

DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell Ks 67665

ATTN: Gary Brungardt

6-13s-16w Ellis

Windholz #1

Start Date: 2005.11.16 @ 00:17:58

End Date: 2005.11.16 @ 06:09:57

Job Ticket #: 22728 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Brungardt Oil & Leasing, Inc.

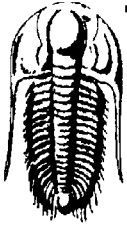
Windholz #1

6-13s-16w Ellis

DST # 1

LKC "A"

2005.11.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

ATTN: Gary Brungardt

Job Ticket: 22728

DST#: 1

Test Start: 2005.11.16 @ 00:17:58

GENERAL INFORMATION:

Formation: **LKC "A"**

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

Time Tool Opened: 01:49:57

Time Test Ended: 06:09:57

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3225.00 ft (KB) To 3260.00 ft (KB) (TVD)**

Total Depth: **3260.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2010.00 ft (KB)**

2005.00 ft (CF)

KB to GRVCF: **5.00 ft**

Serial #: 8167

Inside

Press@RunDepth: **36.06 psig @ 3230.01 ft (KB)**

Start Date: **2005.11.16**

End Date:

2005.11.16

Capacity: **7000.00 psig**

Last Calib.: **2005.11.16**

Start Time: **00:17:58**

End Time:

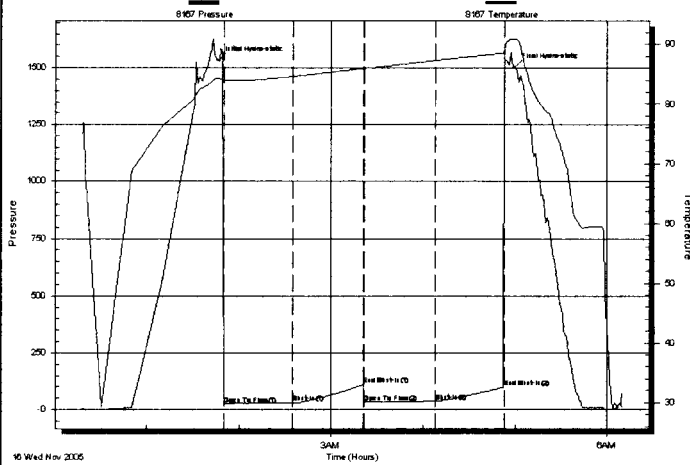
06:09:57

Time On Btm: **2005.11.16 @ 01:46:27**

Time Off Btm: **2005.11.16 @ 04:59:27**

TEST COMMENT: **FFP-w k bl thru-out 1/4"bl**
FFP-w k bl thru-out 1/2"bl
Times 45-45-45

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1532.54	84.26	Initial Hydro-static
4	22.65	83.86	Open To Flow (1)
49	28.71	84.58	Shut-In(1)
95	107.84	85.94	End Shut-In(1)
95	31.55	85.94	Open To Flow (2)
142	36.06	87.30	Shut-In(2)
186	97.88	88.51	End Shut-In(2)
193	1503.19	90.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	O&GCM 5%G 6%O 89%M	0.42
0.00	90'GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22728

DST#: 1

ATTN: Gary Brungardt

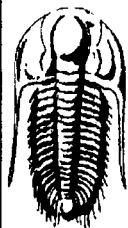
Test Start: 2005.11.16 @ 00:17:58

Tool Information

Drill Pipe:	Length: 3232.00 ft	Diameter: 3.80 inches	Volume: 45.34 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 45.34 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3225.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.02 ft			
Tool Length:	55.02 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			3210.00	
Hydraulic tool	5.00			3215.00	
Packer	5.00			3220.00	20.00 Bottom Of Top Packer
Packer	5.00			3225.00	
Stubb	1.00			3226.00	
Perforations	4.00			3230.00	
Recorder	0.01	8167	Inside	3230.01	
Perforations	27.00			3257.01	
Recorder	0.01	13534	Outside	3257.02	
Bullnose	3.00			3260.02	35.02 Bottom Packers & Anchor
Total Tool Length:	55.02				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22728

DST#: 1

ATTN: Gary Brungardt

Test Start: 2005.11.16 @ 00:17:58

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.73 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	O&GCM 5%G 6%O 89%M	0.421
0.00	90'GIP	0.000

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

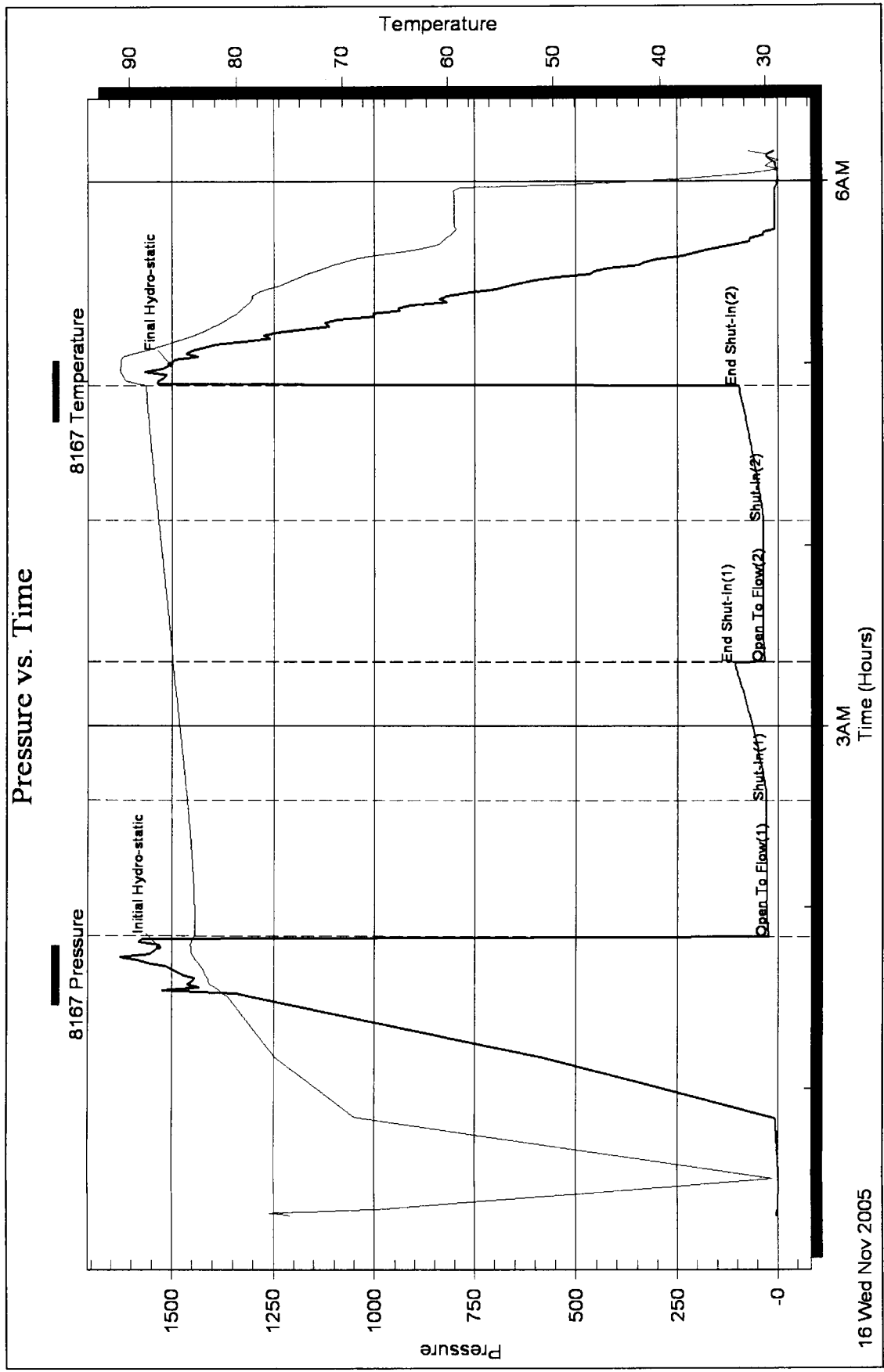
Serial #:

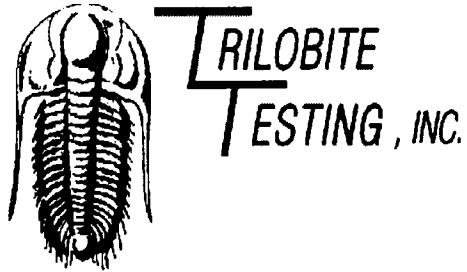
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell Ks 67665

ATTN: Gary Brungardt

6-13s-16w Ellis

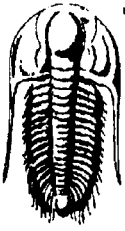
Windholz #1

Start Date: 2005.11.16 @ 13:01:14

End Date: 2005.11.16 @ 18:38:13

Job Ticket #: 22729 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

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

ATTN: Gary Brungardt

Job Ticket: 22729

DST#: 2

Test Start: 2005.11.16 @ 13:01:14

GENERAL INFORMATION:

Formation: **LKC B-C-D**

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

Time Tool Opened: 14:21:13

Time Test Ended: 18:38:13

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3257.00 ft (KB) To 3300.00 ft (KB) (TVD)**

Total Depth: **3300.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2010.00 ft (KB)**

2005.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8167 Inside

Press@RunDepth: **47.68 psig @ 3268.01 ft (KB)**

Start Date: **2005.11.16**

End Date:

2005.11.16

Capacity: **7000.00 psig**

Last Calib.: **2005.11.16**

Start Time: **13:01:14**

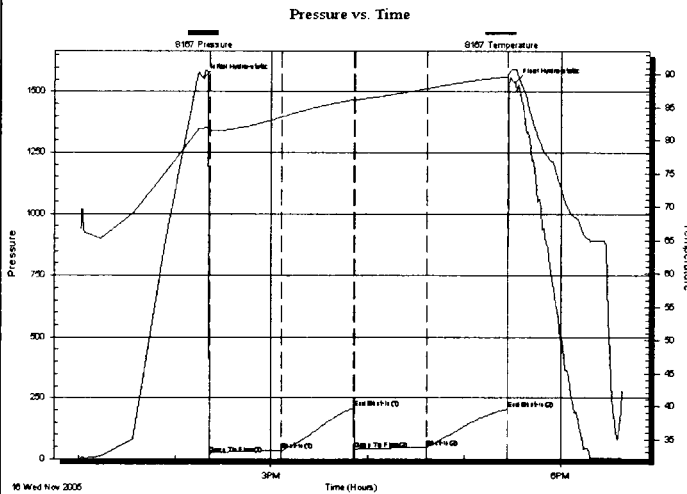
End Time:

18:38:13

Time On Btm: **2005.11.16 @ 14:17:13**

Time Off Btm: **2005.11.16 @ 17:31:13**

TEST COMMENT: FFP-w k to a gd bl 1/4" to 6" bl
FFP-w k to a fr bl 1/4" to 3 1/2" bl
Times 45-45-45-45
no bl on shut-in



PRESSURE SUMMARY

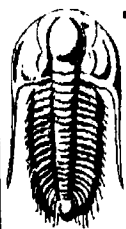
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1556.22	81.78	Initial Hydro-static
4	20.22	80.98	Open To Flow (1)
49	35.02	83.54	Shut-In(1)
94	207.21	86.17	End Shut-In(1)
95	37.75	86.15	Open To Flow (2)
140	47.68	87.88	Shut-In(2)
190	203.44	89.71	End Shut-In(2)
194	1539.25	90.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	O&GCM 10%G 15%O 75%M	0.91
0.00	185'GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22729

DST#: 2

ATTN: Gary Brungardt

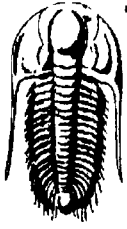
Test Start: 2005.11.16 @ 13:01:14

Tool Information

Drill Pipe:	Length: 3262.00 ft	Diameter: 3.80 inches	Volume: 45.76 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 45.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3257.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.02 ft			
Tool Length:	63.02 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			3242.00	
Hydraulic tool	5.00			3247.00	
Packer	5.00			3252.00	20.00 Bottom Of Top Packer
Packer	5.00			3257.00	
Stubb	1.00			3258.00	
Perforations	10.00			3268.00	
Recorder	0.01	8167	Inside	3268.01	
Perforations	29.00			3297.01	
Recorder	0.01	13534	Outside	3297.02	
Bullnose	3.00			3300.02	43.02 Bottom Packers & Anchor
Total Tool Length:	63.02				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

ATTN: Gary Brungardt

Job Ticket: 22729

DST#: 2

Test Start: 2005.11.16 @ 13:01:14

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.15 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	O&GCM 10%G 15%O 75%M	0.912
0.00	185'GIP	0.000

Total Length: 65.00 ft Total Volume: 0.912 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

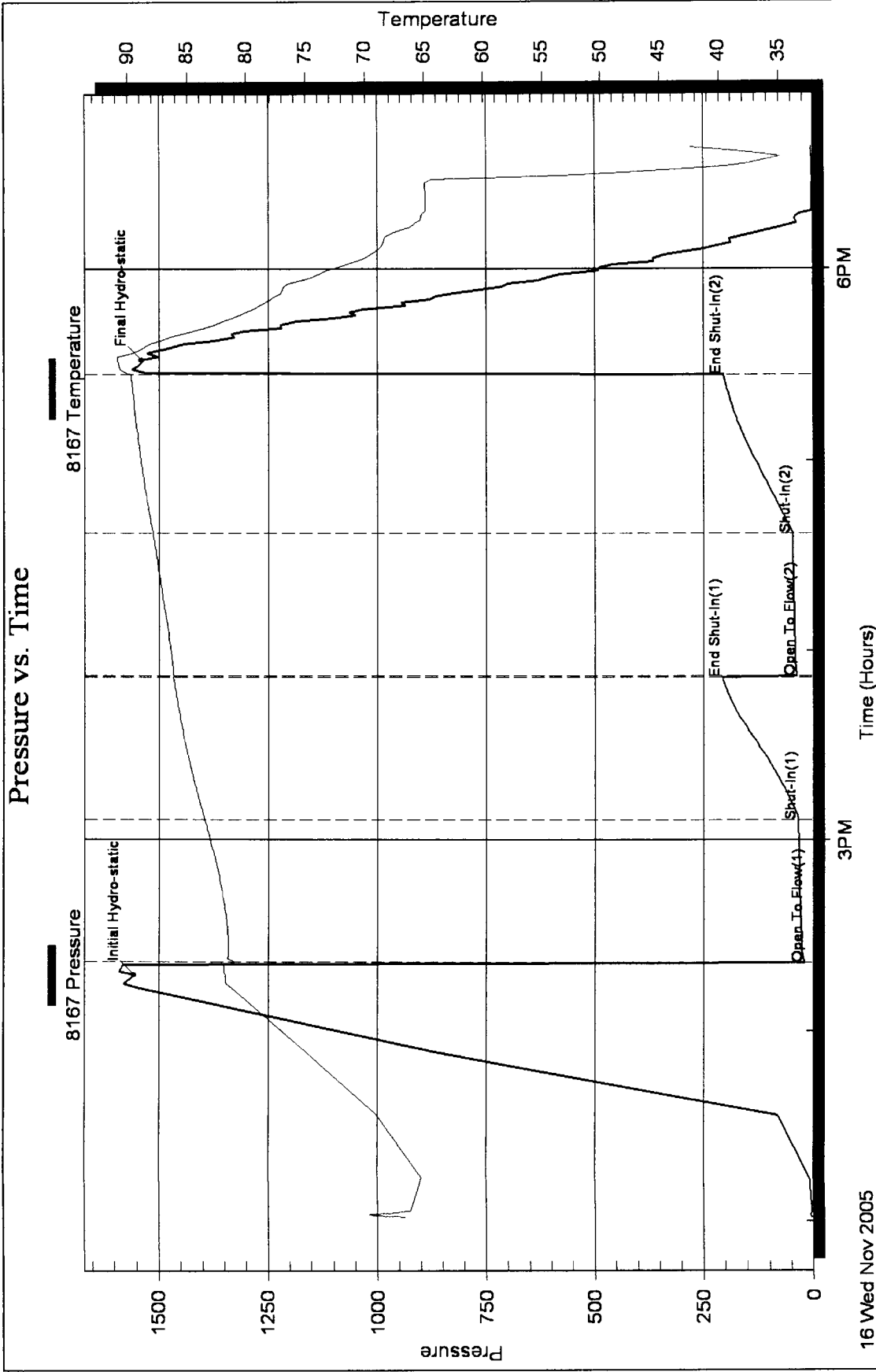
Serial #:

Laboratory Name:

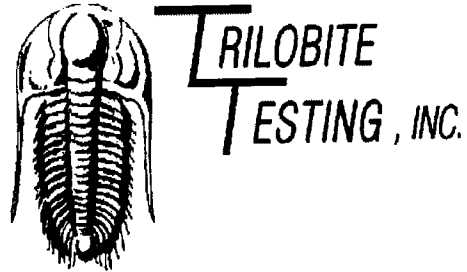
Laboratory Location:

Recovery Comments:

Pressure vs. Time



16 Wed Nov 2005



DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell Ks 67665

ATTN: Gary Brungardt

6-13s-16w Ellis

Windholz #1

Start Date: 2005.11.17 @ 02:57:45

End Date: 2005.11.17 @ 08:58:44

Job Ticket #: 22730 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Brungardt Oil & Leasing, Inc.

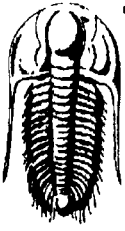
Windholz #1

6-13s-16w Ellis

DST # 3

lkc "e,f"

2005.11.17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

ATTN: Gary Brungardt

Job Ticket: 22730

DST#: 3

Test Start: 2005.11.17 @ 02:57:45

GENERAL INFORMATION:

Formation: **lkc "e,f"**

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

Time Tool Opened: **04:32:44**

Time Test Ended: **08:58:44**

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3304.00 ft (KB) To 3350.00 ft (KB) (TVD)**

Total Depth: **3350.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2010.00 ft (KB)**

2005.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8167

Inside

Press@RunDepth: **76.07 psig @ 3316.01 ft (KB)**

Start Date: **2005.11.17**

End Date:

2005.11.17

Start Time: **02:57:45**

End Time:

08:58:44

Capacity: **7000.00 psig**

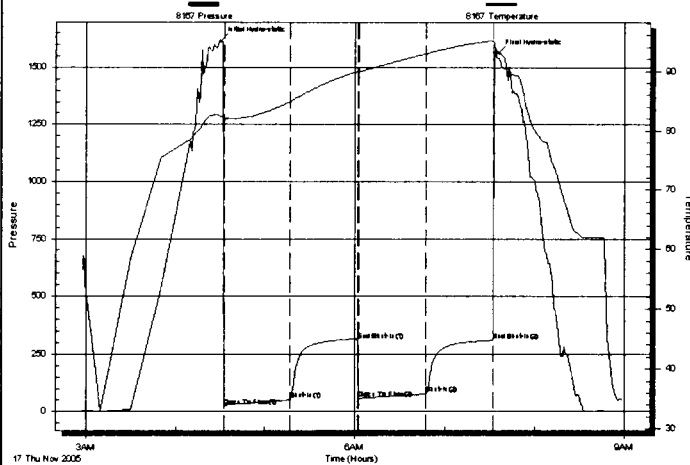
Last Calib.: **2005.11.17**

Time On Btm: **2005.11.17 @ 04:30:14**

Time Off Btm: **2005.11.17 @ 07:35:14**

TEST COMMENT: FFP - weak to fair blow 1/4" - 4 1/8"
FFP - weak throughout surface blow - 2"
no blow on shut in
time 45 - 45 - 45 - 45

Pressure vs. Time



PRESSURE SUMMARY

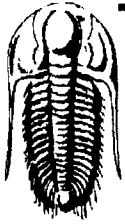
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1615.12	82.38	Initial Hydro-static
3	23.42	81.59	Open To Flow (1)
47	50.43	84.89	Shut-in(1)
92	307.49	89.94	End Shut-in(1)
93	56.89	89.90	Open To Flow (2)
137	76.07	92.89	Shut-in(2)
182	309.94	95.14	End Shut-in(2)
185	1562.65	92.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	mw 8% m92% w w/scum oil	1.33
30.00	wattery mud 35% w 65% mw / scum oil	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22730

DST#: 3

ATTN: Gary Brungardt

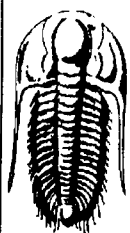
Test Start: 2005.11.17 @ 02:57:45

Tool Information

Drill Pipe:	Length: 3291.00 ft	Diameter: 3.80 inches	Volume: 46.16 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 46.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	3304.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.02 ft			
Tool Length:	66.02 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			3289.00	
Hydraulic tool	5.00			3294.00	
Packer	5.00			3299.00	20.00 Bottom Of Top Packer
Packer	5.00			3304.00	
Stubb	1.00			3305.00	
Perforations	11.00			3316.00	
Recorder	0.01	8167	Inside	3316.01	
Blank Spacing	31.00			3347.01	
Recorder	0.01	13534	Outside	3347.02	
Bullnose	3.00			3350.02	46.02 Bottom Packers & Anchor
Total Tool Length:	66.02				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22730

DST#: 3

ATTN: Gary Brungardt

Test Start: 2005.11.17 @ 02:57:45

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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.16 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
95.00	mw 8% m 92% w w/scum oil	1.333
30.00	w attery mud 35% w 65% mw / scum oil	0.421

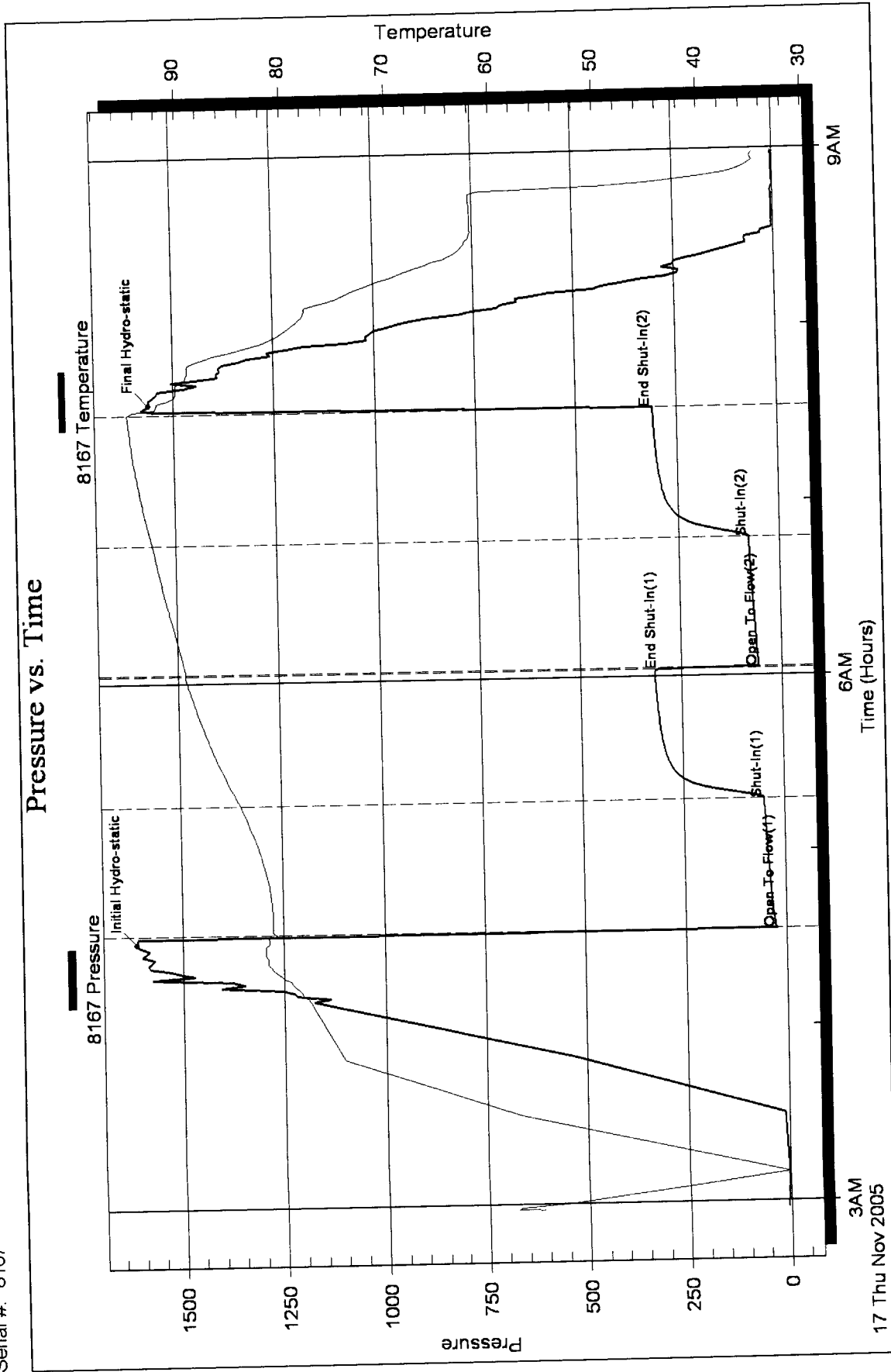
Total Length: 125.00 ft Total Volume: 1.754 bbl

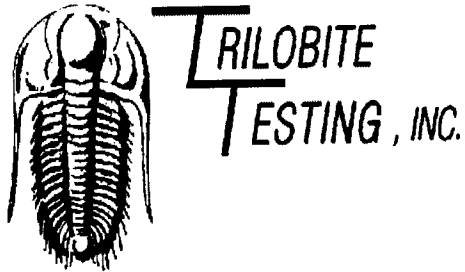
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .46 @ 30 F

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell Ks 67665

ATTN: Gary Brungardt

6-13s-16w Ellis

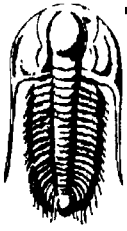
Windholz #1

Start Date: 2005.11.17 @ 19:44:20

End Date: 2005.11.18 @ 01:43:49

Job Ticket #: 22731 DST #: 4

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

PO Box 871
Russell Ks 67665

ATTN: Gary Brungardt

Windholz #1

6-13s-16w Ellis

Job Ticket: 22731

DST#: 4

Test Start: 2005.11.17 @ 19:44:20

GENERAL INFORMATION:

Formation: **LKC "H-K"**

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

Time Tool Opened: 21:12:49

Time Test Ended: 01:43:49

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3390.00 ft (KB) To 3460.00 ft (KB) (TVD)**

Total Depth: **3460.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2010.00 ft (KB)**

2005.00 ft (CF)

KB to GRVCF: 5.00 ft

Serial #: 8167

Inside

Press@RunDepth: **101.88 psig @ 3397.01 ft (KB)**

Start Date: **2005.11.17**

End Date:

2005.11.18

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Start Time: **19:44:20**

End Time:

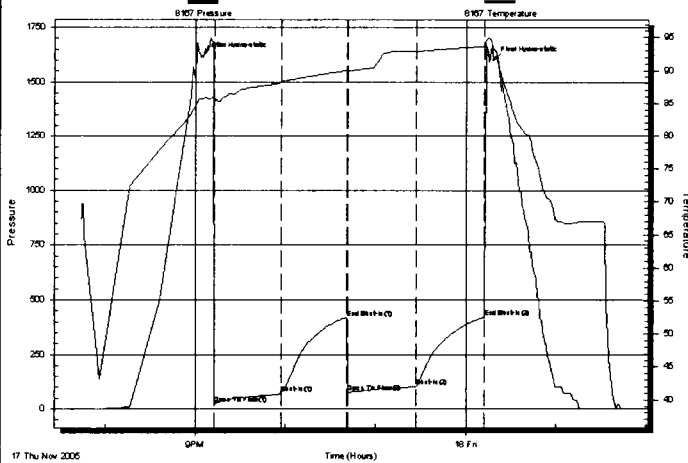
01:43:49

Time On Btm: **2005.11.17 @ 21:04:19**

Time Off Btm: **2005.11.18 @ 00:18:19**

TEST COMMENT: FFP - weak to good 1/2" - 8 1/2"
FFP - bottom in 30 min.
shut in surface throughout
time 45 - 45 - 45 - 45

Pressure vs. Time



PRESSURE SUMMARY

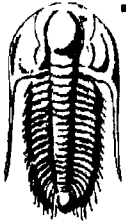
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1617.05	85.72	Initial Hydro-static
9	20.49	85.12	Open To Flow (1)
53	71.20	88.11	Shut-In(1)
97	416.93	89.95	End Shut-In(1)
97	74.29	89.90	Open To Flow (2)
143	101.88	92.87	Shut-In(2)
188	419.34	93.62	End Shut-In(2)
194	1601.60	93.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	hogcm 10% g 22% o 78% m	0.87
62.00	hogcm 25% g 20% o 55% m	0.87
82.00	co	1.15
0.00	290 gip	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22731

DST#: 4

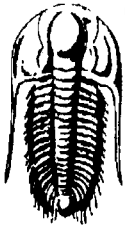
ATTN: Gary Brungardt

Test Start: 2005.11.17 @ 19:44:20

Tool Information

Drill Pipe:	Length: 3387.00 ft	Diameter: 3.80 inches	Volume: 47.51 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 47.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3390.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.02 ft			
Tool Length:	90.02 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			3375.00	
Hydraulic tool	5.00			3380.00	
Packer	5.00			3385.00	20.00 Bottom Of Top Packer
Packer	5.00			3390.00	
Stubb	1.00			3391.00	
Perforations	6.00			3397.00	
Recorder	0.01	8167	Inside	3397.01	
Blank Spacing	60.00			3457.01	
Recorder	0.01	13534	Outside	3457.02	
Bullnose	3.00			3460.02	70.02 Bottom Packers & Anchor
Total Tool Length:	90.02				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22731

DST#: 4

ATTN: Gary Brungardt

Test Start: 2005.11.17 @ 19:44:20

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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	hogcm 10% g 22% o 78% m	0.870
62.00	hogcm 25% g 20% o 55% m	0.870
82.00	co	1.150
0.00	290 gip	0.000

Total Length: 206.00 ft

Total Volume: 2.890 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

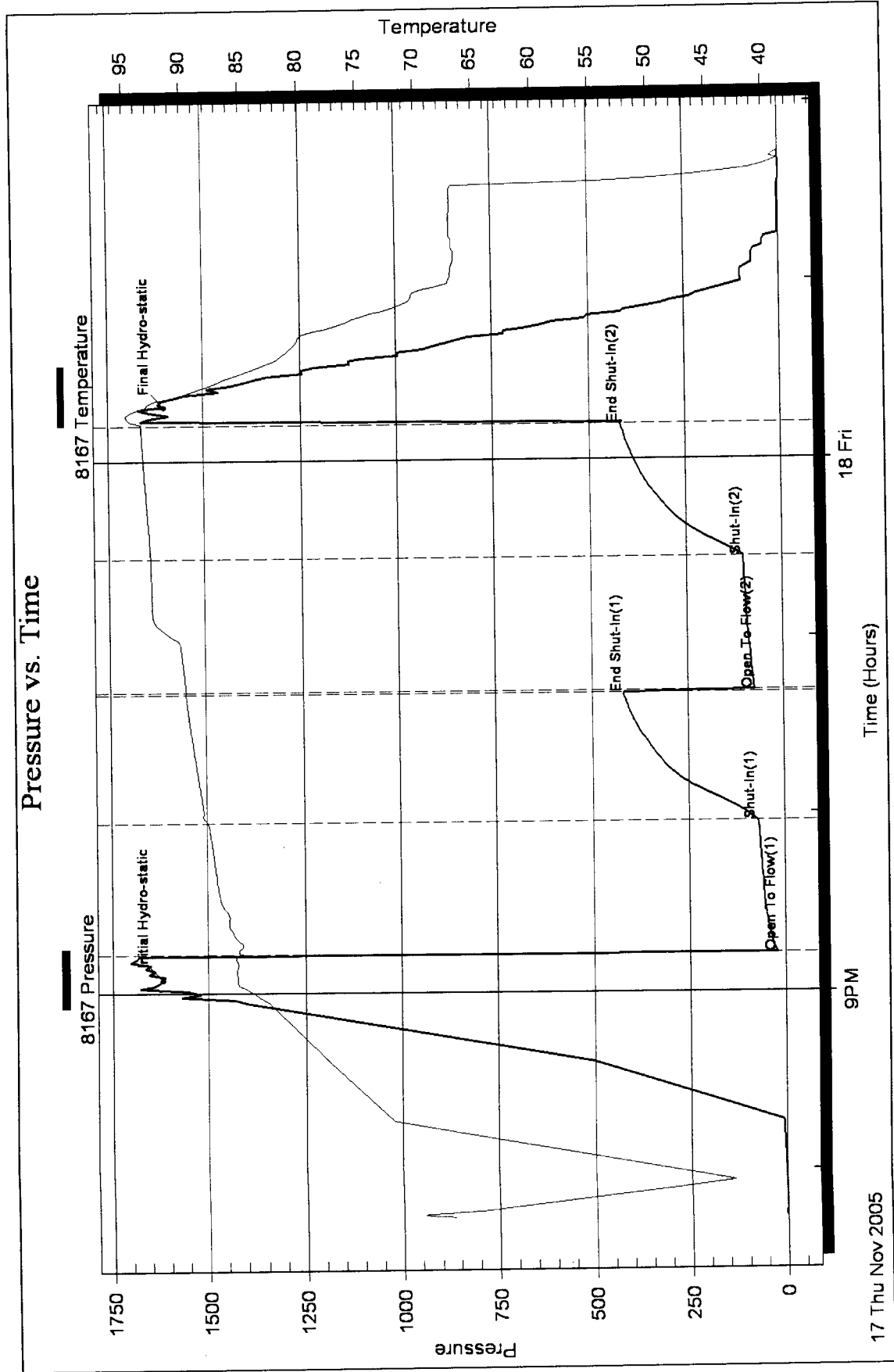
Serial #:

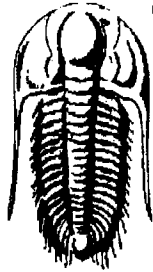
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil & Leasing, Inc.**

PO Box 871
Russell Ks 67665

ATTN: Gary Brungardt

6-13s-16w Ellis

Windholz #1

Start Date: 2005.11.18 @ 10:08:40

End Date: 2005.11.18 @ 15:20:39

Job Ticket #: 22732 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Brungardt Oil & Leasing, Inc.

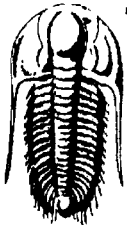
Windholz #1

6-13s-16w Ellis

DST # 5

arbuckle

2005.11.18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

ATTN: Gary Brungardt

Job Ticket: 22732

DST#: 5

Test Start: 2005.11.18 @ 10:08:40

GENERAL INFORMATION:

Formation: **arbuckle**

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

Time Tool Opened: 11:57:09

Time Test Ended: 15:20:39

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **28**

Interval: **3474.00 ft (KB) To 3504.00 ft (KB) (TVD)**

Reference Elevations: **2010.00 ft (KB)**

Total Depth: **3260.00 ft (KB) (TVD)**

2005.00 ft (CF)

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

KB to GR/CF: **5.00 ft**

Serial #: 8167

Inside

Press@RunDepth: **634.52 psig @ 3481.01 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.11.18**

End Date: **2005.11.18**

Last Calib.: **2005.11.18**

Start Time: **10:08:40**

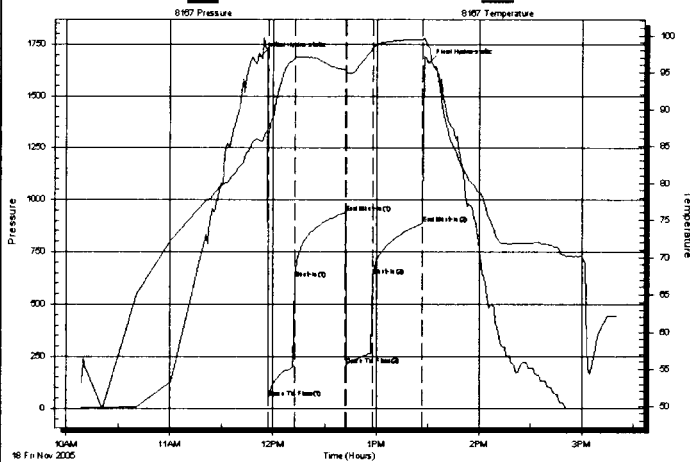
End Time: **15:20:39**

Time On Btm: **2005.11.18 @ 11:52:39**

Time Off Btm: **2005.11.18 @ 13:30:09**

TEST COMMENT: FFP - strong bottom in 4 min.
FFP - strong bottom in 5 min.
shut in surface throughout
time - 15 - 30 - 15 - 30

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1692.86	85.70	Initial Hydro-static
5	51.01	86.55	Open To Flow (1)
20	619.87	96.96	Shut-In(1)
49	936.56	95.35	End Shut-In(1)
50	210.15	95.14	Open To Flow (2)
65	634.52	98.32	Shut-In(2)
94	886.57	99.41	End Shut-In(2)
98	1663.82	98.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	HOGCM 15% G, 20% O, 65% M	1.74
186.00	MGO 20% G, 72% O, 8% M	2.61
377.00	CO	5.29
0.00	124' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22732

DST#: 5

ATTN: Gary Brungardt

Test Start: 2005.11.18 @ 10:08:40

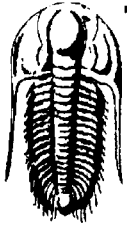
Tool Information

Drill Pipe:	Length: 3478.00 ft	Diameter: 3.80 inches	Volume: 48.79 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 48.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3474.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.02 ft			
Tool Length:	50.02 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			3459.00	
Hydraulic tool	5.00			3464.00	
Packer	5.00			3469.00	20.00 Bottom Of Top Packer
Packer	5.00			3474.00	
Stubb	1.00			3475.00	
Perforations	6.00			3481.00	
Recorder	0.01	8167	Inside	3481.01	
Perforations	20.00			3501.01	
Recorder	0.01	13534	Outside	3501.02	
Bullnose	3.00			3504.02	30.02 Bottom Packers & Anchor
Total Tool Length:	50.02				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing, Inc.

Windholz #1

PO Box 871
Russell Ks 67665

6-13s-16w Ellis

Job Ticket: 22732

DST#: 5

ATTN: Gary Brungardt

Test Start: 2005.11.18 @ 10:08:40

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

25 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	HOGCM 15% G, 20% O, 65% M	1.739
186.00	MGO 20% G, 72% O, 8% M	2.609
377.00	CO	5.288
0.00	124' GIP	0.000

Total Length: 687.00 ft

Total Volume: 9.636 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

