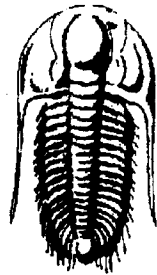


7-9s-24w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration**

4109 N Ironwood
Wichita KS 67226

ATTN: Jim Phillips

7 9 24 Graham KS

Bean #1-7

Start Date: 2007.12.07 @ 06:00:49

End Date: 2007.12.07 @ 13:22:49

Job Ticket #: 30499 DST #: 1

15-065-23380-0000

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Phillips Exploration

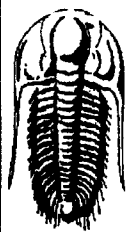
Bean #1-7

7 9 24 Graham KS

DST # 1

LKC "B-D"

2007.12.07



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Phillips Exploration

4109 N Ironwood
Wichita KS 67226

ATTN: Jim Phillips

Bean #1-7

7 9 24 Graham KS

Job Ticket: 30499

DST#: 1

Test Start: 2007.12.07 @ 06:00:49

GENERAL INFORMATION:

Formation: **LKC "B-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:59:49

Time Test Ended: 13:22:49

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 21

Interval: **3820.00 ft (KB) To 3865.00 ft (KB) (TVD)**

Total Depth: 3865.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2476.00 ft (KB)

2471.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320

Inside

Press@RunDepth: 956.60 psig @ 3826.00 ft (KB)

Start Date: 2007.12.07

End Date:

2007.12.07

Capacity: 7000.00 psig

Last Calib.: 2007.12.07

Start Time: 06:00:50

End Time:

13:22:49

Time On Btm: 2007.12.07 @ 07:58:49

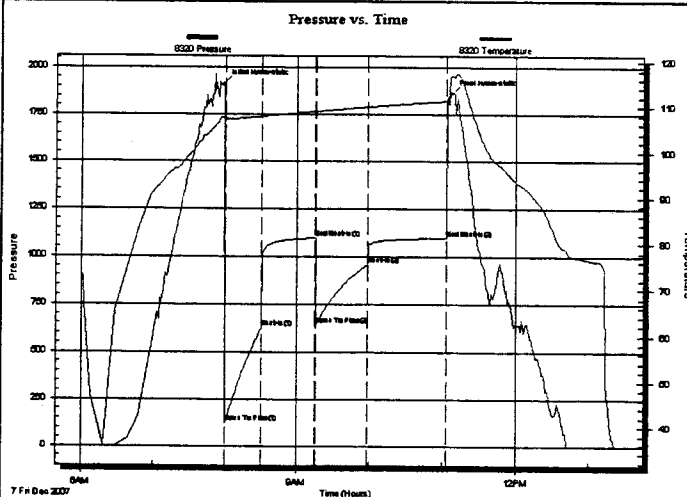
Time Off Btm: 2007.12.07 @ 11:08:19

TEST COMMENT: IFP BOB in 1 min

ISI Weak surface blow back died in 5 min

FFP BOB in 2.5 min

FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1913.56	107.61	Initial Hydro-static
1	127.54	106.94	Open To Flow (1)
32	624.63	107.89	Shut-In (1)
76	1096.57	109.03	End Shut-In (1)
77	640.89	109.01	Open To Flow (2)
120	956.60	110.04	Shut-In (2)
185	1097.82	111.33	End Shut-In (2)
190	1862.72	116.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1800.00	Water	24.38
120.00	MW 85%W 15%M	1.70
105.00	MW 50%W 50%M	1.49

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration

Bean #1-7

4109 N Ironwood
Wichita KS 67226

7 9 24 Graham KS

Job Ticket: 30499

DST#: 1

ATTN: Jim Phillips

Test Start: 2007.12.07 @ 06:00:49

Tool Information

Drill Pipe:	Length: 3704.00 ft	Diameter: 3.82 inches	Volume: 52.51 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	53.11 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3820.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	68.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3798.00	
Shut In Tool	5.00			3803.00	
Hydraulic tool	5.00			3808.00	
Safety Joint	2.00			3810.00	
Packer	5.00			3815.00	23.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Stubb	1.00			3821.00	
Perforations	4.00			3825.00	
Change Over Sub	1.00			3826.00	
Recorder	0.00	8320	Inside	3826.00	
Recorder	0.00	8367	Inside	3826.00	
Blank Spacing	30.00			3856.00	
Change Over Sub	1.00			3857.00	
Perforations	5.00			3862.00	
Bullnose	3.00			3865.00	45.00 Bottom Packers & Anchor

Total Tool Length: 68.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration

Bean #1-7

4109 N Ironwood
Wichita KS 67226

7 9 24 Graham KS

Job Ticket: 30499

DST#: 1

ATTN: Jim Phillips

Test Start: 2007.12.07 @ 06:00:49

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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1800.00	Water	24.377
120.00	MW 85%W 15%M	1.701
105.00	MW 50%W 50%M	1.488

Total Length: 2025.00 ft

Total Volume: 27.566 bbl

Num Fluid Samples: 0

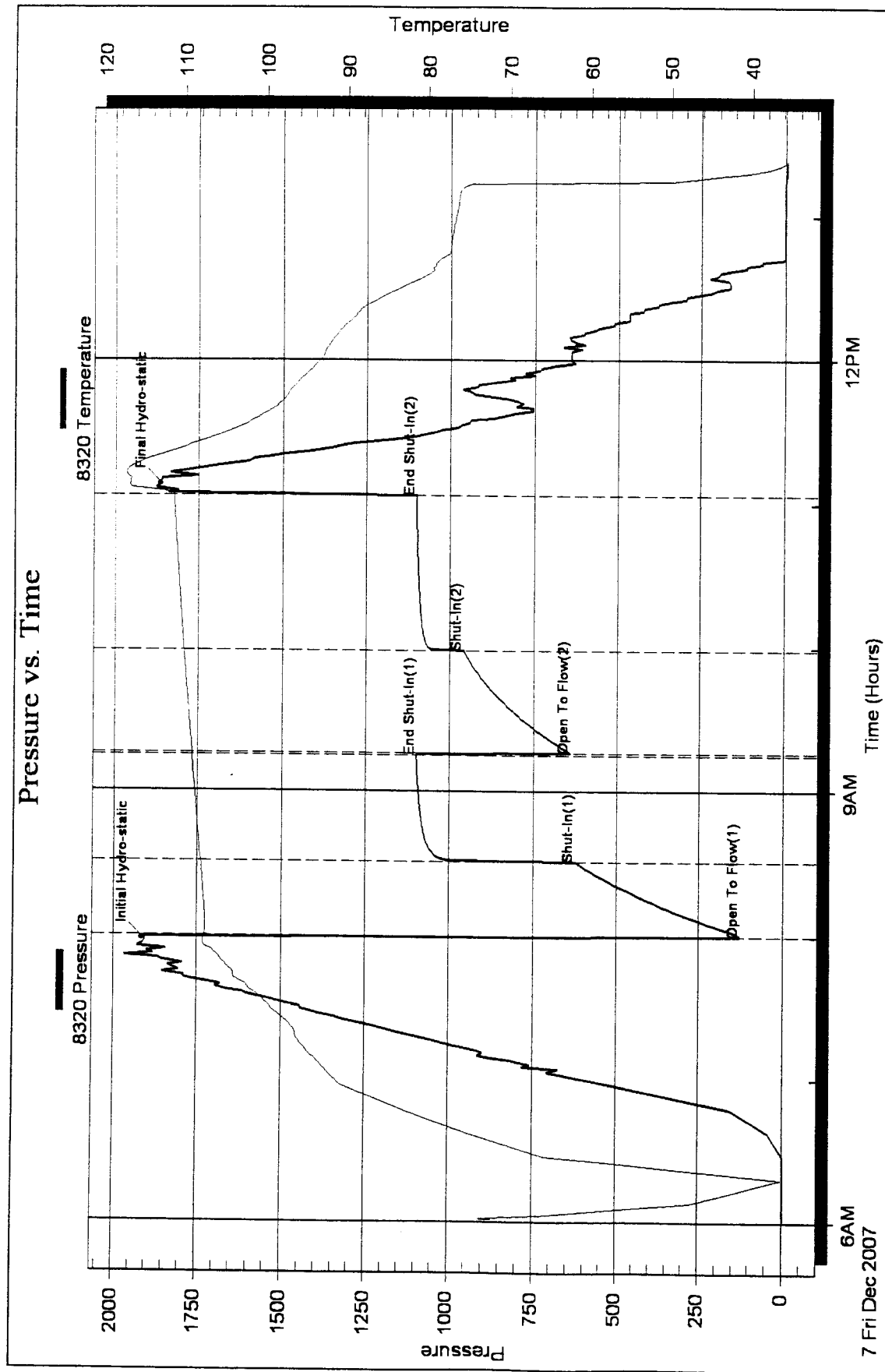
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration**

4109 N Ironwood
Wichita KS 67226

ATTN: Jim Phillips

7 9 24 Graham KS

Bean #1-7

Start Date: 2007.12.07 @ 23:57:43

End Date: 2007.12.08 @ 06:58:43

Job Ticket #: 30500 DST #: 2

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

Phillips Exploration

Bean #1-7

7 9 24 Graham KS

DST # 2

LKC "H"

2007.12.07



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Phillips Exploration

4109 N Ironwood
Wichita KS 67226

ATTN: Jim Phillips

Bean #1-7

7 9 24 Graham KS

Job Ticket: 30500

DST#: 2

Test Start: 2007.12.07 @ 23:57:43

GENERAL INFORMATION:

Formation: LKC "H"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:59:13

Time Test Ended: 06:58:43

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 21

Interval: 3956.00 ft (KB) To 3970.00 ft (KB) (TVD)

Total Depth: 3970.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2476.00 ft (KB)

2471.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320

Inside

Press@RunDepth: 71.57 psig @ 3962.00 ft (KB)

Start Date: 2007.12.07

End Date:

2007.12.08

Capacity: 7000.00 psig

Last Calib.: 2007.12.08

Start Time: 23:57:44

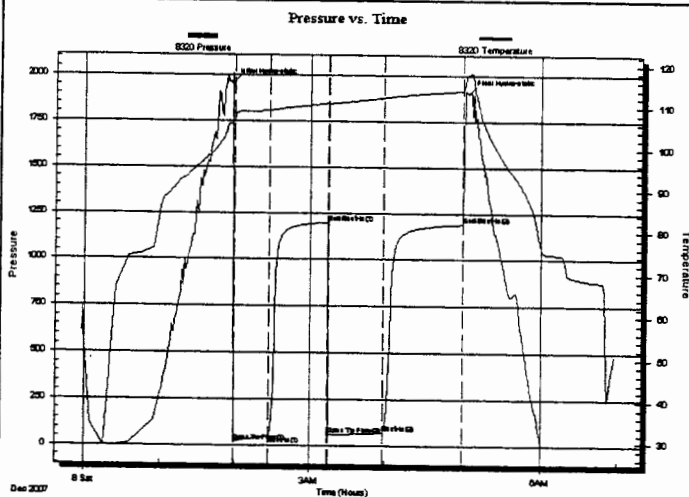
End Time:

06:58:43

Time On Btm: 2007.12.08 @ 01:57:43

Time Off Btm: 2007.12.08 @ 05:04:13

TEST COMMENT: IFP Weak surface blow built to 7 "
ISI Weak surface blow back died in 8 min
FFP Weak surface blow built to 6.5 "
FSI Weak surface blow backdied in 5 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1959.49	105.97	Initial Hydro-static
2	18.08	106.85	Open To Flow (1)
30	50.90	109.14	Shut-In(1)
77	1198.06	110.89	End Shut-In(1)
78	59.62	110.81	Open To Flow (2)
121	71.57	112.19	Shut-In(2)
183	1188.95	113.99	End Shut-In(2)
187	1906.63	117.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	MCWO 60%O 30%W 10%M	0.30
62.00	MCO 50%M 50%O	0.30
15.00	MO 90%O 10%M	0.21
15.00	CO	0.21
0.00	280 GIP	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

Phillips Exploration

Bean #1-7

4109 N Ironwood
Wichita KS 67226

7 9 24 Graham KS

Job Ticket: 30500

DST#: 2

ATTN: Jim Phillips

Test Start: 2007.12.07 @ 23:57:43

Tool Information

Drill Pipe:	Length: 3829.00 ft	Diameter: 3.82 inches	Volume: 54.28 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	60000.00 lb
		Total Volume:	54.88 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3956.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	14.00 ft				
Tool Length:	37.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3934.00	
Shut In Tool	5.00			3939.00	
Hydraulic tool	5.00			3944.00	
Safety Joint	2.00			3946.00	
Packer	5.00			3951.00	23.00 Bottom Of Top Packer
Packer	5.00			3956.00	
Stubb	1.00			3957.00	
Perforations	5.00			3962.00	
Recorder	0.00	8320	Inside	3962.00	
Recorder	0.00	8367	Inside	3962.00	
Perforations	5.00			3967.00	
Bullnose	3.00			3970.00	14.00 Bottom Packers & Anchor

Total Tool Length: 37.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration

Bean #1-7

4109 N Ironwood
Wichita KS 67226

7 9 24 Graham KS

Job Ticket: 30500

DST#: 2

ATTN: Jim Phillips

Test Start: 2007.12.07 @ 23:57:43

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	MCWO 60%O 30%W 10%M	0.300
62.00	MCO 50%M 50%O	0.305
15.00	MO 90%O 10%M	0.213
15.00	CO	0.213
0.00	280 GIP	0.000

Total Length:

153.00 ft

Total Volume:

1.031 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

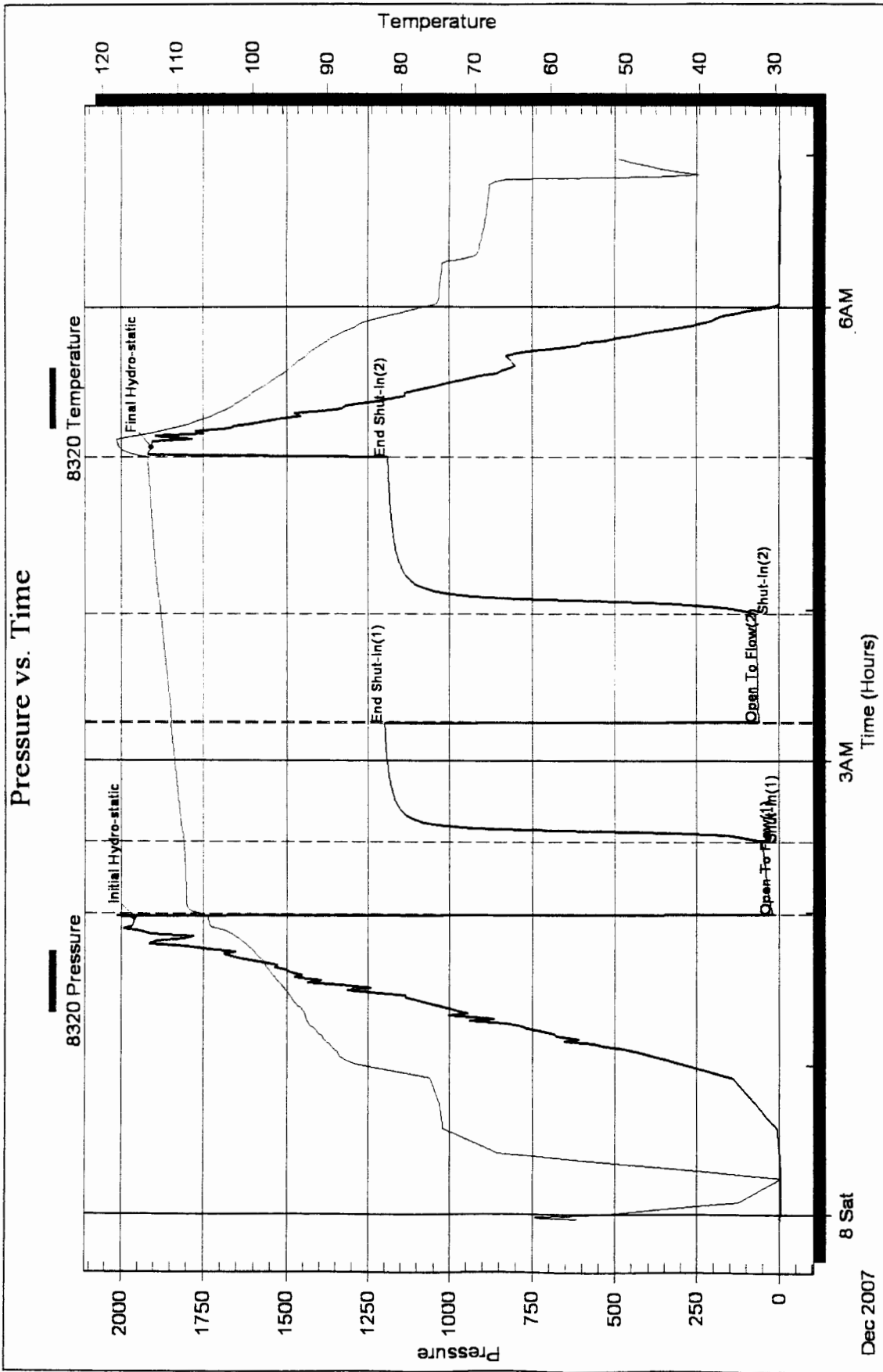
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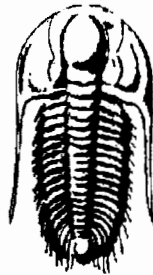
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration**

4109 N Ironwood
Wichita KS 67226

ATTN: Jim Phillips

7 9 24 Graham KS

Bean #1-7

Start Date: 2007.12.08 @ 15:45:22

End Date: 2007.12.08 @ 22:03:22

Job Ticket #: 30251 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Phillips Exploration

Bean #1-7

7 9 24 Graham KS

DST # 3

LKC "I-J"

2007.12.08



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Phillips Exploration

4109 N Ironwood
Wichita KS 67226

ATTN: Jim Phillips

Bean #1-7

7 9 24 Graham KS

Job Ticket: 30251

DST#: 3

Test Start: 2007.12.08 @ 15:45:22

GENERAL INFORMATION:

Formation: LKC "I-J"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:25:22

Time Test Ended: 22:03:22

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 21

Interval: 3972.00 ft (KB) To 4006.00 ft (KB) (TVD)

Total Depth: 4006.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2476.00 ft (KB)

2471.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320 Inside

Press@RunDepth: 19.25 psig @ 3978.00 ft (KB)

Start Date: 2007.12.08

End Date:

2007.12.08

Capacity: 7000.00 psig

Last Calib.: 2007.12.08

Start Time: 15:45:23

End Time:

22:03:22

Time On Btm: 2007.12.08 @ 18:24:52

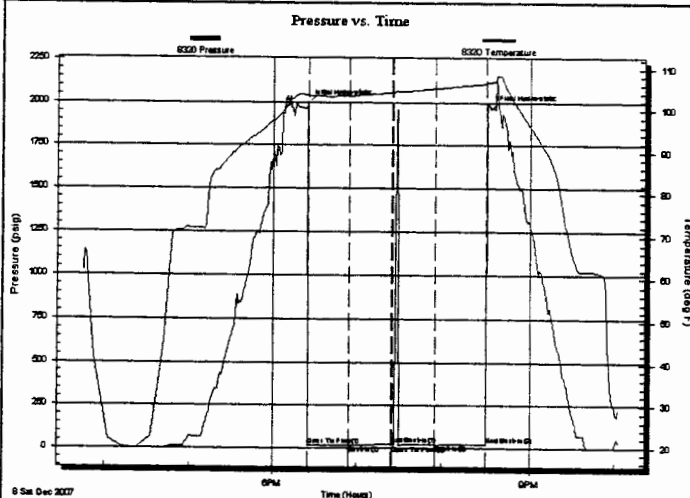
Time Off Btm: 2007.12.08 @ 20:33:22

TEST COMMENT: IFP Weak 1/4 " blow died in 22 min

ISI No blow back

FFP No blow flushed tool no blow

FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1993.97	103.80	Initial Hydro-static
1	15.74	103.54	Open To Flow (1)
30	16.31	103.46	Shut-In(1)
60	20.77	104.25	End Shut-In(1)
61	16.72	104.26	Open To Flow (2)
91	19.25	105.28	Shut-In(2)
125	23.73	106.45	End Shut-In(2)
129	1966.16	106.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w/scum of Oil	0.02

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration

Bean #1-7

4109 N Ironwood
Wichita KS 67226

7 9 24 Graham KS

Job Ticket: 30251

DST#: 3

ATTN: Jim Phillips

Test Start: 2007.12.08 @ 15:45:22

Tool Information

Drill Pipe:	Length: 3826.00 ft	Diameter: 3.82 inches	Volume: 54.24 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	50000.00 lb
			Total Volume: 54.84 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	0.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3972.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	57.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3950.00	
Shut In Tool	5.00			3955.00	
Hydraulic tool	5.00			3960.00	
Safety Joint	2.00			3962.00	
Packer	5.00			3967.00	23.00 Bottom Of Top Packer
Packer	5.00			3972.00	
Stubb	1.00			3973.00	
Perforations	5.00			3978.00	
Recorder	0.00	8320	Inside	3978.00	
Recorder	0.00	8367	Inside	3978.00	
Perforations	25.00			4003.00	
Bullnose	3.00			4006.00	34.00 Bottom Packers & Anchor

Total Tool Length: 57.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration

Bean #1-7

4109 N Ironwood
Wichita KS 67226

7 9 24 Graham KS

Job Ticket: 30251

DST#: 3

ATTN: Jim Phillips

Test Start: 2007.12.08 @ 15:45:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.49 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud w/scum of Oil	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

