

DRILL STEM TEST REPORT

Prepared For: **Cambria Corporation**

P.O. Box 1065
Great Bend, KS 67530

ATTN: Jim Musgrove

32-23s-15w-Pawnee KS

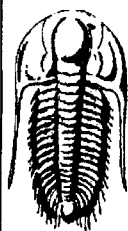
Becker Trust #1

Start Date: 2005.05.26 @ 05:47:11

End Date: 2005.05.26 @ 13:48:56

Job Ticket #: 20746 DST #: 1

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Cambria Corporation

P.O. Box 1065
Great Bend, KS 67530

ATTN: Jim Musgrove

Becker Trust #1

32-23s-15w-Pawnee KS

Job Ticket: 20746

DST#: 1

Test Start: 2005.05.26 @ 05:47:11

GENERAL INFORMATION:

Formation: **Winfield**

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

Time Tool Opened: 07:59:56

Time Test Ended: 13:48:56

Test Type: **Conventional Bottom Hole**

Tester: **Jake Fahrenbruch**

Unit No: **19**

Interval: **2012.00 ft (KB) To 2065.00 ft (KB) (TVD)**

Total Depth: **2065.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2044.00 ft (KB)**

2040.00 ft (CF)

KB to GR/CF: **4.00 ft**

Serial #: 6667 **Inside**

Press@RunDepth: **38.90 psig @ 2013.00 ft (KB)**

Start Date: **2005.05.26**

End Date:

2005.05.26

Start Time: **05:47:16**

End Time:

13:48:55

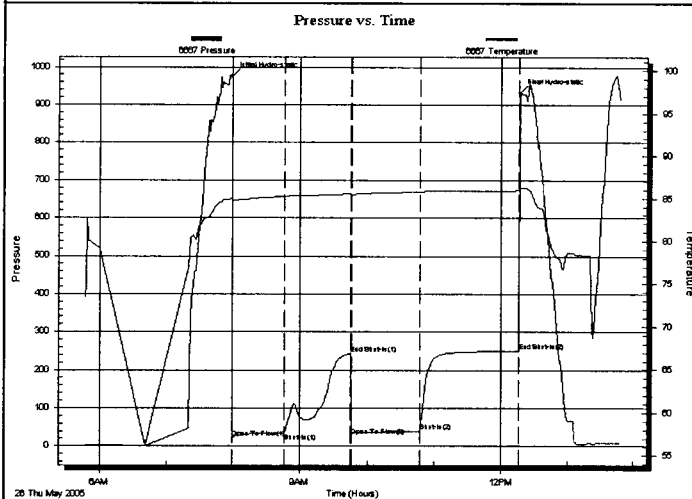
Capacity: **7000.00 psig**

Last Calib.: **2005.05.26**

Time On Btm: **2005.05.26 @ 07:59:41**

Time Off Btm: **2005.05.26 @ 12:16:41**

TEST COMMENT: IF: Fair to strong blow, building to BOB in 36 min.
IS: Bled off, blew back BOB in 26 min, slowly dying to 5" at end of shut in.
FF: Strong blow, BOB immediately. GTS 44 min.
FS: Bled off, Blew bac



PRESSURE SUMMARY

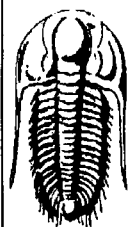
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	975.95	84.92	Initial Hydro-static
1	21.05	84.67	Open To Flow (1)
47	34.47	85.20	Shut-In (1)
106	243.33	85.49	End Shut-In (1)
106	27.25	85.43	Open To Flow (2)
168	38.90	85.75	Shut-In (2)
257	250.26	85.91	End Shut-In (2)
257	932.90	86.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	WM 35%w 65%rn	0.32
0.00	RW=.13ohm@83degF=36000ppm	0.00
0.00	0	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cambria Corporation
P.O. Box 1065
Great Bend, KS 67530
ATTN: Jim Musgrove

Becker Trust #1
32-23s-15w-Pawnee KS
Job Ticket: 20746 **DST#: 1**
Test Start: 2005.05.26 @ 05:47:11

Tool Information

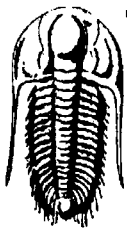
Drill Pipe:	Length: 1894.00 ft	Diameter: 3.80 inches	Volume: 26.57 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose:	lb
			<u>Total Volume: 27.15 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	28000.00 lb
Depth to Top Packer:	2012.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	53.00 ft				
Tool Length:	73.00 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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Shut In Tool	5.00			1997.00	
Hydraulic tool	5.00			2002.00	
Packer	5.00			2007.00	20.00 Bottom Of Top Packer
Packer	5.00			2012.00	
Stubb	1.00			2013.00	
Recorder	0.00	6667	Inside	2013.00	
Perforations	10.00			2023.00	
Change Over Sub	1.00			2024.00	
Blank Spacing	32.00			2056.00	
Change Over Sub	1.00			2057.00	
Perforations	5.00			2062.00	
Recorder	0.00	6074	Outside	2062.00	
Bullnose	3.00			2065.00	53.00 Bottom Packers & Anchor

Total Tool Length: 73.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Cambria Corporation
P.O. Box 1065
Great Bend, KS 67530
ATTN: Jim Musgrove

Becker Trust #1
32-23s-15w-Pawnee KS
Job Ticket: 20746 **DST#: 1**
Test Start: 2005.05.26 @ 05:47:11

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 43.00 sec/qt
Water Loss: 7.98 in³
Resistivity: ohm.m
Salinity: 75000.00 ppm
Filter Cake: 0.04 inches

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

Oil API: deg API
Water Salinity: 36000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	WM 35%w 65%m	0.320
0.00	RW=.13ohm@83degF=36000ppm	0.000
0.00	0	0.000

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:

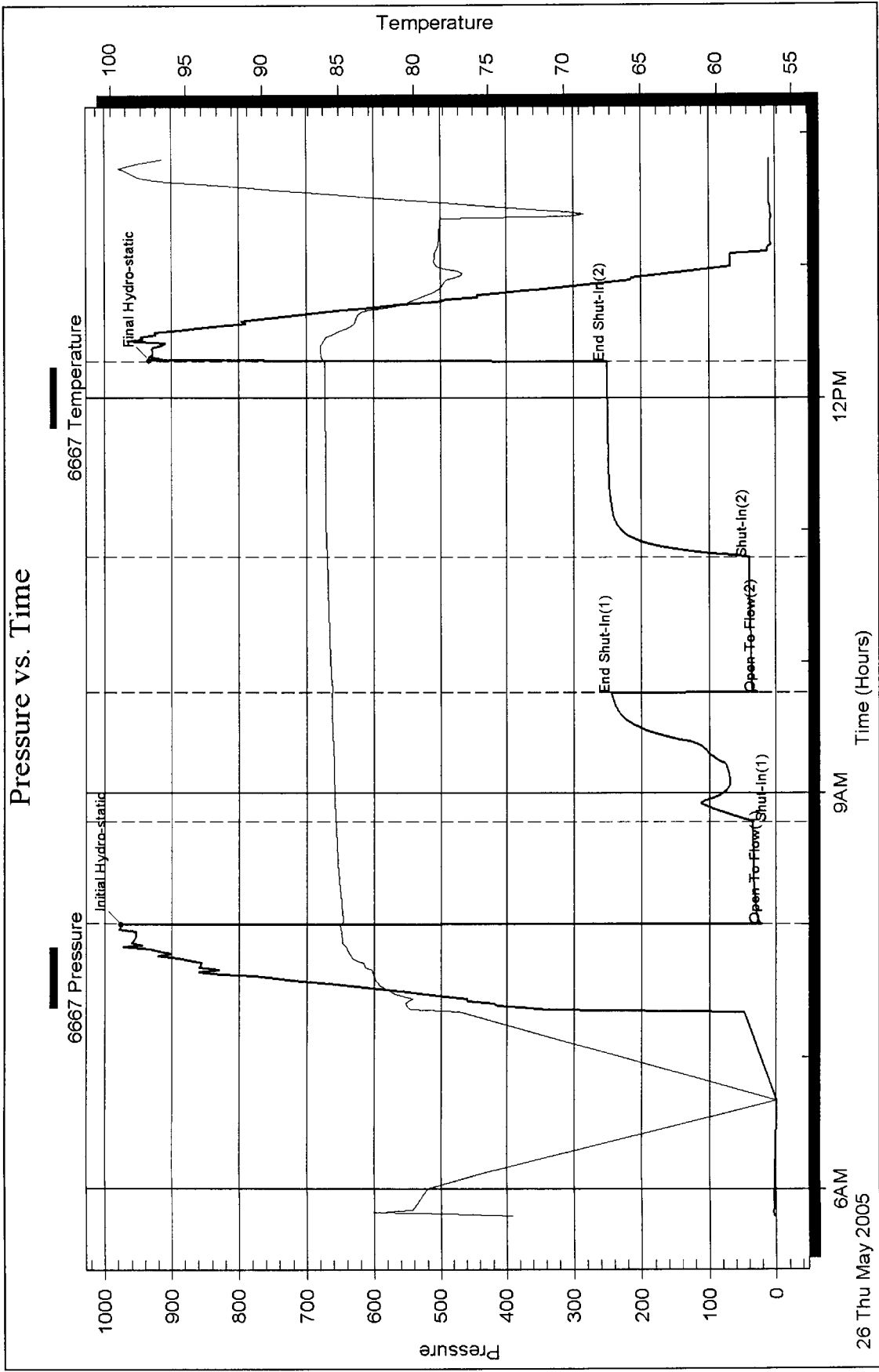
Serial #: 6667

Inside

Cambria Corporation

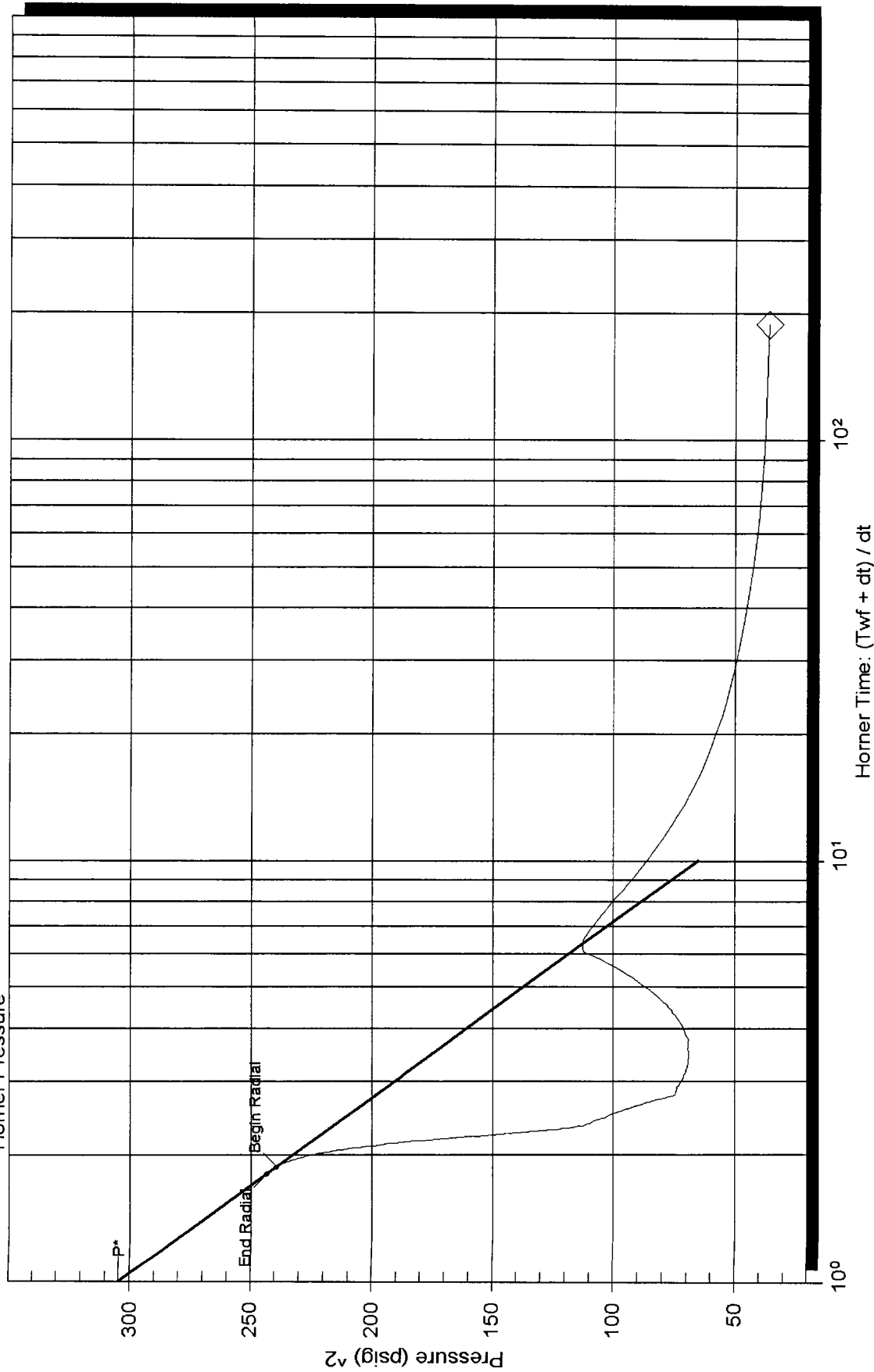
32-23s-15w - Pawnee KS

DST Test Number: 1

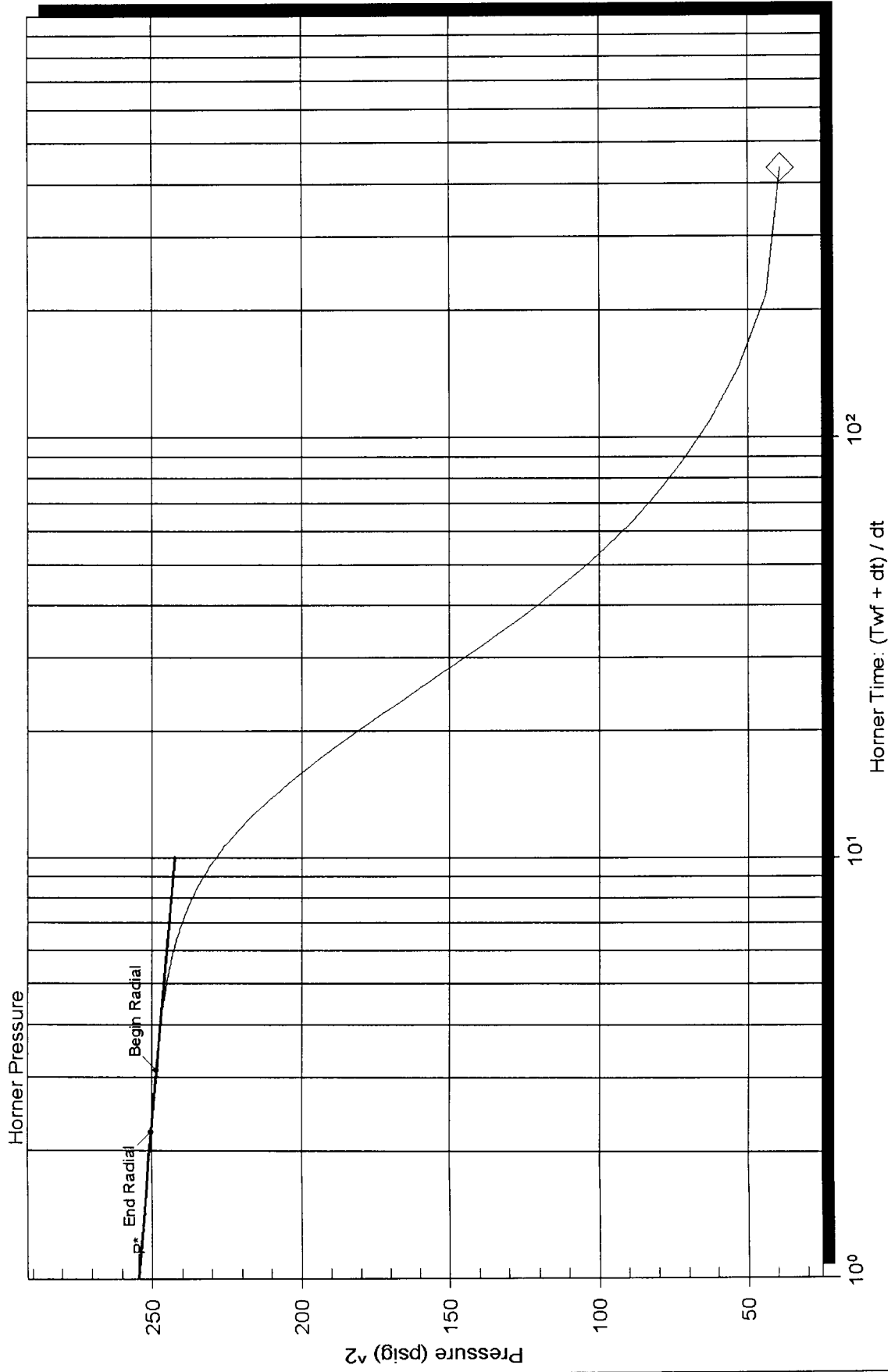


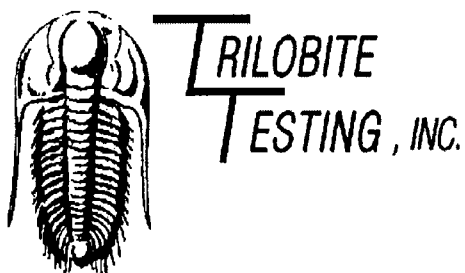
Horner Plot

Horner Pressure



Horner Plot





DRILL STEM TEST REPORT

Prepared For: **Cambria Corporation**

P.O. Box 1065
Great Bend, KS 67530

ATTN: Jim Musgrove

32-23s-15w-Pawnee KS

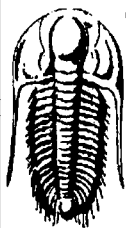
Becker Trust #1

Start Date: 2005.05.26 @ 19:16:03

End Date: 2005.05.27 @ 02:11:18

Job Ticket #: 20747 DST #: 2

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



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TESTING, INC.

DRILL STEM TEST REPORT

Cambria Corporation
P.O. Box 1065
Great Bend, KS 67530
ATTN: Jim Musgrove

Becker Trust #1

32-23s-15w-Pawnee KS

Job Ticket: 20747

DST#: 2

Test Start: 2005.05.26 @ 19:16:03

GENERAL INFORMATION:

Formation: **Tawanda**

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

Time Tool Opened: 20:43:03

Time Test Ended: 02:11:18

Test Type: **Conventional Bottom Hole**

Tester: **Jake Fahrenbruch**

Unit No: **19**

Interval: **2046.00 ft (KB) To 2110.00 ft (KB) (TVD)**

Total Depth: **2110.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2044.00 ft (KB)**

2040.00 ft (CF)

KB to GR/CF: **4.00 ft**

Serial #: 6667 **Inside**

Press@RunDepth: **62.51 psig @ 2047.00 ft (KB)**

Start Date: **2005.05.26**

End Date:

2005.05.27

Start Time: **19:16:08**

End Time:

02:11:17

Capacity: **7000.00 psig**

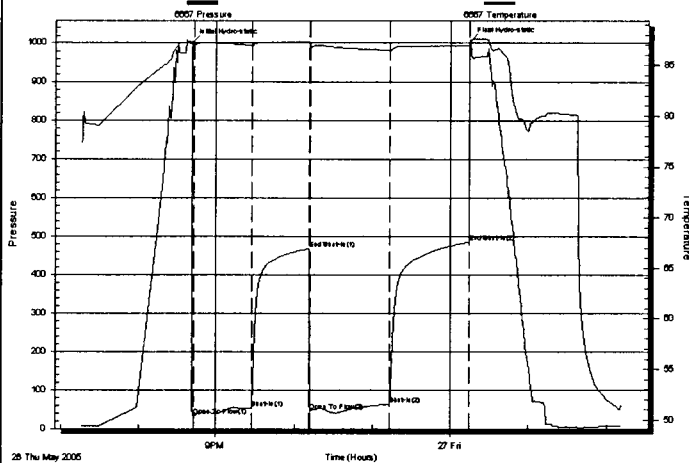
Last Calib.: **2005.05.27**

Time On Btm: **2005.05.26 @ 20:41:33**

Time Off Btm: **2005.05.27 @ 00:15:33**

TEST COMMENT: IF: Strong blow, BOB 2min 23sec. GTS 17min 30sec.
IS: Bled off, blew back BOB in 6min, held for duration.
FF: Strong blow, BOB immediately.
FS: Bled off, blew back @ 2".

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1000.46	87.30	Initial Hydro-static
2	31.63	87.06	Open To Flow (1)
46	51.18	86.92	Shut-In (1)
90	466.68	87.25	End Shut-In (1)
91	43.51	86.82	Open To Flow (2)
151	62.51	86.45	Shut-In (2)
213	485.32	86.88	End Shut-In (2)
214	1005.22	87.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	WCM 15%w 85%m	0.68
0.00	RW=.165ohm@58degF=55000ppm	0.00
0.00	0	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	7.50	8.20
Last Gas Rate	0.25	19.00	52.99
Max. Gas Rate	0.25	19.00	52.99



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cambria Corporation

Becker Trust #1

P.O. Box 1065
Great Bend, KS 67530

32-23s-15w-Pawnee KS

Job Ticket: 20747

DST#: 2

ATTN: Jim Musgrove

Test Start: 2005.05.26 @ 19:16:03

Tool Information

Drill Pipe:	Length: 1956.00 ft	Diameter: 3.80 inches	Volume: 27.44 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: lb
			Total Volume: 28.02 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	48.00 ft			String Weight: Initial 26000.00 lb
Depth to Top Packer:	2046.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	84.00 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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Shut In Tool	5.00			2031.00	
Hydraulic tool	5.00			2036.00	
Packer	5.00			2041.00	20.00 Bottom Of Top Packer
Packer	5.00			2046.00	
Stubb	1.00			2047.00	
Recorder	0.00	6667	Inside	2047.00	
Perforations	10.00			2057.00	
Change Over Sub	1.00			2058.00	
Blank Spacing	32.00			2090.00	
Change Over Sub	1.00			2091.00	
Perforations	16.00			2107.00	
Recorder	0.00	6074	Outside	2107.00	
Bullnose	3.00			2110.00	64.00 Bottom Packers & Anchor

Total Tool Length: 84.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Cambria Corporation
P.O. Box 1065
Great Bend, KS 67530

ATTN: Jim Musgrove

Becker Trust #1
32-23s-15w-Pawnee KS
Job Ticket: 20747 **DST#: 2**
Test Start: 2005.05.26 @ 19:16:03

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 38.00 sec/qt
Water Loss: 9.98 in³
Resistivity: ohm.m
Salinity: 29500.00 ppm
Filter Cake: 0.04 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig
Oil API: deg API
Water Salinity: 55000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	WCM 15%w 85%m	0.678
0.00	RW=.165ohm@58degF=55000ppm	0.000
0.00	0	0.000

Total Length: 125.00 ft Total Volume: 0.678 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



TRILOBITE
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DRILL STEM TEST REPORT

GAS RATES

Cambria Corporation

Becker Trust #1

P.O. Box 1065
Great Bend, KS 67530

32-23s-15w-Pawnee KS

Job Ticket: 20747

DST#: 2

ATTN: Jim Musgrove

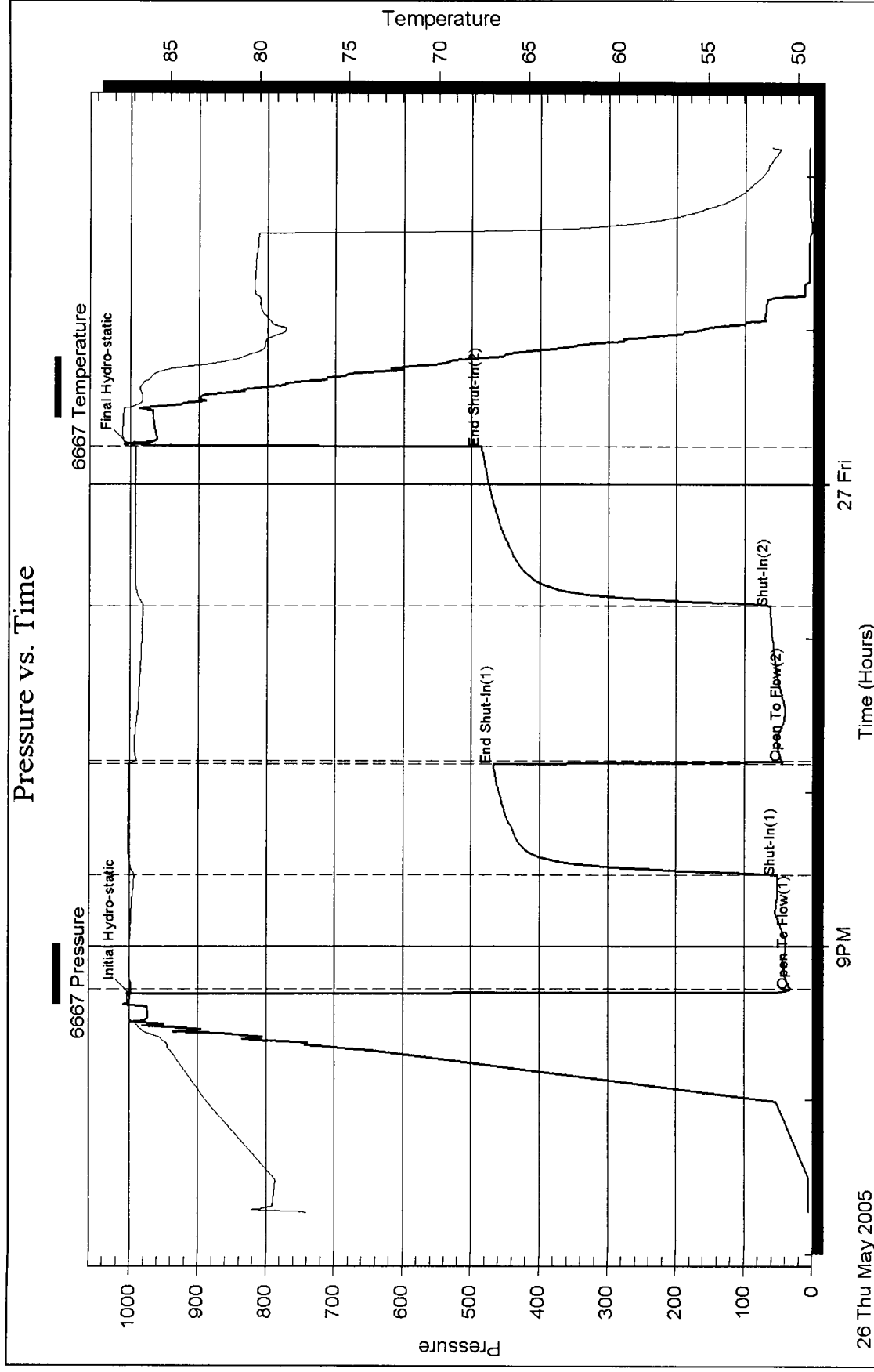
Test Start: 2005.05.26 @ 19:16:03

Gas Rates Information

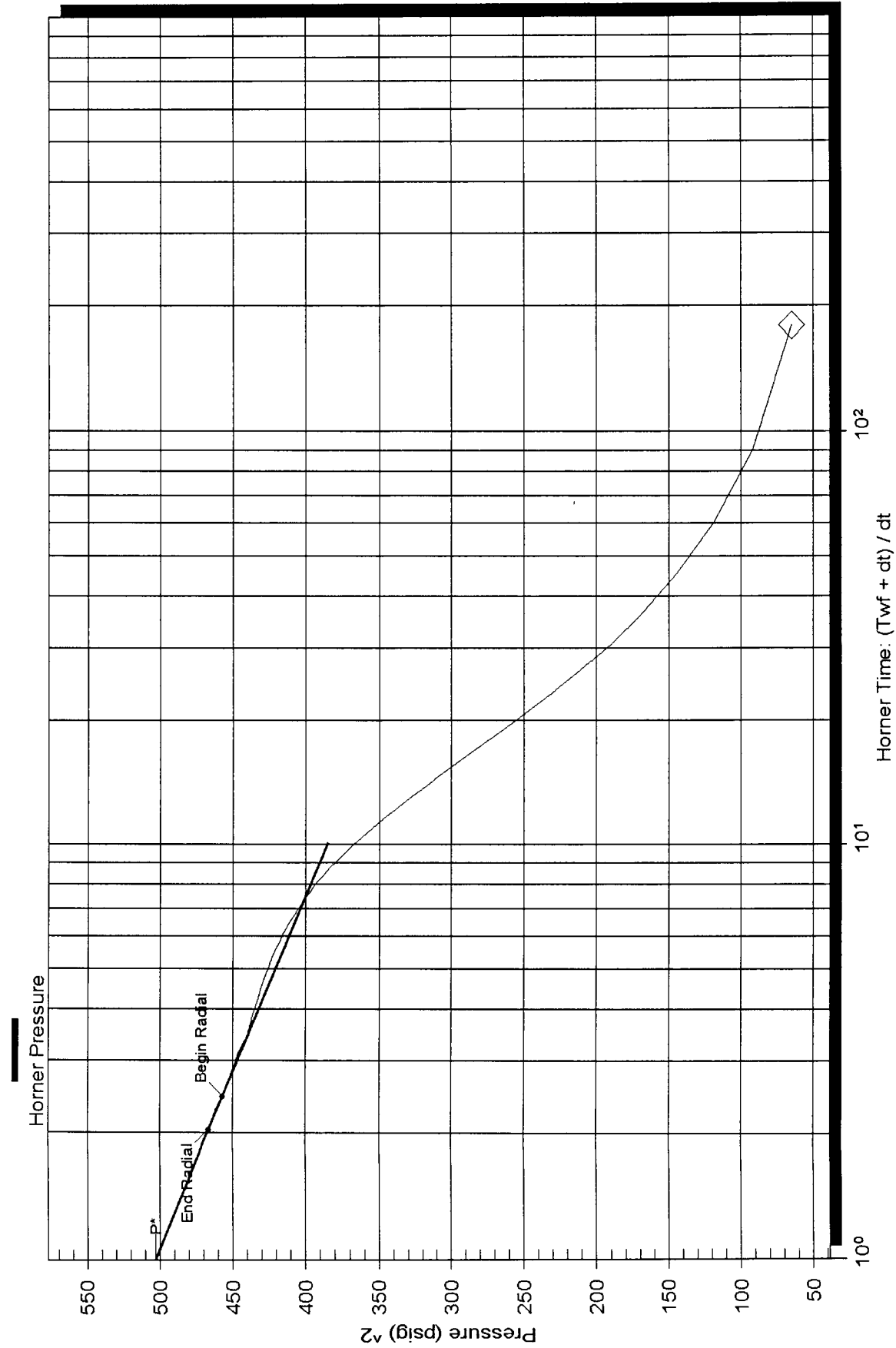
Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	25	0.13	7.50	8.20
1	25	0.13	7.50	8.20
1	30	0.13	15.00	11.00
1	35	0.25	12.00	41.88
1	40	0.25	10.50	39.50
1	45	0.25	10.00	38.71
2	5	0.25	13.00	43.47
2	10	0.25	15.00	46.64
2	15	0.38	4.00	67.40
2	20	0.25	3.00	27.60
2	25	0.25	6.00	32.36
2	30	0.25	11.00	40.30
2	35	0.25	13.50	44.26
2	40	0.25	16.00	48.23
2	45	0.25	17.00	49.81
2	50	0.25	18.00	51.40
2	55	0.25	19.00	52.99
2	60	0.25	19.00	52.99



Horner Plot



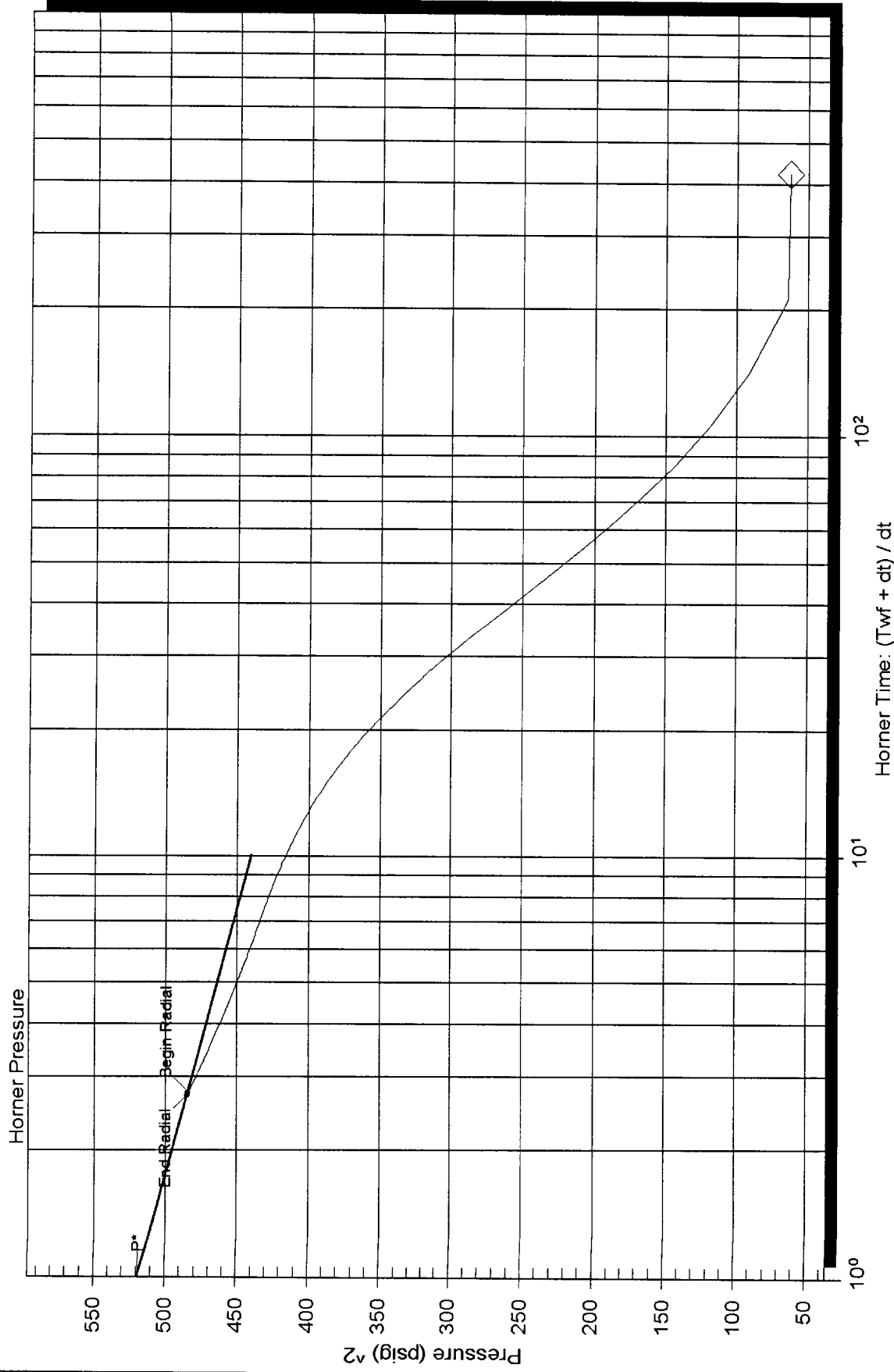
Serial Number: 6667 (Inside)

P* : 22.43

Slope (m) : 117.71 kpa/log cycle

Flow Cycle: 1

Horner Plot

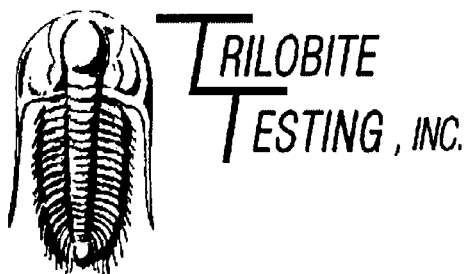


Serial Number: 6667 (Inside)

P* : 22.78

Slope (m) : 78.57 kpa/log cycle

Flow Cycle: 2



DRILL STEM TEST REPORT

Prepared For: **Cambria Corporation**

P.O. Box 1065
Great Bend, KS 67530

ATTN: Jim Musgrove

32-23s-15w-Pawnee KS

Becker Trust #1

Start Date: 2005.05.29 @ 05:35:49

End Date: 2005.05.29 @ 13:53:34

Job Ticket #: 20748 DST #: 3

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Cambria Corporation
P.O. Box 1065
Great Bend, KS 67530
ATTN: Jim Musgrove

Becker Trust #1

32-23s-15w-Pawnee KS

Job Ticket: 20748

DST#: 3

Test Start: 2005.05.29 @ 05:35:49

GENERAL INFORMATION:

Formation: **Howard**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:35:49

Time Test Ended: 13:53:34

Test Type: Conventional Bottom Hole

Tester: Jake Fahrenbruch

Unit No: 19

Interval: **2934.00 ft (KB) To 2980.00 ft (KB) (TVD)**

Total Depth: 2980.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2044.00 ft (KB)

2040.00 ft (CF)

KB to GR/CF: 4.00 ft

Serial #: 6667 Inside

Press@RunDepth: 66.58 psig @ 2935.00 ft (KB)

Start Date: 2005.05.29

End Date:

2005.05.29

Capacity: 7000.00 psig

Last Calib.: 2005.05.29

Start Time: 05:35:54

End Time:

13:53:33

Time On Btm: 2005.05.29 @ 08:35:34

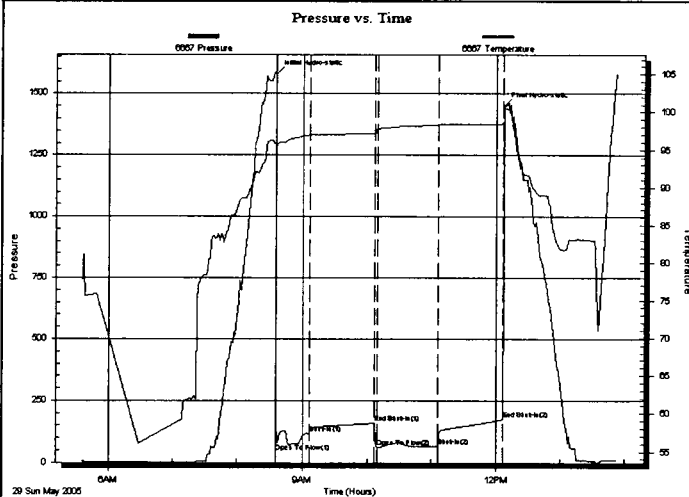
Time Off Btm: 2005.05.29 @ 12:07:34

TEST COMMENT: IF: Strong blow, BOB 1min 15sec. GTS 21min.

IS: Bled off, dying surface blow.

FF: Strong blow, BOB immediately.

FS: Bled off, dying surface blow.



PRESSURE SUMMARY

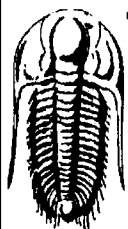
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1580.61	95.77	Initial Hydro-static
1	41.19	95.31	Open To Flow (1)
31	115.56	96.99	Shut-In(1)
91	158.37	97.19	End Shut-In(1)
94	60.41	97.79	Open To Flow (2)
151	66.58	98.29	Shut-In(2)
211	173.49	98.48	End Shut-In(2)
212	1449.04	100.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
135.00	M 100% m	0.82
0.00	0	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	16.00	48.23
Last Gas Rate	0.38	10.00	89.38
Max. Gas Rate	0.25	32.00	73.61



TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Cambria Corporation
P.O. Box 1065
Great Bend, KS 67530
ATTN: Jim Musgrove

Becker Trust #1
32-23s-15w-Pawnee KS
Job Ticket: 20748 **DST#: 3**
Test Start: 2005.05.29 @ 05:35:49

Tool Information

Drill Pipe:	Length: 2809.00 ft	Diameter: 3.80 inches	Volume: 39.40 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 39.98 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	2934.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2919.00	
Hydraulic tool	5.00			2924.00	
Packer	5.00			2929.00	20.00 Bottom Of Top Packer
Packer	5.00			2934.00	
Stubb	1.00			2935.00	
Recorder	0.00	6667	Inside	2935.00	
Perforations	42.00			2977.00	
Recorder	0.00	6074	Outside	2977.00	
Bullnose	3.00			2980.00	46.00 Bottom Packers & Anchor
Total Tool Length:		66.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Cambria Corporation

Becker Trust #1

P.O. Box 1065
Great Bend, KS 67530

32-23s-15w-Pawnee KS

Job Ticket: 20748

DST#: 3

ATTN: Jim Musgrove

Test Start: 2005.05.29 @ 05:35:49

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: 64.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 28000.00 ppm

Filter Cake: 0.04 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
135.00	M 100%m	0.819
0.00	0	0.000

Total Length: 135.00 ft

Total Volume: 0.819 bbl

Num Fluid Samples: 1

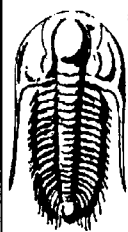
Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Cambria Corporation

Becker Trust #1

P.O. Box 1065
Great Bend, KS 67530

32-23s-15w-Pawnee KS

Job Ticket: 20748

DST#: 3

ATTN: Jim Musgrove

Test Start: 2005.05.29 @ 05:35:49

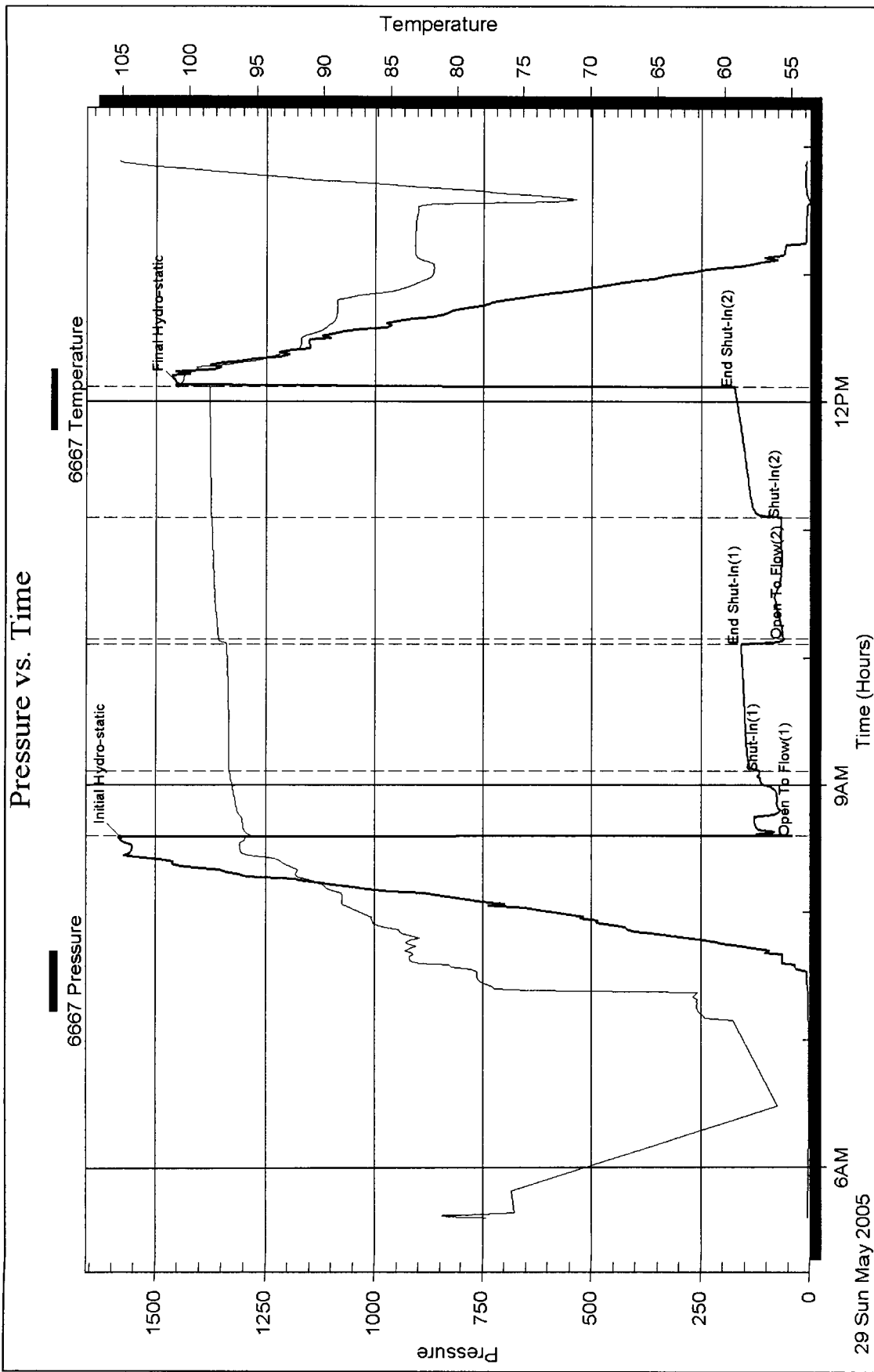
Gas Rates Information

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

Gas Rates Table

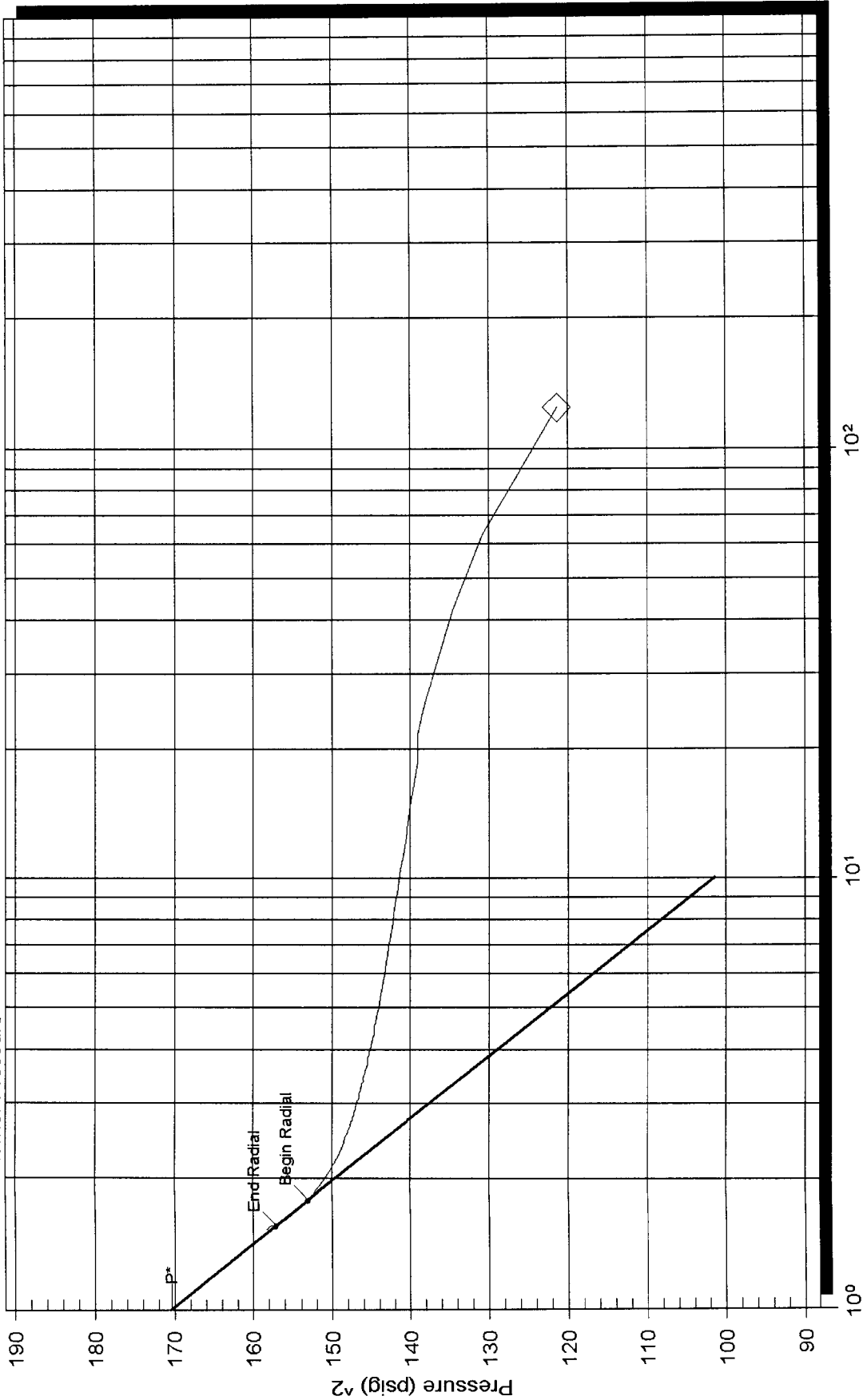
Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	20	0.25	16.00	48.23
1	20	0.25	16.00	48.23
1	30	0.25	15.00	46.64
2	10	0.25	21.00	56.16
2	20	0.25	32.00	73.61
2	30	0.38	18.00	118.69
2	40	0.38	12.00	96.71
2	50	0.38	10.00	89.38
2	60	0.38	10.00	89.38

Pressure vs. Time



Horner Plot

Horner Pressure



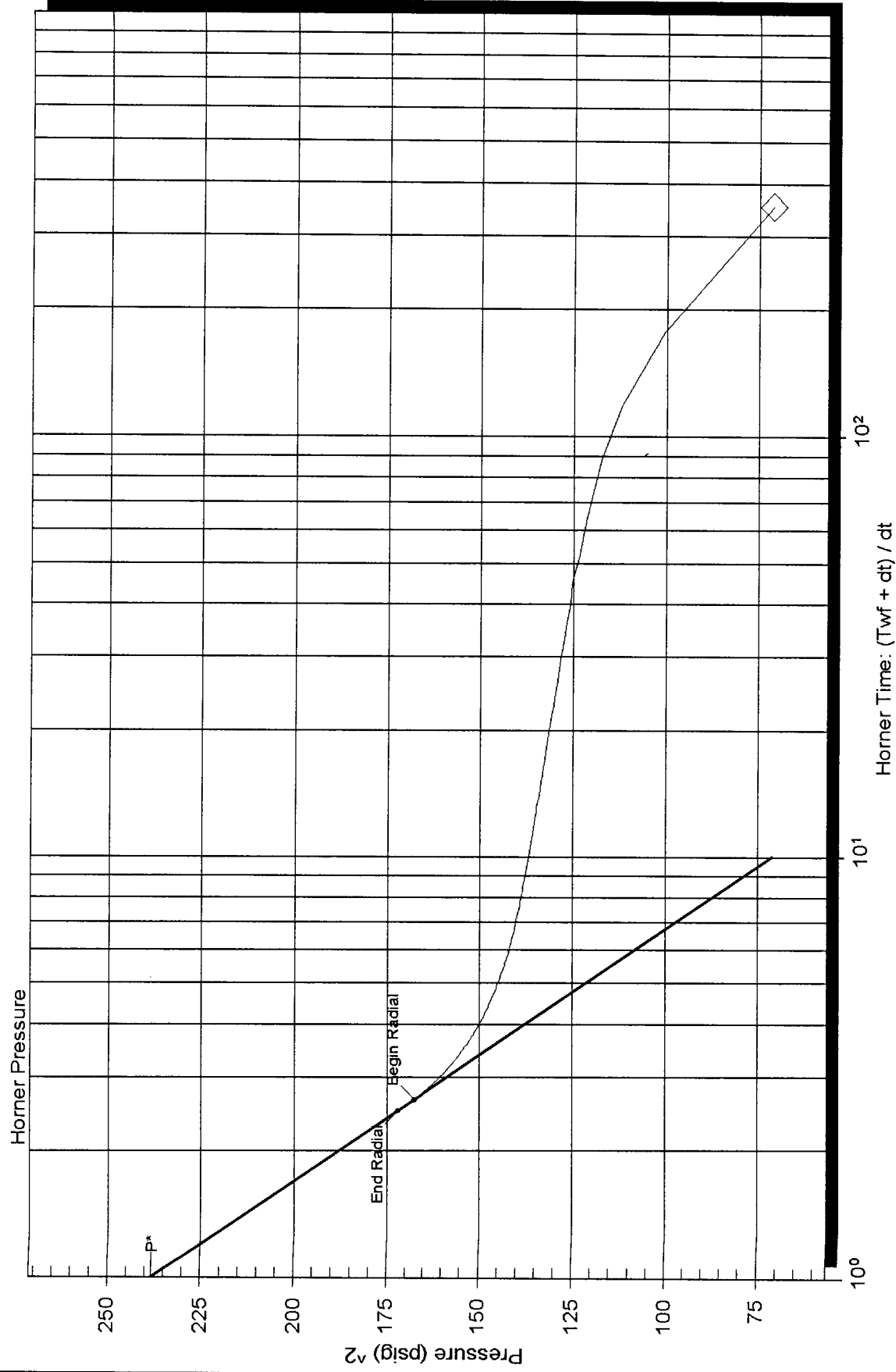
Serial Number: 6667 (Inside)

P* : 13.05

Slope (m) : 68.91 kpa/log cycle

Flow Cycle: 1

Horner Plot



Serial Number: 6667 (Inside)

 $p^* : 15.43$

Slope (m) : 167.07 kpa/log cycle

Flow Cycle: 2