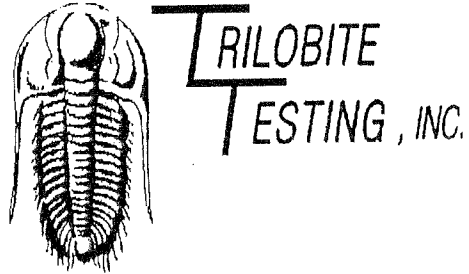


15-095-22071-0000

14-27s-10w



DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Company**

409 N Ironwood
Wichita KS 67226

ATTN: Josh Austin

14 27 10 Kingman KS

Dyke-Bick #1-14

Start Date: 2007.01.02 @ 15:33:59

End Date: 2007.01.02 @ 21:43:29

Job Ticket #: 25892 DST #: 1

15-095-22071

NW NE SW SE

1090 FSL 1880 FEL

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Phillips Exploration Company

Dyke-Bick #1-14

14 27 10 Kingman KS

DST # 1

Indian Cave

2007.01.02



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Phillips Exploration Company

409 N Ironwood
Wichita KS 67226

ATTN: Josh Austin

Dyke-Bick #1-14

14 27 10 Kingman KS

Job Ticket: 25892

DST#: 1

Test Start: 2007.01.02 @ 15:33:59

GENERAL INFORMATION:

Formation: **Indian Cave**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:26:59

Time Test Ended: 21:43:29

Interval: **2350.00 ft (KB) To 2390.00 ft (KB) (TVD)**

Total Depth: 2390.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Travy Cushenbery

Unit No: 30

Reference Elevations: 1728.00 ft (KB)

1717.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6668

Inside

Press@RunDepth: 14.08 psig @ 2350.00 ft (KB)

Start Date: 2007.01.02

End Date:

2007.01.02

Start Time: 15:34:04

End Time:

21:44:28

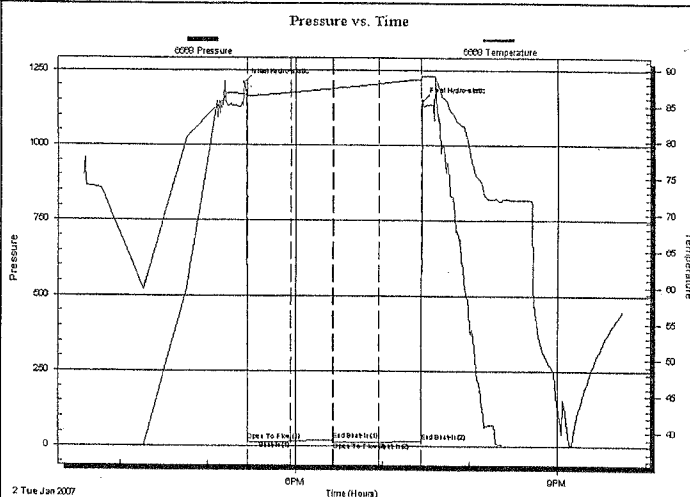
Capacity: 7000.00 psig

Last Calib.: 2007.01.02

Time On Btm: 2007.01.02 @ 17:24:59

Time Off Btm: 2007.01.02 @ 19:27:29

TEST COMMENT: IF Tool opened No blow
ISI No blow back
FF No blow
FSI No blow back



PRESSURE SUMMARY

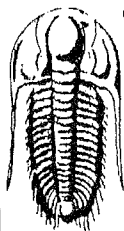
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1206.92	86.56	Initial Hydro-static
2	17.03	86.16	Open To Flow (1)
32	16.01	86.76	Shut-In(1)
61	21.50	87.27	End Shut-In(1)
61	14.48	87.29	Open To Flow(2)
92	14.08	87.94	Shut-In(2)
122	17.99	88.58	End Shut-In(2)
123	1146.69	89.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	No Recovery Shutin tool was not plugged	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration Company

Dyke-Bick #1-14

409 N Ironwood
Wichita KS 67226

14 27 10 Kingman KS

Job Ticket: 25892

DST#: 1

ATTN: Josh Austin

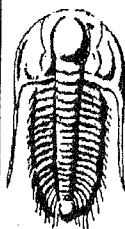
Test Start: 2007.01.02 @ 15:33:59

Tool Information

Drill Pipe:	Length: 2221.00 ft	Diameter: 3.80 inches	Volume: 31.15 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: 34000.00 lb
		Total Volume:	31.73 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	2350.00 ft			Final 34000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	63.00 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			2332.00	
Hydraulic tool	5.00			2337.00	
Safety Joint	3.00			2340.00	
Packer	5.00			2345.00	23.00 Bottom Of Top Packer
Packer	5.00			2350.00	
Recorder	0.00	6668	Inside	2350.00	
Perforations	37.00			2387.00	
Recorder	0.00	13266	Outside	2387.00	
Bullnose	3.00			2390.00	40.00 Bottom Packers & Anchor
Total Tool Length:	63.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration Company

Dyke-Bick #1-14

409 N Ironwood
Wichita KS 67226

14 27 10 Kingman KS

Job Ticket: 25892

DST#: 1

ATTN: Josh Austin

Test Start: 2007.01.02 @ 15:33:59

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Oil API:

deg API

Viscosity: 30.00 sec/qt

Cushion Volume:

bbl

Water Salinity:

ppm

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 108000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	No Recovery Shutin tool was not plugged	0.000

Total Length:

ft

Total Volume:

bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

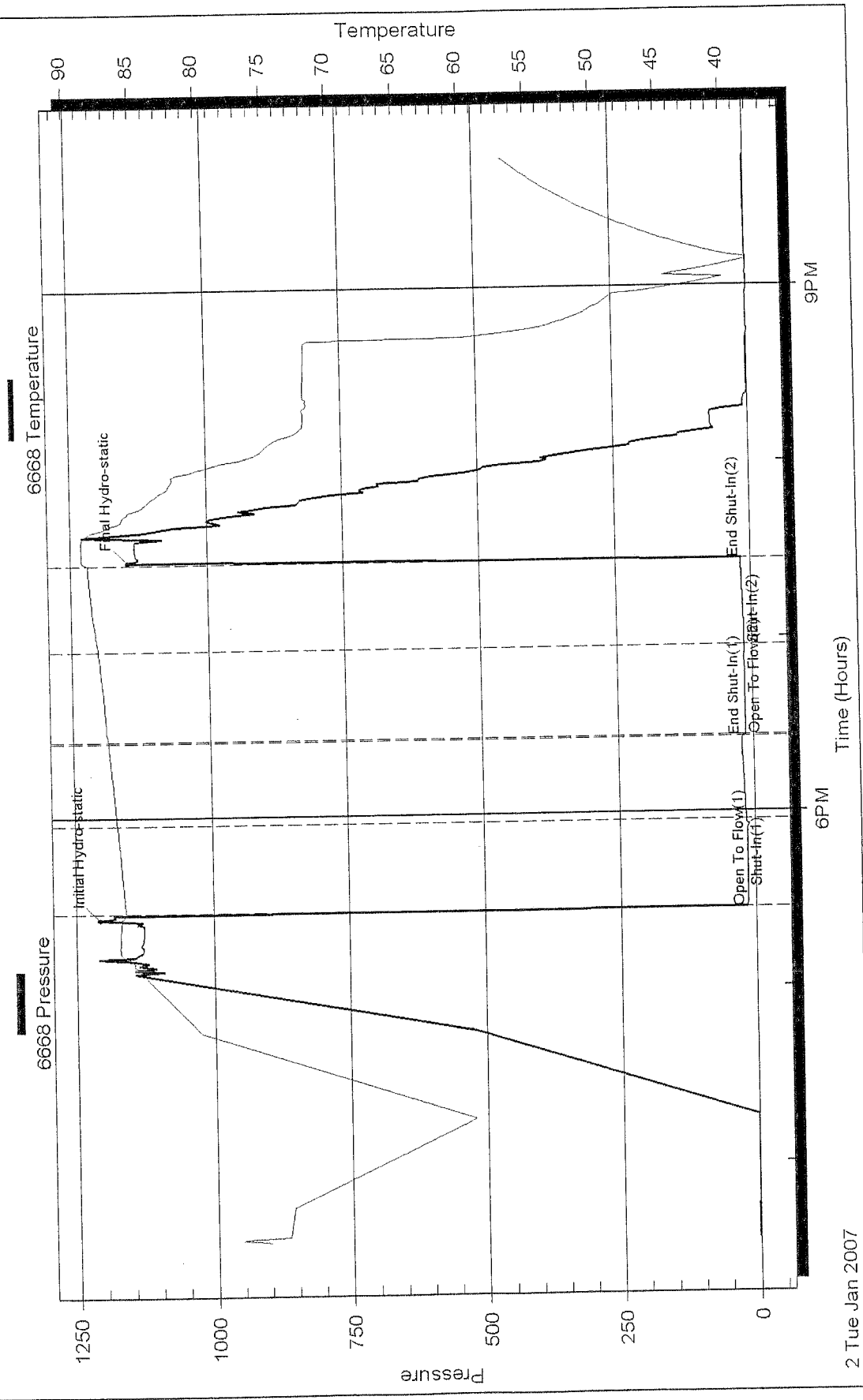
Serial #:

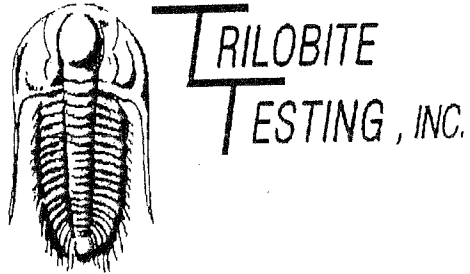
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Company**

409 N Ironwood
Wichita KS 67226

ATTN: Josh Austin

14 27 10 Kingman KS

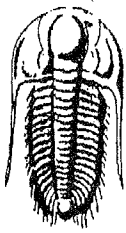
Dyke-Bick #1-14

Start Date: 2007.01.05 @ 19:33:54

End Date: 2007.01.06 @ 04:41:25

Job Ticket #: 27037 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

Phillips Exploration Company

409 N Ironwood
Wichita KS 67226

ATTN: Josh Austin

Dyke-Bick #1-14

14 27 10 Kingman KS

Job Ticket: 27037

DST#: 2

Test Start: 2007.01.05 @ 19:33:54

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:23:30

Time Test Ended: 04:41:25

Test Type: Conventional Bottom Hole

Tester: Zach Stover

Unit No: 23

Interval: **3970.00 ft (KB) To 4030.00 ft (KB) (TVD)**

Total Depth: 4030.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Fair

Reference Elevations: 1728.00 ft (KB)

1717.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8290

Inside

Press@RunDepth: 54.65 psig @ 4010.00 ft (KB)

Start Date: 2007.01.05

End Date: 2007.01.06

Capacity: 7000.00 psig

Last Calib.: 2007.01.06

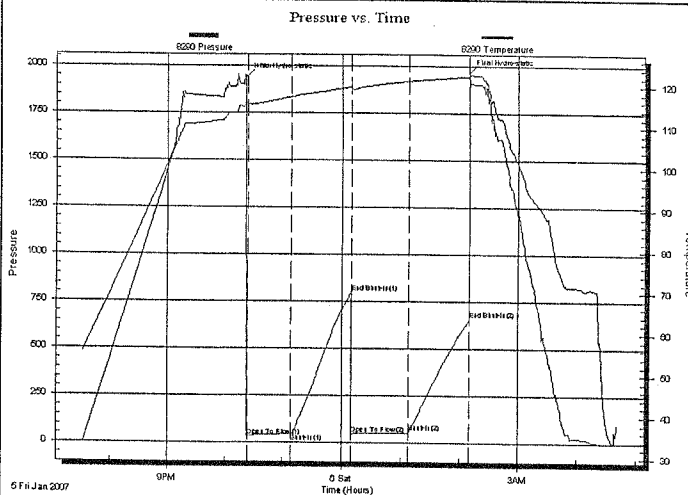
Start Time: 19:33:59

End Time: 04:41:25

Time On Btm: 2007.01.05 @ 22:22:38

Time Off Btm: 2007.01.06 @ 02:10:23

TEST COMMENT: IF Strong blow BOB in 12 min.
ISI No blow
FF Strong blow BOB immediately.
FSI No blow



PRESSURE SUMMARY

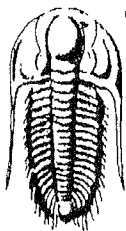
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1942.37	116.06	Initial Hydro-static
1	33.73	115.85	Open To Flow (1)
46	45.40	117.41	Shut-In(1)
108	797.75	119.92	End Shut-In(1)
108	47.41	119.74	Open To Flow (2)
166	54.65	121.26	Shut-In(2)
228	656.97	122.49	End Shut-In(2)
228	1966.52	123.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	GSY Drilling Mud 5%G 95%M	1.54

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 Company

Dyke-Bick #1-14

409 N Ironwood
Wichita KS 67226

14 27 10 Kingman KS

Job Ticket: 27037

DST#: 2

ATTN: Josh Austin

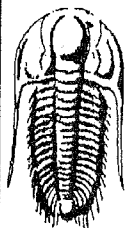
Test Start: 2007.01.05 @ 19:33:54

Tool Information

Drill Pipe:	Length: 3928.00 ft	Diameter: 3.80 inches	Volume: 55.10 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: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 48000.00 lb
		Total Volume: 55.25 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3970.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	82.00 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			3949.00	
Shut In Tool	5.00			3954.00	
Hydraulic tool	5.00			3959.00	
Safety Joint	2.00			3961.00	
Packer	4.00			3965.00	22.00 Bottom Of Top Packer
Packer	5.00			3970.00	
Stubb	1.00			3971.00	
Perforations	6.00			3977.00	
Change Over Sub	1.00			3978.00	
Blank Spacing	31.00			4009.00	
Change Over Sub	1.00			4010.00	
Recorder	0.00	8290	Inside	4010.00	
Perforations	15.00			4025.00	
Recorder	0.00	13789	Outside	4025.00	
Bullnose	5.00			4030.00	60.00 Bottom Packers & Anchor

Total Tool Length: 82.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration Company

Dyke-Bick #1-14

409 N Ironwood
Wichita KS 67226

14 27 10 Kingman KS

Job Ticket: 27037

DST#: 2

ATTN: Josh Austin

Test Start: 2007.01.05 @ 19:33:54

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: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	GSY Drilling Mud 5%G 95%M	1.541

Total Length: 130.00 ft

Total Volume: 1.541 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

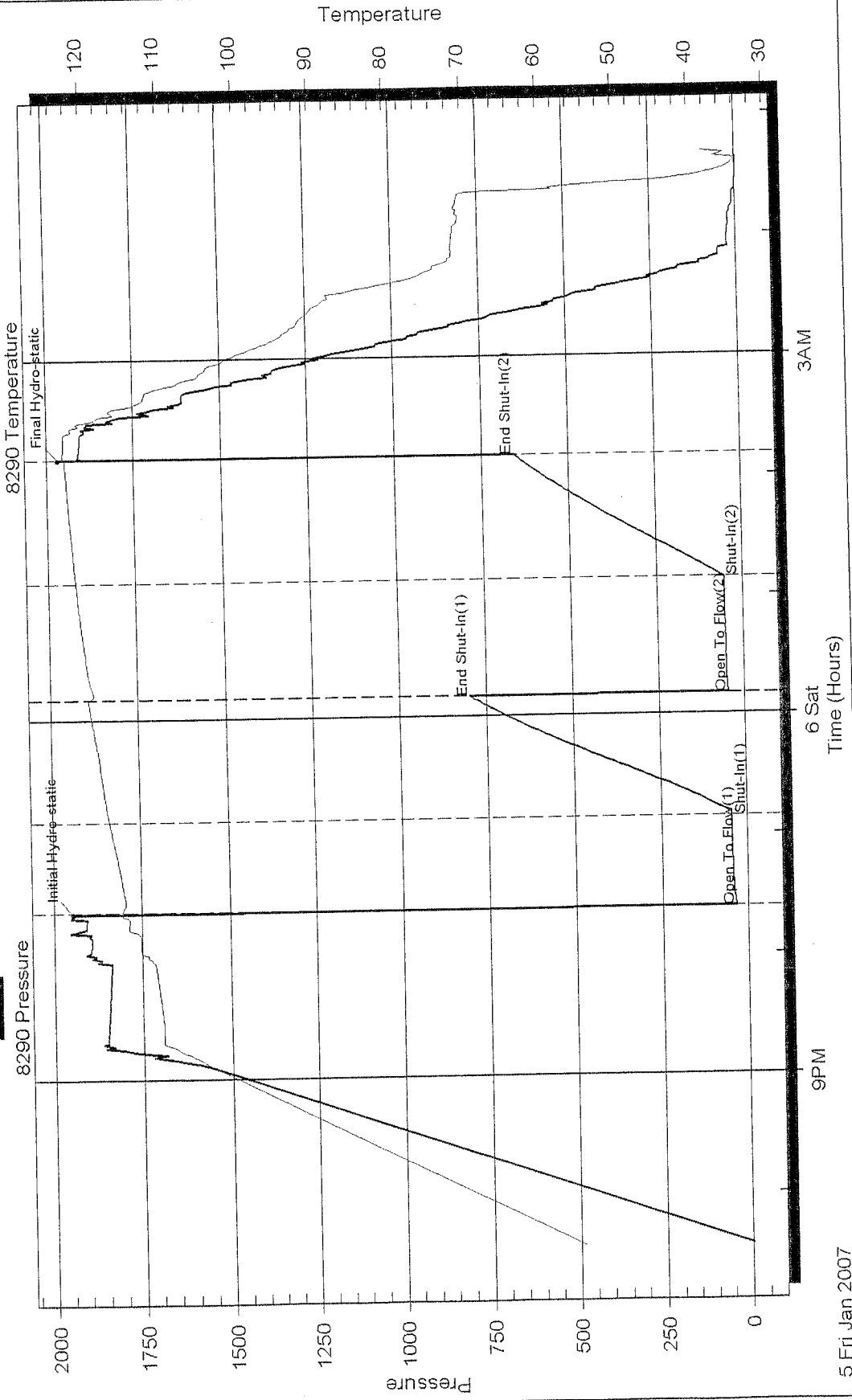
Serial #:

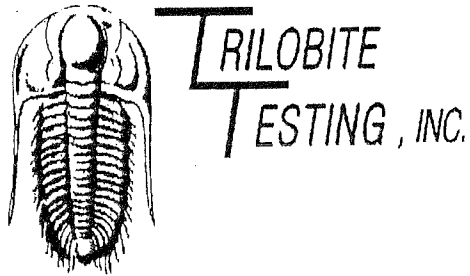
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Company**

409 N Ironwood
Wichita KS 67226

ATTN: Josh Austin

14 27 10 Kingman KS

Dyke-Bick #1-14

Start Date: 2007.01.07 @ 09:09:58

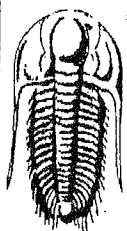
End Date: 2007.01.07 @ 17:20:08

Job Ticket #: 27038 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

Phillips Exploration Company

409 N Ironwood
Wichita KS 67226

ATTN: Josh Austin

Dyke-Bick #1-14

14 27 10 Kingman KS

Job Ticket: 27038

DST#: 3

Test Start: 2007.01.07 @ 09:09:58

GENERAL INFORMATION:

Formation: **Viola**

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

Time Tool Opened: 11:31:56

Time Test Ended: 17:20:08

Test Type: **Conventional Bottom Hole**

Tester: **Zach Stover**

Unit No: **23**

Interval: **4265.00 ft (KB) To 4271.00 ft (KB) (TVD)**

Total Depth: **4271.00 ft (KB) (TVD)**

Hole Diameter: **7.80 inches** Hole Condition: **Fair**

Reference Elevations: **1728.00 ft (KB)**

1717.00 ft (CF)

KB to GR/CF: **11.00 ft**

Serial #: 8290

Inside

Press@RunDepth: **509.74 psig @ 4266.00 ft (KB)**

Start Date: **2007.01.07**

End Date:

2007.01.07

Capacity: **7000.00 psig**

Last Calib.: **2007.01.07**

Start Time: **09:10:03**

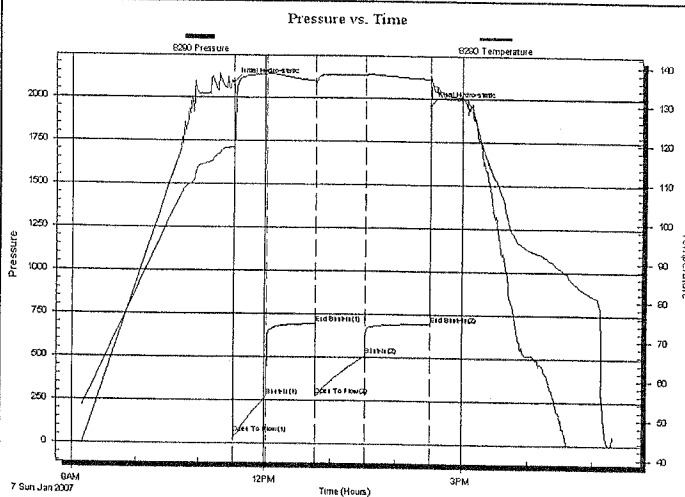
End Time:

17:20:09

Time On Btm: **2007.01.07 @ 11:31:52**

Time Off Btm: **2007.01.07 @ 14:32:07**

TEST COMMENT: IF Strong blow BOB in 3 min.
ISI Strong blow back BOB in 16 min.
FF Strong blow BOB immediately
FSI Fair blow Built to 10 in.



PRESSURE SUMMARY

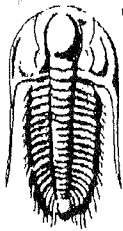
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2092.59	119.13	Initial Hydro-static
1	54.69	117.85	Open To Flow (1)
31	273.49	137.79	Shut-In(1)
75	695.29	136.08	End Shut-In(1)
75	277.02	135.85	Open To Flow (2)
120	509.74	137.73	Shut-In(2)
181	694.60	136.74	End Shut-In(2)
181	1961.08	137.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
890.00	GSY W 5%G 95%W	12.20
60.00	GSY O&MCW 5%G 5%O 65%W 25%M	0.84
60.00	GSY OCM 20%G 25%O 55%M	0.84
10.00	GSY MCO 10%G 85%O 5%M	0.14

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration Company

Dyke-Bick #1-14

409 N Ironwood
Wichita KS 67226

14 27 10 Kingman KS

Job Ticket: 27038

DST#: 3

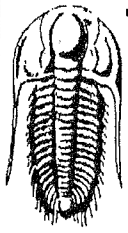
ATTN: Josh Austin

Test Start: 2007.01.07 @ 09:09:58

Tool Information

Drill Pipe:	Length: 4230.00 ft	Diameter: 3.80 inches	Volume: 59.34 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: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 54000.00 lb
			Total Volume: 59.49 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4265.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	28.00 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			4244.00	
Shut In Tool	5.00			4249.00	
Hydraulic tool	5.00			4254.00	
Safety Joint	2.00			4256.00	
Packer	4.00			4260.00	22.00 Bottom Of Top Packer
Packer	5.00			4265.00	
Stubb	1.00			4266.00	
Recorder	0.00	8290	Inside	4266.00	
Recorder	0.00	13789	Outside	4266.00	
Bullnose	5.00			4271.00	6.00 Bottom Packers & Anchor
Total Tool Length:		28.00			



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration Company

Dyke-Bick #1-14

409 N Ironwood
Wichita KS 67226

14 27 10 Kingman KS

Job Ticket: 27038

DST#: 3

ATTN: Josh Austin

Test Start: 2007.01.07 @ 09:09:58

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:

16500 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.57 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
890.00	GSY W 5%G 95%W	12.202
60.00	GSY O&MCW 5%G 5%O 65%W 25%M	0.842
60.00	GSY OCM 20%G 25%O 55%M	0.842
10.00	GSY MCO 10%G 85%O 5%M	0.140

Total Length: 1020.00 ft

Total Volume: 14.026 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

