAMUEL GARY JR. & ASSC. INC

Serial # 26180

Pressure vs. Time

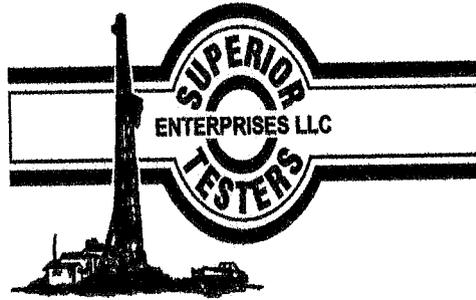


Mon 22 Sep 2008

Printed: 2008.09.23 @ 14:32:42

Ref. No: 16144

Superior Testers Enterprises LLC



DRILL STEM TEST REPORT

Prepared For: **SAMUEL GARY JR. & ASSC. INC**

1560 BROADWAY
SUITE 2100
DENVER CO. 80202

ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

ALLENBOUGH-JME #1-27

Start Date: 2008.09.23 @ 07:43:00

End Date: 2008.09.23 @ 15:57:30

Job Ticket #: 16145 DST #: 4

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2008.09.23 @ 14:32:57

SAMUEL GARY JR. & ASSC. INC

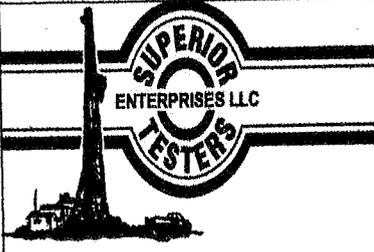
ALLENBOUGH-JME #1-27

21-16S-16W RUSH

DST # 4

ARBUCKLE

2008.09.23



DRILL STEM TEST REPORT

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
SUITE 2100
DENVER CO. 80202
ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

Job Ticket: 16145 DST#: 4
Test Start: 2008.09.23 @ 07:43:00

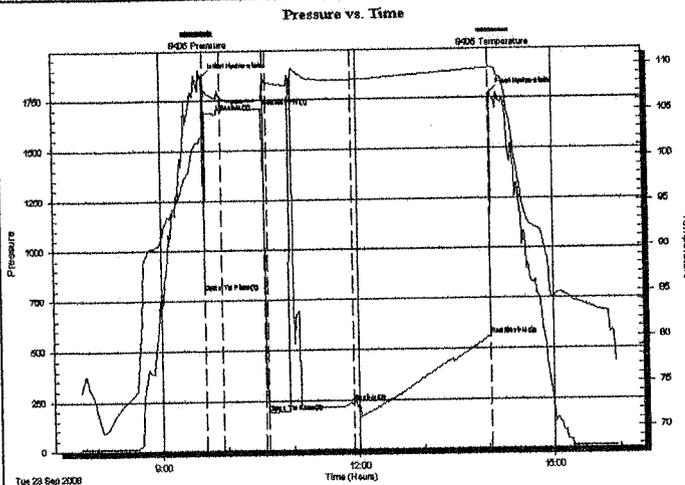
GENERAL INFORMATION:

Formation: **ARBUCKLE**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:39:30
 Time Test Ended: 15:57:30
 Interval: **3518.00 ft (KB) To 3535.00 ft (KB) (TVD)**
 Total Depth: 3535.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: FRANK ZAMARRIPA
 Unit No: 3335 62 GB
 Reference Elevations: 1965.00 ft (KB)
 1958.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8405

Press@RunDepth: 237.56 psig @ ft (KB) Capacity: 2000.00 psig
 Start Date: 2008.09.23 End Date: 2008.09.23 Last Calib.: 1899.12.30
 Start Time: 07:45:00 End Time: 15:57:30 Time On Btm: 2008.09.23 @ 09:38:30
 Time Off Btm: 2008.09.23 @ 14:02:30

TEST COMMENT: 10-INITIAL OPEN:STRONG BLOW TO BOTTOM OF 5 GALLON BUCKET IN 1 MINUTE
 45-INITIAL SHUT-IN:NO BLOW BACK
 60-FINAL OPEN:FAIR BLOW BIULT TO 7 INCHES,FLUSHED TOOL,FAIR BLOW TO 10 INCHES
 120-FINAL SHUT-IN:NO BLOW BACK



PRESSURE SUMMARY

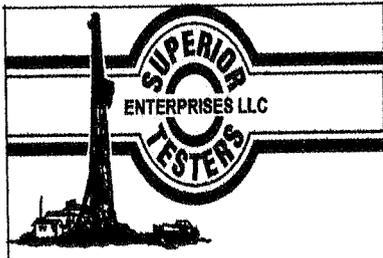
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1867.05	102.37	Initial Hydro-static
2	791.38	106.23	Open To Flow (1)
17	1693.93	106.56	Shut-In(1)
56	1713.09	108.75	End Shut-In(1)
59	193.78	107.95	Open To Flow (2)
137	237.56	108.38	Shut-In(2)
263	563.62	109.53	End Shut-In(2)
264	1771.20	109.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
305.00	MUD	4.28

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
SUITE 2100
DENVER CO. 80202
ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

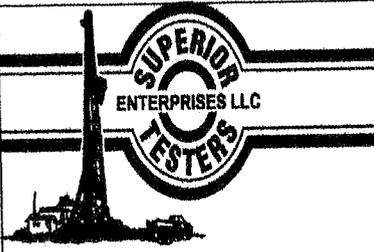
Job Ticket: 16145 DST#: 4
Test Start: 2008.09.23 @ 07:43:00

Tool Information

Drill Pipe:	Length: 3491.00 ft	Diameter: 3.80 inches	Volume: 48.97 bbl	Tool Weight:	20000.00 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:	40000.00 lb
			<u>Total Volume: 48.97 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3518.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	17.00 ft				
Tool Length:	46.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Safety Joint	2.00			3491.00	
S.I. Tool	5.00			3496.00	
HYD S.I. Tool	5.00			3501.00	
Jars	5.00			3506.00	
Safety Joint	2.00			3508.00	
Packer	5.00			3513.00	29.00 Bottom Of Top Packer
Packer	5.00			3518.00	
Perforations	12.00			3530.00	
Bullnose	5.00			3535.00	17.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

SAMUEL GARY JR. & ASSC. INC
 1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

ALLENBOUGH-JME #1-27
21-16S-16W RUSH
 Job Ticket: 16145 DST#: 4
 Test Start: 2008.09.23 @ 07:43:00

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: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8500.00 ppm			
Filter Cake: 1.00 inches			

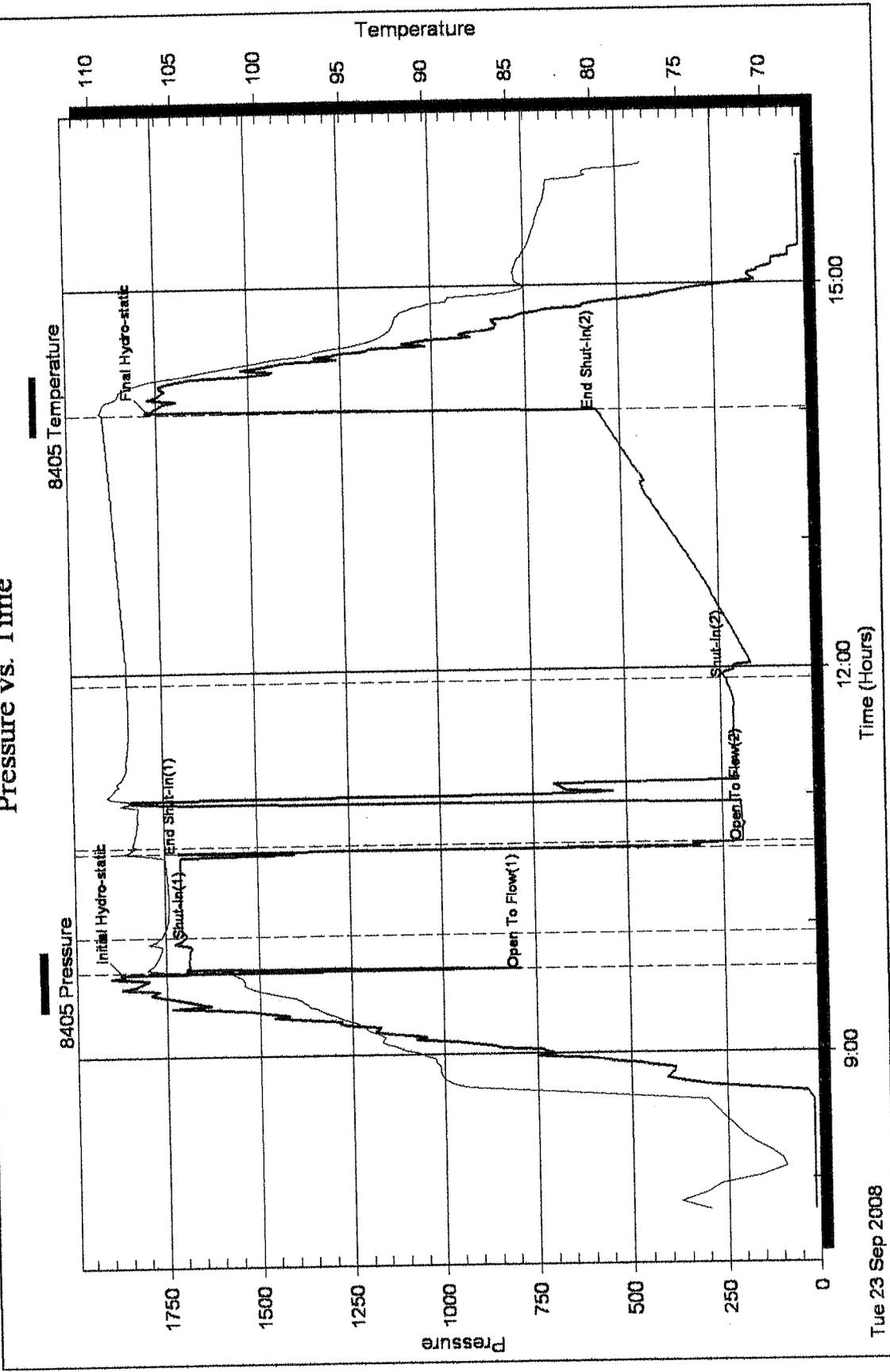
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
305.00	MUD	4.278

Total Length: 305.00 ft Total Volume: 4.278 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time



Tue 23 Sep 2008

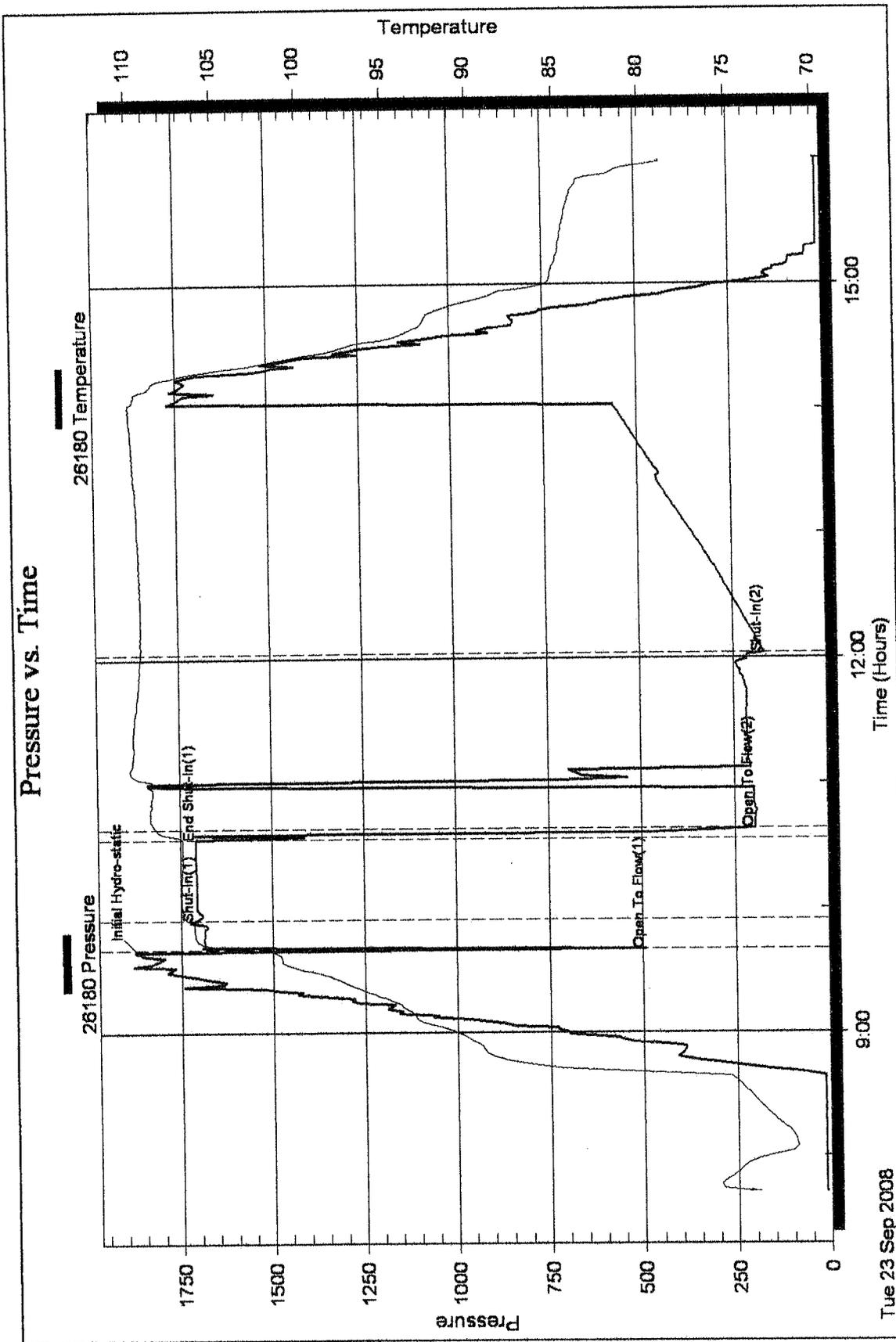
DST Test Number: 4

21-16S-16W RUSH

SAMUEL GARY JR. & ASSC. INC

Serial # 26180

Pressure vs. Time

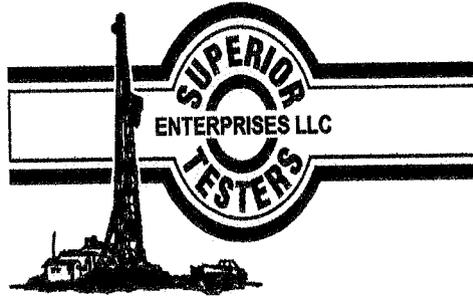


Tue 23 Sep 2008

Printed: 2008.09.23 @ 14:32:58

Ref. No: 16145

Superior Testers Enterprises LLC



DRILL STEM TEST REPORT

Prepared For: **SAMUEL GARY JR. & ASSC. INC**

1560 BROADWAY
SUITE 2100
DENVER CO. 80202

ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

ALLENBOUGH-JME #1-27

Start Date: 2008.09.23 @ 21:00:00

End Date: 2008.09.24 @ 06:35:30

Job Ticket #: 16146 DST #: 5

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2008.09.24 @ 06:52:52

SAMUEL GARY JR. & ASSC. INC

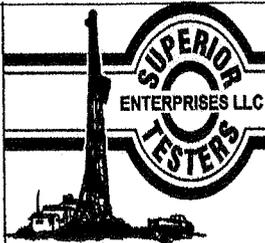
ALLENBOUGH-JME #1-27

21-16S-16W RUSH

DST # 5

ARBUCKLE

2008.09.23



DRILL STEM TEST REPORT

SAMUEL GARY JR. & ASSC. INC

ALLENBOUGH-JME #1-27

1560 BROADWAY
SUITE 2100
DENVER CO. 80202
ATTN: CLAYTON CAMOZZI

21-16S-16W RUSH

Job Ticket: 16146 DST#: 5
Test Start: 2008.09.23 @ 21:00:00

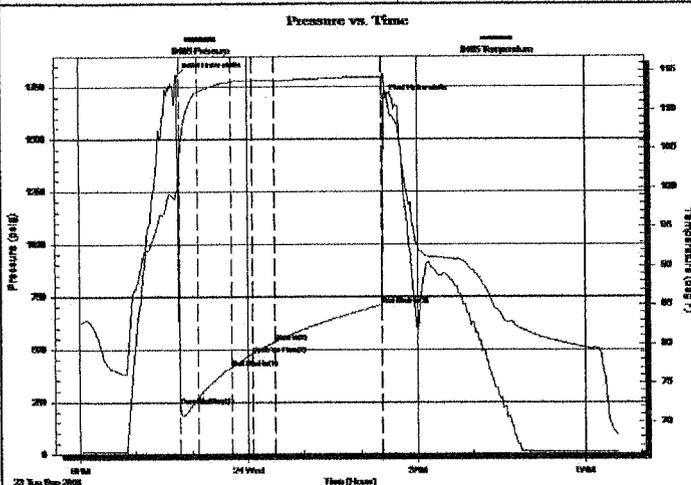
GENERAL INFORMATION:

Formation: **ARBUCKLE**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:47:00
 Time Test Ended: 06:35:30
 Interval: **3529.00 ft (KB) To 3545.00 ft (KB) (TVD)**
 Total Depth: 3545.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: FRANK ZAMARRIPA
 Unit No: 3335 62 GB
 Reference Elevations: 1965.00 ft (KB)
 1958.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8405

Press@RunDepth: 534.58 psig @ ft (KB) Capacity: 2000.00 psig
 Start Date: 2008.09.23 End Date: 2008.09.24 Last Calib.: 1899.12.30
 Start Time: 21:00:00 End Time: 06:35:30 Time On Btm: 2008.09.23 @ 22:45:30
 Time Off Btm: 2008.09.24 @ 02:24:30

TEST COMMENT: 10-INITIAL OPEN:STRONG BLOW TO BOTTOM OF 5 GALLON BUCKET IN 1 MINUTE
 45-INITIAL SHUT-IN: STRONG BLOW BACK BUILT TO BOTTOM OF 5 GALLON BUCKET
 30-FINAL OPEN:STRONG BLOW TO BOTTOM OF 5 GLLON BUCKET RIGHT AWAY
 120-FINAL SHUT-IN: BLOW BACK BUILT TO BOTTOM OF 5 GALLON BUCKET



PRESSURE SUMMARY

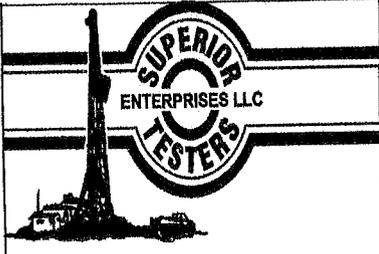
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1804.24	99.75	Initial Hydro-static
2	238.25	103.17	Open To Flow (1)
21	272.06	112.40	Shut-In(1)
57	414.81	113.56	End Shut-In(1)
80	478.83	113.75	Open To Flow (2)
104	534.58	113.73	Shut-In(2)
218	712.01	114.18	End Shut-In(2)
219	1694.31	114.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1645.00	GO 20% GAS 80% OIL	23.08
240.00	MCWCGO 5% MUD 5% WATER 10% 3.373 80	

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

SAMUEL GARY JR. & ASSC. INC
 1560 BROADWAY
 SUITE 2100
 DENVER CO. 80202
 ATTN: CLAYTON CAMOZZI

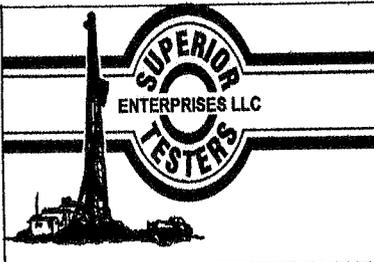
ALLENBOUGH-JME #1-27
21-16S-16W RUSH
 Job Ticket: 16146 DST#: 5
 Test Start: 2008.09.23 @ 21:00:00

Tool Information

Drill Pipe:	Length: 3502.00 ft	Diameter: 3.80 inches	Volume: 49.12 bbl	Tool Weight: 20000.00 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: 50000.00 lb
			<u>Total Volume: 49.12 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3529.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Safety Joint	2.00			3502.00	
S.I. Tool	5.00			3507.00	
HYD S.I. Tool	5.00			3512.00	
Jars	5.00			3517.00	
Safety Joint	2.00			3519.00	
Packer	5.00			3524.00	29.00 Bottom Of Top Packer
Packer	5.00			3529.00	
Perforations	11.00			3540.00	
Bullnose	5.00			3545.00	16.00 Bottom Packers & Anchor
Total Tool Length:	45.00				



DRILL STEM TEST REPORT **FLUID SUMMARY**

SAMUEL GARY JR. & ASSC. INC 1560 BROADWAY SUITE 2100 DENVER CO. 80202 ATTN: CLAYTON CAMOZZI	ALLENBOUGH-JME #1-27 21-16S-16W RUSH Job Ticket: 16146 DST#: 5 Test Start: 2008.09.23 @ 21:00:00
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Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 69.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.80 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 8500.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1645.00	GO 20% GAS 80% OIL	23.075
240.00	MCWCGO 5% MUD 5% WATER 10% GA:	3.367

Total Length: 1885.00 ft Total Volume: 26.442 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

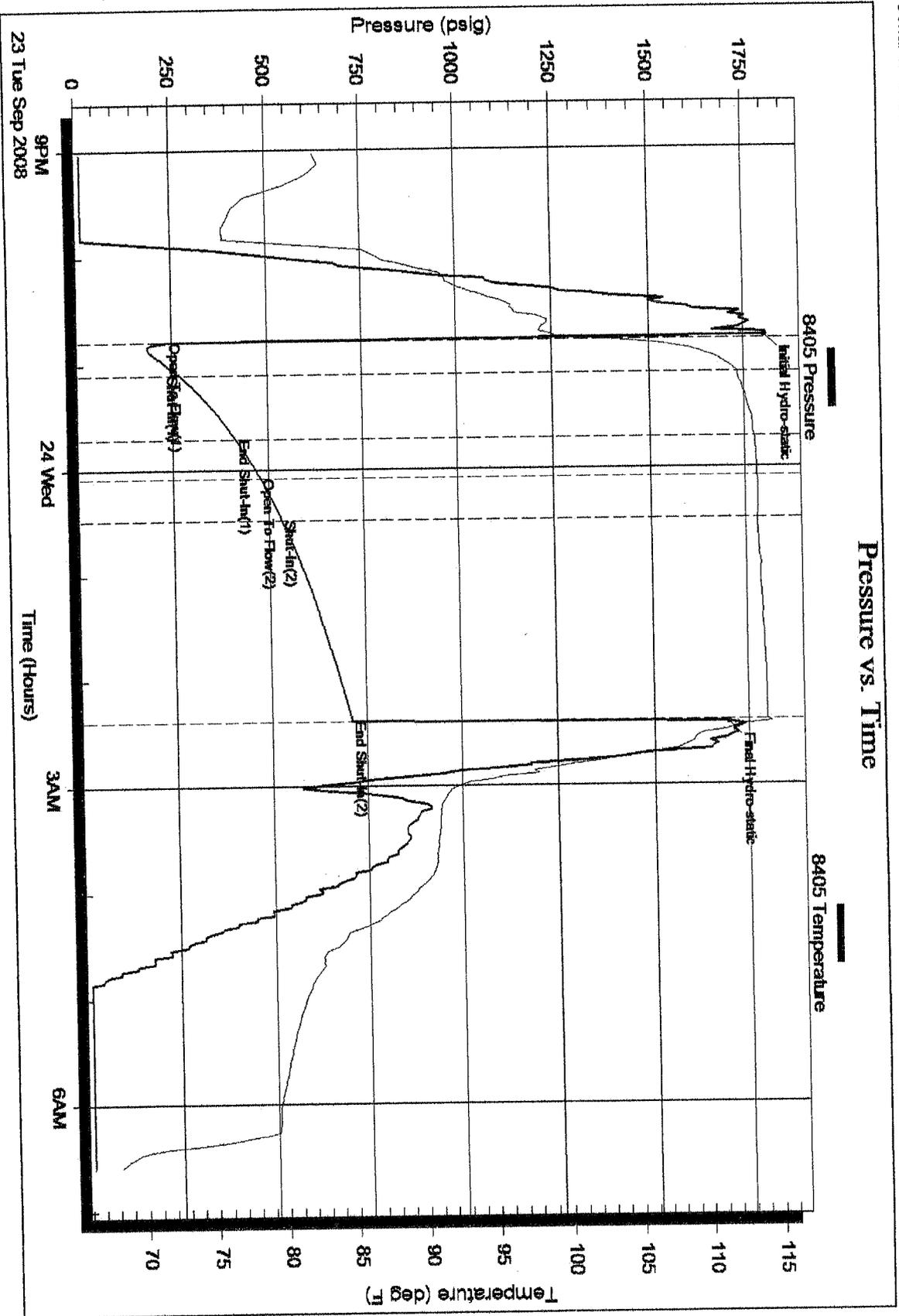
Serial #: 8405

SAMUEL GARY JR. & ASSOC. INC

21-16S-16W RUSH

DST Test Number: 5

Pressure vs. Time



Serial #: 26180

SAMUEL GARY JR. & ASSC. INC

21-16S-16W RUSH

DST Test Number: 5

