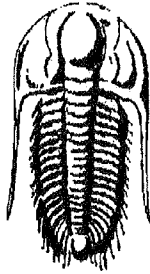


15-179-21229

16-9s-26w

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **A & A Production**

PO Box 100
Hill City, KS 67642

ATTN: Herb Deines

16 9s26w Sheridan KS

Simon #2

Start Date: 2009.05.21 @ 04:29:00

End Date: 2009.05.21 @ 09:20:00

Job Ticket #: 34666 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

CONFIDENTIAL
MAY 28 2009
KCC

A & A Production

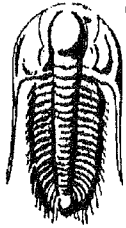
Simon #2

16 9s26w Sheridan KS

DST # 1

LKC "H - K"

2009.05.21



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34666

DST#: 1

ATTN: Herb Deines

Test Start: 2009.05.21 @ 04:29:00

GENERAL INFORMATION:

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

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

Time Tool Opened: 06:26:00

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Time Test Ended: 09:20:00

Unit No: **36**

Interval: **3980.00 ft (KB) To 4140.00 ft (KB) (TVD)**

Reference Elevations: **2670.00 ft (KB)**

Total Depth: **4140.00 ft (KB) (TVD)**

2665.00 ft (CF)

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

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: **17.60 psig @ 3981.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2009.05.21**

End Date:

2009.05.21

Last Calib.: **2009.05.21**

Start Time: **04:29:05**

End Time:

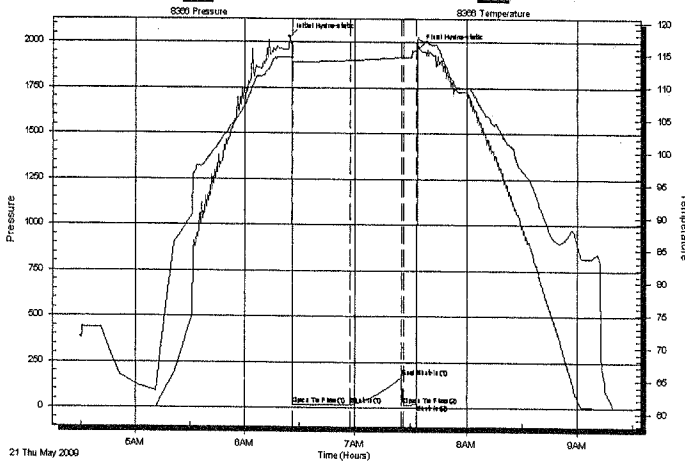
09:19:59

Time On Btm: **2009.05.21 @ 06:24:30**

Time Off Btm: **2009.05.21 @ 07:34:30**

TEST COMMENT: IF: Blow built to 1/2", dead in 16 min.
IS: No blow back
FF: No blow, Flushed tool, No blow, Pulled tool

Pressure vs. Time



PRESSURE SUMMARY

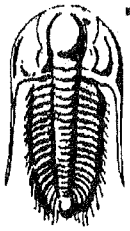
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2027.65	114.67	Initial Hydro-static
2	16.06	113.52	Open To Flow (1)
33	17.60	114.14	Shut-In (1)
61	171.24	114.63	End Shut-In (1)
62	17.94	114.61	Open To Flow (2)
69	23.86	115.69	Shut-In (2)
70	1969.75	117.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34666

DST#: 1

ATTN: Herb Deines

Test Start: 2009.05.21 @ 04:29:00

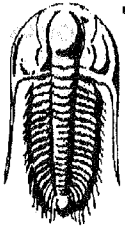
Tool Information

Drill Pipe:	Length: 3985.00 ft	Diameter: 3.80 inches	Volume: 55.90 bbl	Tool Weight: 1500.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 55.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3980.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	160.00 ft			
Tool Length:	180.00 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			3965.00	
HYD S.I. Tool	5.00			3970.00	
Packer	5.00			3975.00	20.00 Bottom Of Top Packer
Packer	5.00			3980.00	
Stubb	1.00			3981.00	
Recorder	0.00	8366	Inside	3981.00	
Recorder	0.00	8320	Inside	3981.00	
Perforations	20.00			4001.00	
Blank Spacing	127.00			4128.00	
Perforations	9.00			4137.00	
Bullnose	3.00			4140.00	160.00 Bottom Packers & Anchor

Total Tool Length: 180.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34666

DST#: 1

ATTN: Herb Deines

Test Start: 2009.05.21 @ 04:29:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100%	0.281

Total Length: 20.00 ft

Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8366

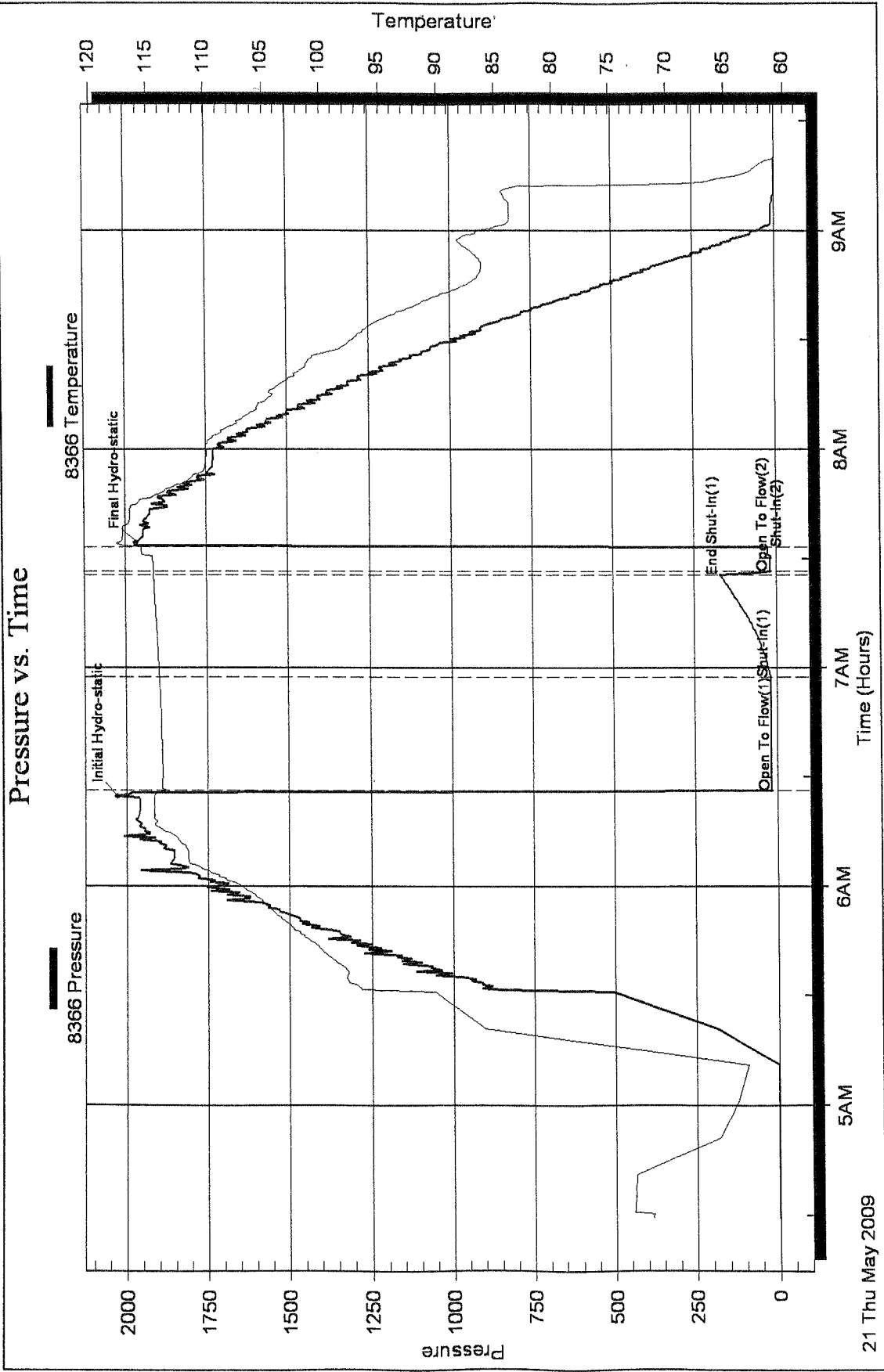
Inside

A & A Production

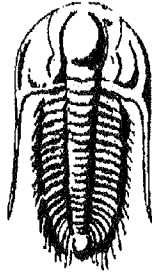
16.9s26w Sheridan KS

DST Test Number: 1

Pressure vs. Time



21 Thu May 2009



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **A & A Production**

PO Box 100
Hill City, KS 67642

ATTN: Herb Deines

16 9s26w Sheridan KS

Simon #2

Start Date: 2009.05.21 @ 10:19:00

End Date: 2009.05.21 @ 14:10:30

Job Ticket #: 34667 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

A & A Production

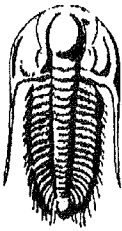
Simon #2

16 9s26w Sheridan KS

DST # 2

LKC "E - K"

2009.05.21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

ATTN: Herb Deines

Job Ticket: 34667

DST#: 2

Test Start: 2009.05.21 @ 10:19:00

GENERAL INFORMATION:

Formation: **LKC "E - K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:54:30

Time Test Ended: 14:10:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Interval: **3926.00 ft (KB) To 4140.00 ft (KB) (TVD)**

Total Depth: 4140.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2670.00 ft (KB)

2665.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: psig @ 3927.00 ft (KB)

Start Date: 2009.05.21

End Date:

2009.05.21

Capacity: 7000.00 psig

Last Calib.: 2009.05.21

Start Time: 10:19:05

End Time:

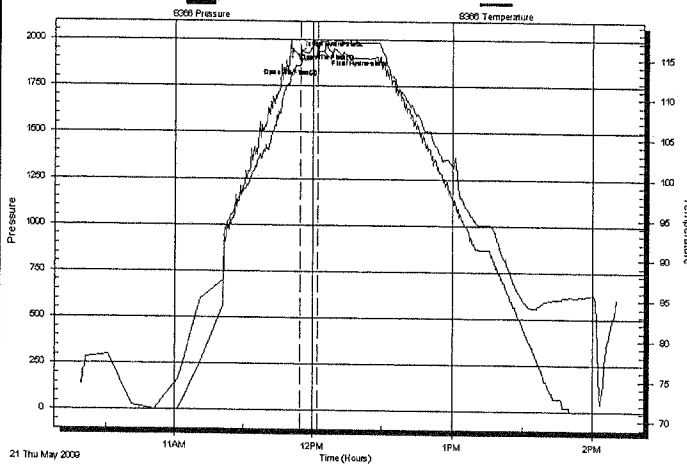
14:10:30

Time On Btm: 2009.05.21 @ 11:54:00

Time Off Btm: 2009.05.21 @ 12:05:00

TEST COMMENT: IF: Packers not holding, Reset tool
Packers failed again, Pulled tool
Ms - Run

Pressure vs. Time



PRESSURE SUMMARY

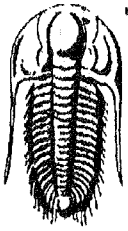
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1915.69	114.13	Initial Hydro-static
1	1880.50	114.06	Open To Flow (1)
8	1842.76	115.46	Open To Flow (2)
11	1934.29	117.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
170.00	Mud 100%	2.38

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34667

DST#: 2

ATTN: Herb Deines

Test Start: 2009.05.21 @ 10:19:00

Tool Information

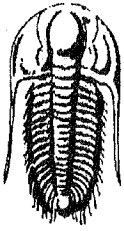
Drill Pipe:	Length: 3923.00 ft	Diameter: 3.80 inches	Volume: 55.03 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 47000.00 lb
		Total Volume:	55.03 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3926.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	214.00 ft			
Tool Length:	234.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3911.00	
HYD S.I. Tool	5.00			3916.00	
Packer	5.00			3921.00	20.00 Bottom Of Top Packer
Packer	5.00			3926.00	
Stubb	1.00			3927.00	
Recorder	0.00	8366	Inside	3927.00	
Recorder	0.00	8320	Inside	3927.00	
Perforations	20.00			3947.00	
Blank Spacing	188.00			4135.00	
Perforations	2.00			4137.00	
Bullnose	3.00			4140.00	214.00 Bottom Packers & Anchor

Total Tool Length: 234.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34667 **DST#: 2**

ATTN: Herb Deines

Test Start: 2009.05.21 @ 10:19:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
170.00	Mud 100%	2.385

Total Length: 170.00 ft Total Volume: 2.385 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8366

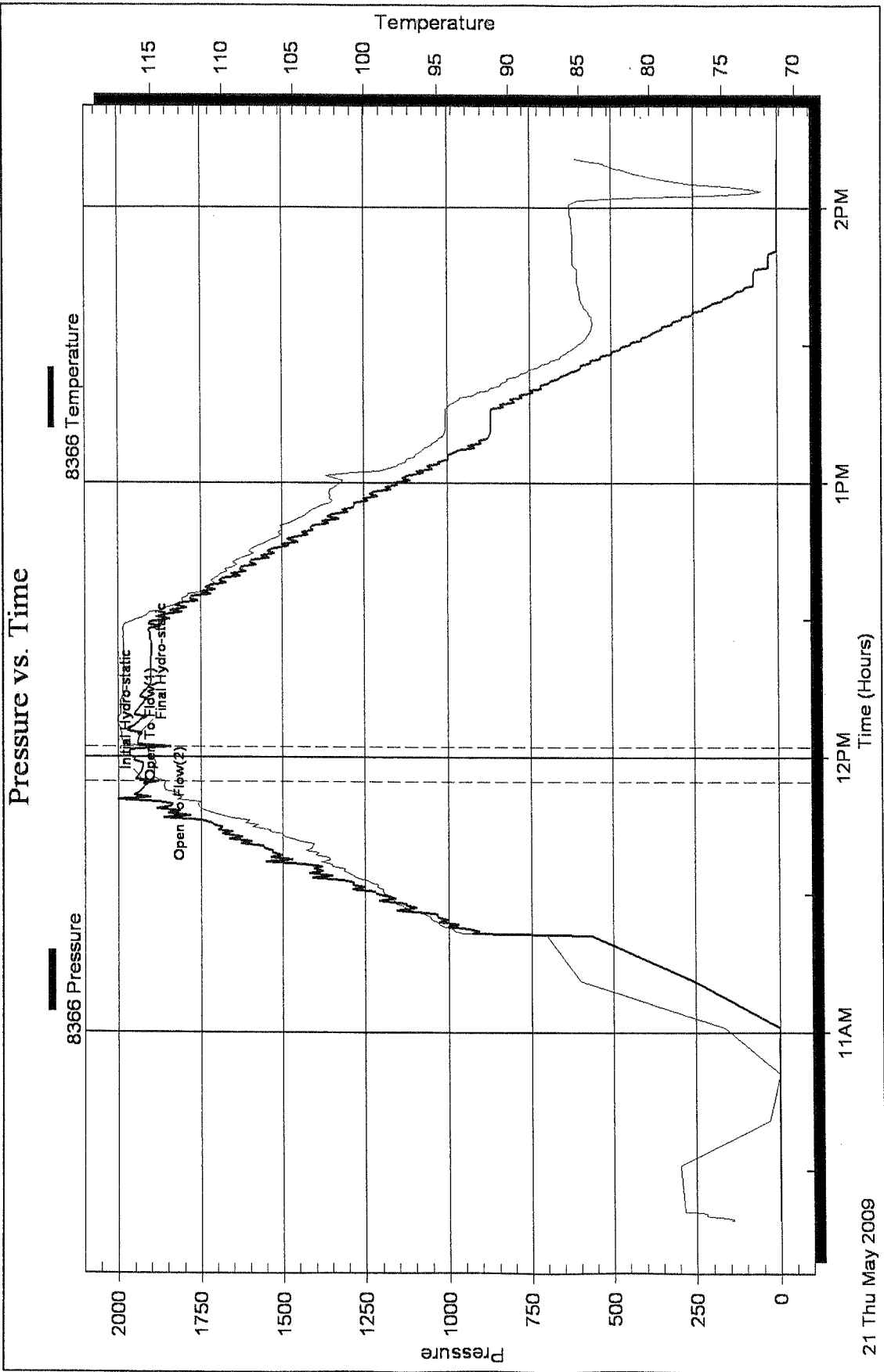
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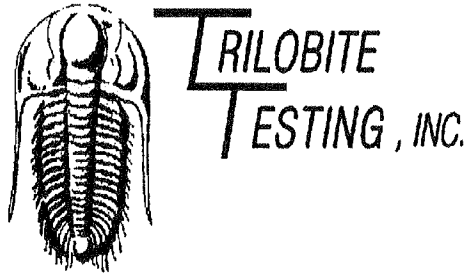
A & A Production

16 9s26w Sheridan KS

DST Test Number: 2

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **A & A Production**

PO Box 100
Hill City, KS 67642

ATTN: Herb Deines

16 9s26w Sheridan KS

Simon #2

Start Date: 2009.05.21 @ 20:20:00

End Date: 2009.05.22 @ 04:40:00

Job Ticket #: 34668 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

A & A Production

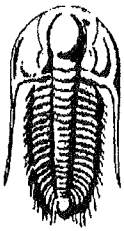
Simon #2

16 9s26w Sheridan KS

DST # 3

LKC "E - F"

2009.05.21



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

ATTN: Herb Deines

Job Ticket: 34668

DST#: 3

Test Start: 2009.05.21 @ 20:20:00

GENERAL INFORMATION:

Formation: **LKC "E - F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:37:00

Time Test Ended: 04:40:00

Test Type: Conventional Straddle

Tester: James Winder

Unit No: 36

Interval: **3916.00 ft (KB) To 3970.00 ft (KB) (TVD)**

Total Depth: 4140.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2670.00 ft (KB)

2665.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366 Inside

Press@RunDepth: 161.97 psig @ 3917.00 ft (KB)

Start Date: 2009.05.21 End Date: 2009.05.22

Start Time: 20:20:05 End Time: 04:39:59

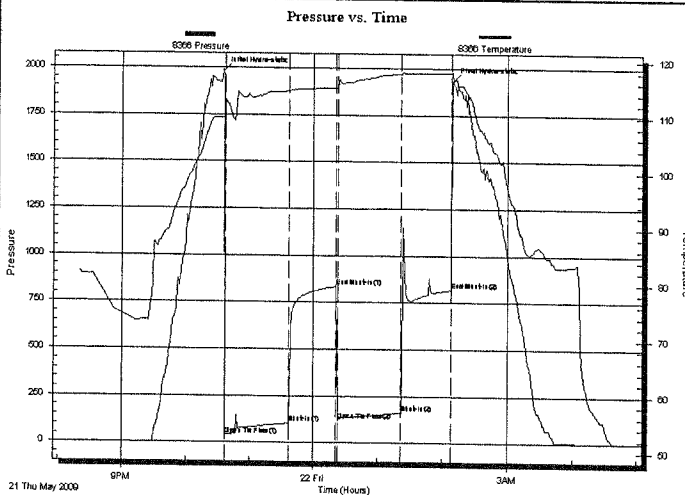
Capacity: 7000.00 psig

Last Calib.: 2009.05.22

Time On Btm: 2009.05.21 @ 22:35:00

Time Off Btm: 2009.05.22 @ 02:09:29

TEST COMMENT: Hole took 15' to 20' mud at both opens, bled off initial surge blow s
IF: Blow built to 1 1/2" in 13 min., hole took 10' mud, blow at 5", built to 10 1/4"
IS: Bled off, No blow back
FF: Blow built t



PRESSURE SUMMARY

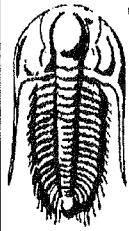
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1980.28	109.83	Initial Hydro-static
2	40.73	111.84	Open To Flow (1)
62	104.52	114.60	Shut-In(1)
106	833.48	115.26	End Shut-In(1)
108	121.54	115.08	Open To Flow (2)
166	161.97	117.82	Shut-In(2)
213	818.34	117.87	End Shut-In(2)
215	1932.00	116.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	Muddy Water 60%w, 40%m	0.87
124.00	WCM 68%m, 32%w	1.74
124.00	Mud 100%	1.74
0.00	RW = .296 ohms @ 54 deg F	0.00
0.00	Chlorides = 30,000 ppm	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34668

DST#: 3

ATTN: Herb Deines

Test Start: 2009.05.21 @ 20:20:00

Tool Information

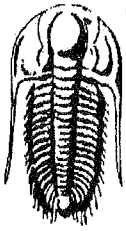
Drill Pipe:	Length: 3906.00 ft	Diameter: 3.80 inches	Volume: 54.79 bbl	Tool Weight: 3500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 54.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3916.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	3970.00 ft			
Interval between Packers:	54.00 ft			
Tool Length:	244.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Hole took 15' to 20' of mud at both opens,
Bled off the initial surge blows

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3901.00	
HYD S.I. Tool	5.00			3906.00	
Packer	5.00			3911.00	20.00 Bottom Of Top Packer
Packer	5.00			3916.00	
Stubb	1.00			3917.00	
Recorder	0.00	8366	Inside	3917.00	
Perforations	10.00			3927.00	
Blank Spacing	34.00			3961.00	
Perforations	4.00			3965.00	
Recorder	0.00	7457	Inside	3965.00	
Blank Off Sub	1.00			3966.00	
Blank Spacing	4.00			3970.00	54.00 Tool Interval
Packer	0.00			3970.00	
Shale Packer	0.00			3970.00	
Stubb	1.00			3971.00	
Recorder	0.00	8320	Inside	3971.00	
Perforations	5.00			3976.00	
Blank Spacing	157.00			4133.00	
Perforations	4.00			4137.00	
Bullnose	3.00			4140.00	170.00 Bottom Packers & Anchor

Total Tool Length: 244.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

A & A Production

Simon #2

PO Box 100
Hill City, KS 67642

16 9s26w Sheridan KS

Job Ticket: 34668

DST#: 3

ATTN: Herb Deines

Test Start: 2009.05.21 @ 20:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

30000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.35 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	Muddy Water 60%w, 40%m	0.870
124.00	WCM 68%m, 32%w	1.739
124.00	Mud 100%	1.739
0.00	RW = .296 ohms @ 54 deg F	0.000
0.00	Chlorides = 30,000 ppm	0.000

Total Length: 310.00 ft

Total Volume: 4.348 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

