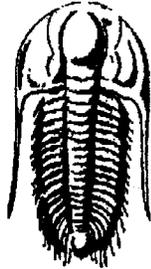


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**TRILOBITE**  
**TESTING, INC.**

DRILL STEM TEST REPORT

**CONFIDENTIAL**

Prepared For: Great Eastern Energy&Develop

**ORIGINAL** Bdx 150  
Bogue Ks 67625

**KCC**

ATTN: Mike Davignon **DEC 02 2003**

14-7s-21w Graham **CONFIDENTIAL**

**Pozas #1**

Start Date: 2003.10.19 @ 00:43:30

End Date: 2003.10.19 @ 06:21:29

Job Ticket #: 18437 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**

Great Eastern Energy&Develop

Pozas #1

Box 150  
Bogue Ks 67625

14-7s-21w Graham Ks

ATTN: Mike Davignon

Job Ticket: 18437

DST#: 1

Test Start: 2003.10.19 @ 00:43:30

**GENERAL INFORMATION:**

Formation: **Topeka**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:30:59  
 Time Test Ended: 06:21:29

**KCC**  
**DEC 02 2003**  
**CONFIDENTIAL**

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: **2081.00 ft (KB)**  
**2076.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

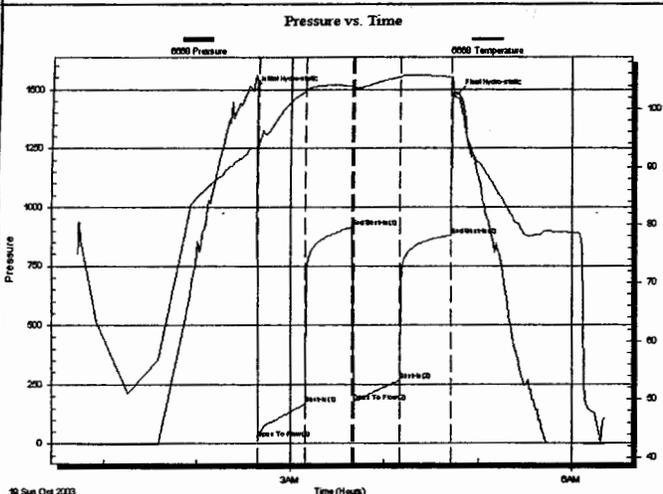
Serial #: **6668**

Inside

Press@RunDepth: **266.41 psig @ 3226.01 ft (KB)**  
 Start Date: **2003.10.19** End Date: **2003.10.19**  
 Start Time: **00:43:30** End Time: **06:21:29**

Capacity: **7000.00 psig**  
 Last Calib.: **2003.10.19**  
 Time On Btrm: **2003.10.19 @ 02:35:59**  
 Time Off Btrm: **2003.10.19 @ 04:46:59**

TEST COMMENT: IFF-w k to strg in 14 min  
 FFP-w k to fr 1/4" to 4" bl  
 Times 30-30-30-30



**PRESSURE SUMMARY**

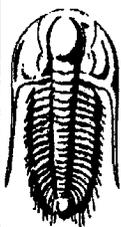
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1496.50	93.16	Initial Hydro-static
3	24.10	93.19	Open To Flow (1)
34	166.93	102.98	Shut-In (1)
64	913.59	103.88	End Shut-In (1)
65	174.79	103.69	Open To Flow (2)
94	266.41	105.43	Shut-In (2)
127	878.65	105.44	End Shut-In (2)
131	1480.42	101.77	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
120.00	MW 20% mud 80% water	0.59
420.00	water RW .49@46F	5.89

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18437      **DST#: 1**

ATTN: Mike Davignon

Test Start: 2003.10.19 @ 00:43:30

**Tool Information**

Drill Pipe:	Length: 3091.00 ft	Diameter: 3.80 inches	Volume: 43.36 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 43.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 31000.00 lb
Depth to Top Packer:	3225.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.02 ft			
Tool Length:	56.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

**KCC**  
**DEC 02 2003**  
**CONFIDENTIAL**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3205.00	
Shut In Tool	5.00			3210.00	
Hydraulic tool	5.00			3215.00	
Packer	5.00			3220.00	21.00      Bottom Of Top Packer
Packer	5.00			3225.00	
Stubb	1.00			3226.00	
Recorder	0.01	6668	Inside	3226.01	
Perforations	31.00			3257.01	
Recorder	0.01	11085	Outside	3257.02	
Bullnose	3.00			3260.02	35.02      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>56.02</b>				

10/19/03



**TRILOBITE TESTING, INC.**

### DRILL STEM TEST REPORT

### FLUID SUMMARY

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18437      **DST#: 1**

ATTN: Mike Davignon

Test Start: 2003.10.19 @ 00:43:30

#### 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:	19000 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.74 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 700.00 ppm			
Filter Cake: 1.00 inches			

#### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MW 20% mud 80% water	0.590
420.00	water RW .49@46F	5.891

Total Length: 540.00 ft      Total Volume: 6.481 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

DST Test Number: 1

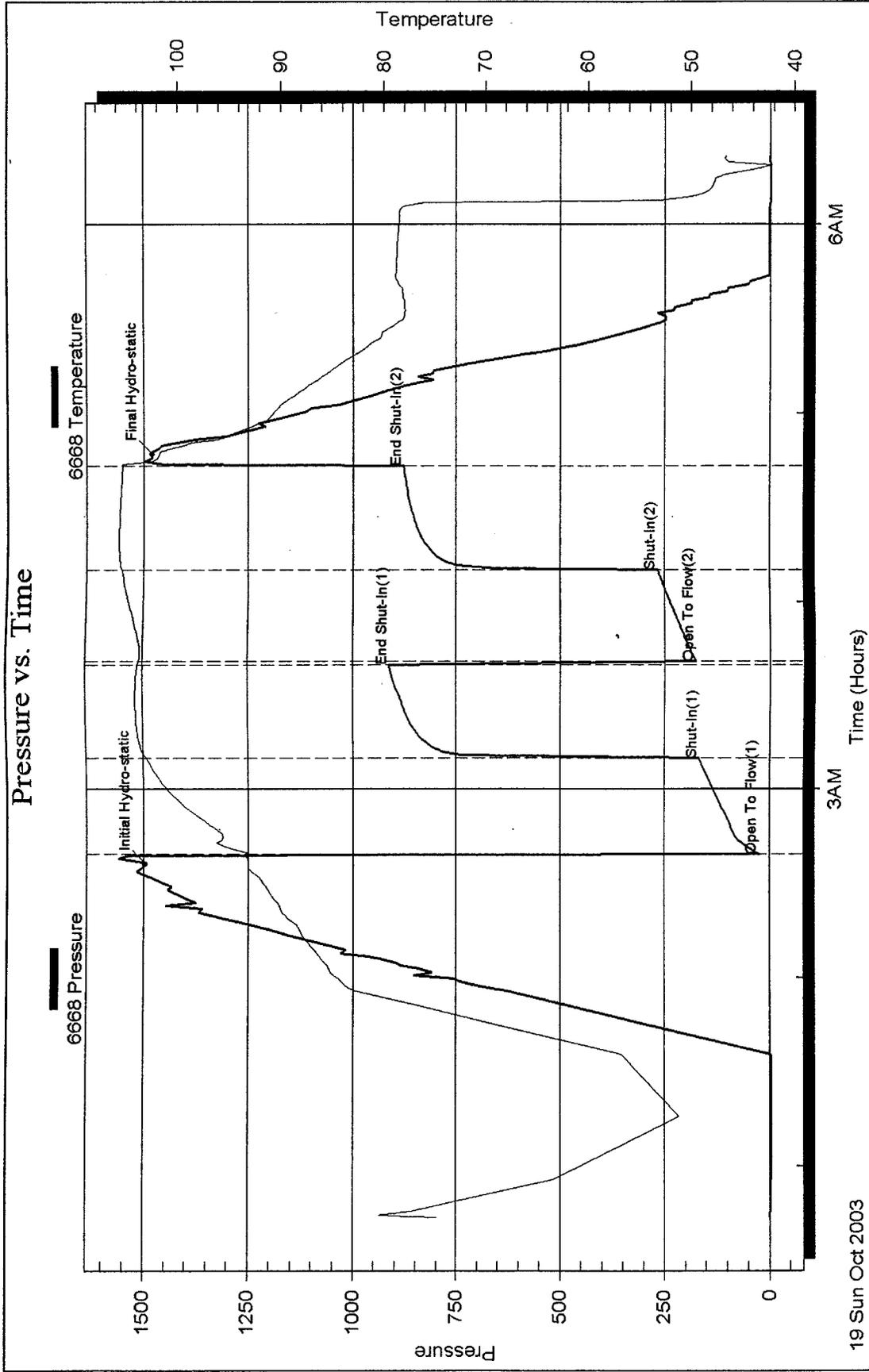
14-7s-21w Graham Ks

Great Eastern Energy&Develop

Inside

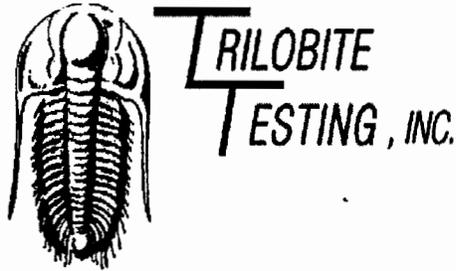
Serial #: 6668

### Pressure vs. Time



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**DRILL STEM TEST REPORT**

Prepared For: **Great Eastern Energy&Develop**

Box 150  
Bogue Ks 67625

ATTN: Mike Davignon

**14-7s-21w Graham Ks**

**Pozas #1**

Start Date: 2003.10.19 @ 12:53:25

End Date: 2003.10.19 @ 18:13:54

Job Ticket #: 18438                      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

Great Eastern Energy&Develop  
 Box 150  
 Bogue Ks 67625  
 ATTN: Mike Davignon

**Pozas #1**  
**14-7s-21w Graham Ks**  
 Job Ticket: 18438      **DST#: 2**  
 Test Start: 2003.10.19 @ 12:53:25

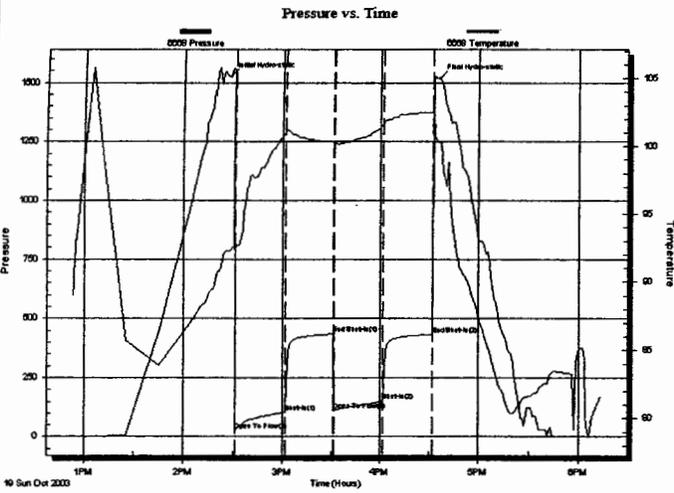
**GENERAL INFORMATION:**

Formation: **Toronto**  
 Deviated: **No** Whipstock:      ft (KB)  
 Test Type: **Conventional Bottom Hole**  
 Time Tool Opened: 14:31:24      Tester: **Ray Schwager**  
 Time Test Ended: 18:13:54      Unit No: **28**  
 Interval: **3273.00 ft (KB) To 3313.00 ft (KB) (TVD)**      Reference Elevations:      2081.00 ft (KB)  
 Total Depth: **3313.00 ft (KB) (TVD)**      2076.00 ft (CF)  
 Hole Diameter: **7.85 inches** Hole Condition: **Fair**      KB to GR/CF:      5.00 ft

**Serial #: 6668**

**Inside**  
 Press@RunDepth: **150.74 psig @ 3274.01 ft (KB)**      Capacity:      7000.00 psig  
 Start Date: **2003.10.19**      End Date:      2003.10.19      Last Calib.:      2003.10.19  
 Start Time: **12:53:25**      End Time:      18:13:54      Time On Btm:      2003.10.19 @ 14:27:54  
 Time Off Btm:      2003.10.19 @ 16:35:54

**TEST COMMENT:** IFF-w k to a gd bl 1/2" to 6" bl  
 FFP-w k bl thru-out 1/2" to 1 1/2" bl  
 Times 30-30-30-30



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1525.62	92.30	Initial Hydro-static
4	24.87	92.49	Open To Flow (1)
34	105.01	100.99	Shut-In(1)
63	435.16	100.33	End Shut-In(1)
64	112.54	100.23	Open To Flow (2)
94	150.74	101.66	Shut-In(2)
124	432.92	102.50	End Shut-In(2)
128	1517.66	100.27	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
20.00	clean oil	0.10
140.00	O&GCWM 10%oil10%gas30%w ater50%r1.05	
120.00	O&GCMW 5%gas5%oil85%w ater5%md1.68	

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18438      **DST#: 2**

ATTN: Mike Davignon

Test Start: 2003.10.19 @ 12:53:25

**Tool Information**

Drill Pipe:	Length: 3153.00 ft	Diameter: 3.80 inches	Volume: 44.23 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 44.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3273.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.02 ft			
Tool Length:	61.02 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			3253.00	
Shut In Tool	5.00			3258.00	
Hydraulic tool	5.00			3263.00	
Packer	5.00			3268.00	21.00      Bottom Of Top Packer
Packer	5.00			3273.00	
Stubb	1.00			3274.00	
Recorder	0.01	6668	Inside	3274.01	
Perforations	36.00			3310.01	
Recorder	0.01	11085	Outside	3310.02	
Bullnose	3.00			3313.02	40.02      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>61.02</b>				



**TRILOBITE TESTING, INC**

### DRILL STEM TEST REPORT

### FLUID SUMMARY

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18438      **DST#: 2**

ATTN: Mike Davignon

Test Start: 2003.10.19 @ 12:53:25

#### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 33 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 28000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.72 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1100.00 ppm		
Filter Cake: 1.00 inches		

#### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	clean oil	0.098
140.00	O&GCWM 10%oil10%gas30%water50%mud	1.053
120.00	O&GCMW 5%gas5%oil85%water5%mud	1.683

Total Length: 280.00 ft      Total Volume: 2.834 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: RW.19@92F

DST Test Number: 2

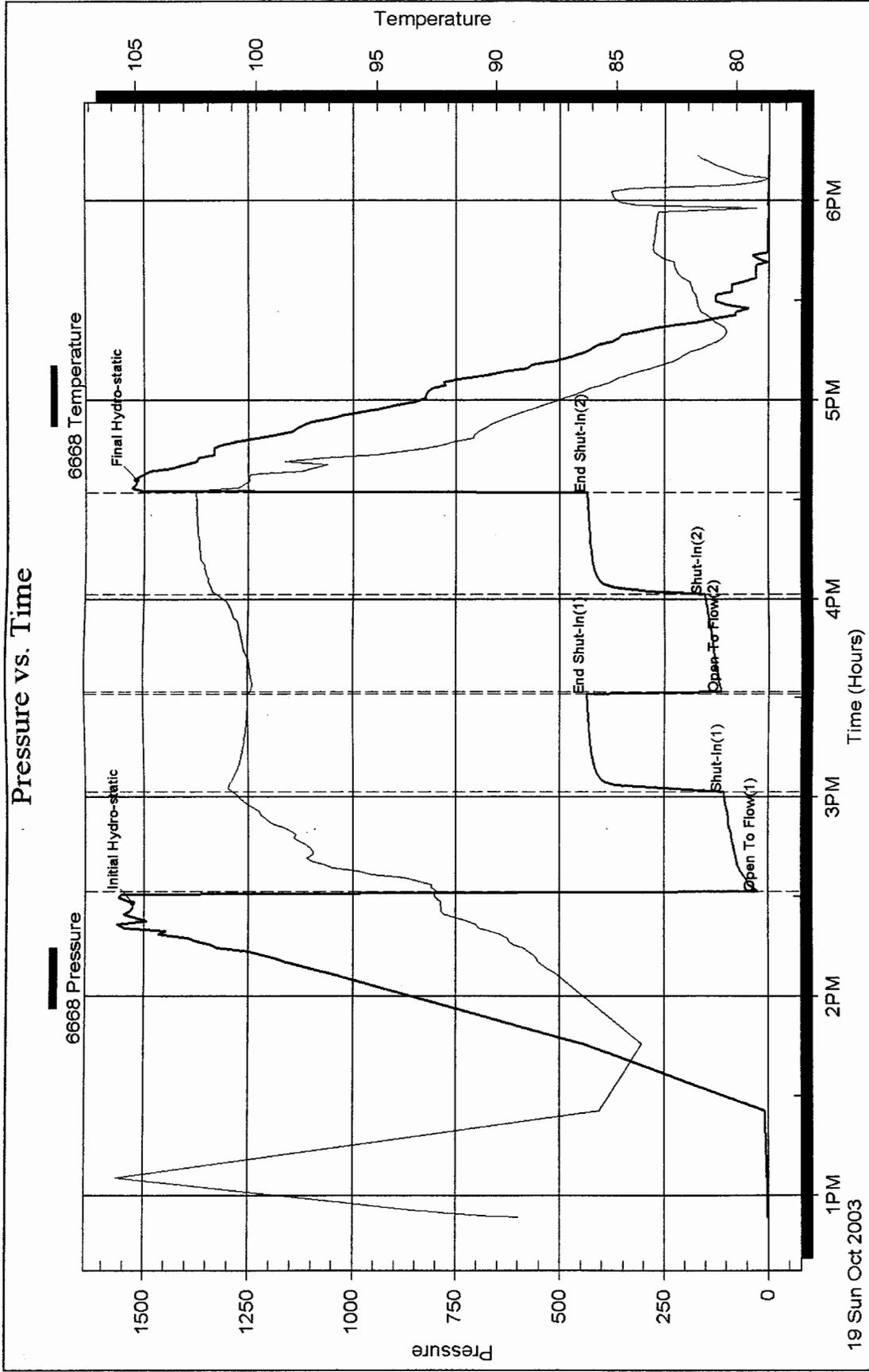
14-7s-21w Graham Ks

Great Eastern Energy&Develop

Inside

Serial #: 6668

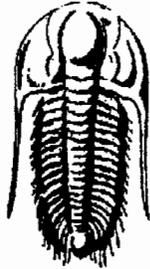
### Pressure vs. Time



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**TRILOBITE**  
**TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Great Eastern Energy&Develop**

Box 150  
Bogue Ks 67625

ATTN: Mike Davignon

**14-7s-21w Graham Ks**

**Pozas #1**

Start Date: 2003.10.19 @ 23:40:43

End Date: 2003.10.20 @ 07:02:12

Job Ticket #: 18439                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Great Eastern Energy&Develop

Pozas #1

14-7s-21w Graham Ks

DST # 3

Ians A

2003.10.19





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18439      **DST#: 3**

ATTN: Mike Davignon

Test Start: 2003.10.19 @ 23:40:43

### Tool Information

Drill Pipe:	Length: 3183.00 ft	Diameter: 3.80 inches	Volume: 44.65 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 45.24 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3310.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.02 ft			
Tool Length:	46.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3290.00	
Shut In Tool	5.00			3295.00	
Hydraulic tool	5.00			3300.00	
Packer	5.00			3305.00	21.00      Bottom Of Top Packer
Packer	5.00			3310.00	
Stubb	1.00			3311.00	
Recorder	0.01	6668	Inside	3311.01	
Perforations	21.00			3332.01	
Recorder	0.01	11085	Outside	3332.02	
Bullnose	3.00			3335.02	25.02      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>46.02</b>				

 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>	<b>FLUID SUMMARY</b>
	Great Eastern Energy&Develop Box 150 Bogue Ks 67625 ATTN: Mike Davignon	<b>Pozas #1</b> <b>14-7s-21w Graham Ks</b> Job Ticket: 18439 <b>DST#: 3</b> Test Start: 2003.10.19 @ 23:40:43

**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:	53000 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.74 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1100.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

**Recovery Table**

Length ft	Description	Volume bbl
360.00	water RW.19@54F	3.957
90.00	mw 20%mud 80%water w/show of oil	1.262
10.00	CO	0.140
0.00	80 GP	0.000

Total Length: 460.00 ft      Total Volume: 5.359 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

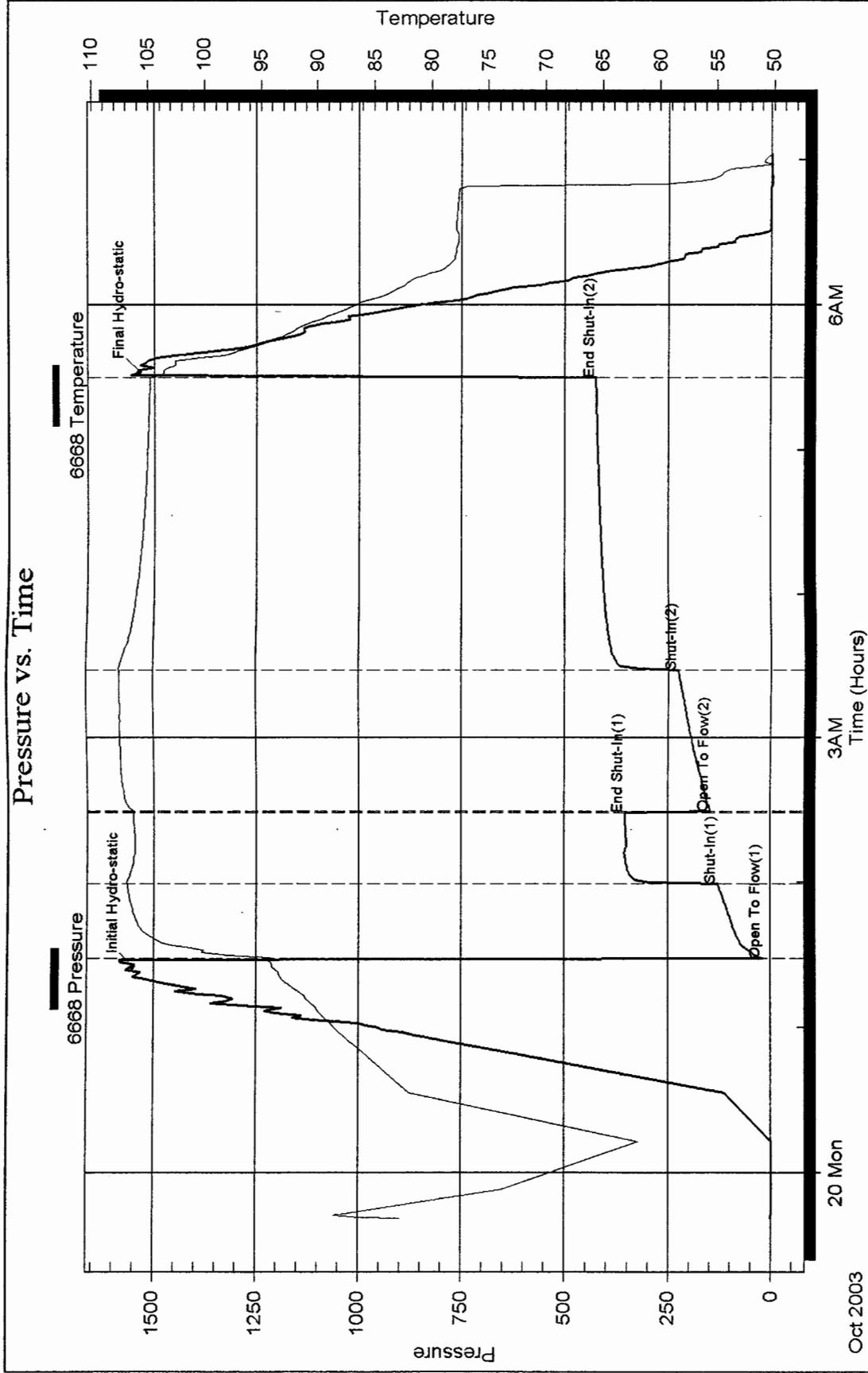
Serial #: 6668

Inside Great Eastern Energy&Develop

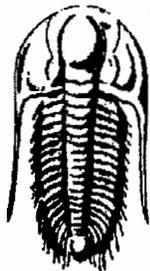
14-7s-21w Graham Ks

DST Test Number: 3

### Pressure vs. Time



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**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Great Eastern Energy&Develop**

Box 150  
Bogue Ks 67625

ATTN: Mike Davignon

**14-7s-21w Graham Ks**

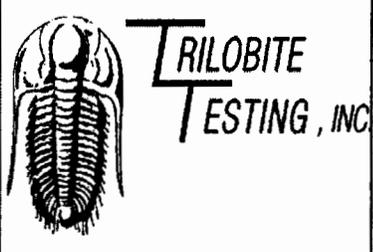
**Pozas #1**

Start Date: 2003.10.20 @ 12:42:19

End Date: 2003.10.20 @ 20:28:48

Job Ticket #: 18440      DST #: 4

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



# DRILL STEM TEST REPORT

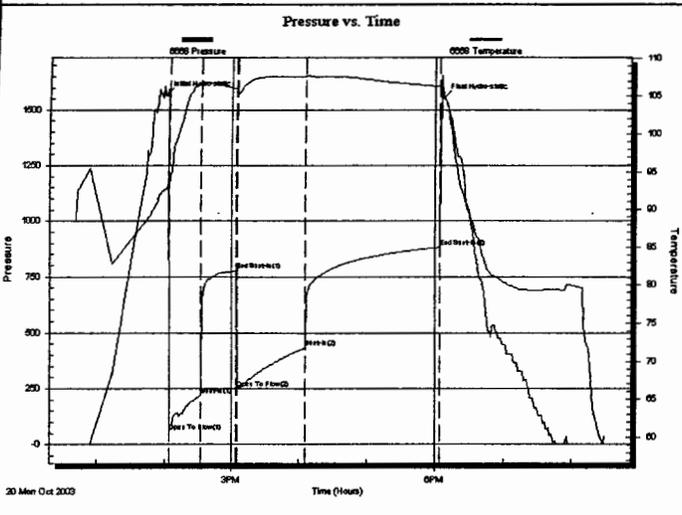
Great Eastern Energy & Develop **Pozas #1**  
 Box 150 **14-7s-21w Graham Ks**  
 Bogue Ks 67625 Job Ticket: 18440 **DST#: 4**  
 ATTN: Mike Davignon Test Start: 2003.10.20 @ 12:42:19

## GENERAL INFORMATION:

Formation: **LKC C**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole  
 Time Tool Opened: 14:04:48 Tester: Ray Schwager  
 Time Test Ended: 20:28:48 Unit No: 28  
 Interval: **3335.00 ft (KB) To 3360.00 ft (KB) (TVD)** Reference Elevations: 2081.00 ft (KB)  
 Total Depth: 3365.00 ft (KB) (TVD) 2076.00 ft (CF)  
 Hole Diameter: 7.85 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

**Serial #: 6668** Inside  
 Press@RunDepth: 434.28 psig @ 3336.01 ft (KB) Capacity: 7000.00 psig  
 Start Date: 2003.10.20 End Date: 2003.10.20 Last Calib.: 2003.10.20  
 Start Time: 12:42:19 End Time: 20:28:48 Time On Btrm: 2003.10.20 @ 14:01:18  
 Time Off Btrm: 2003.10.20 @ 18:07:48

TEST COMMENT: IFP-w k to strg in 2 min  
 FFP-w k to strg in 4min  
 Times 30-30-60-120  
 ISIP-2"bl FSIP-surface bl



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1567.35	92.64	Initial Hydro-static
4	57.46	93.09	Open To Flow (1)
31	220.75	106.55	Shut-In(1)
63	776.85	105.94	End Shut-In(1)
64	248.75	105.75	Open To Flow (2)
125	434.28	107.64	Shut-In(2)
244	879.89	106.32	End Shut-In(2)
247	1554.06	105.51	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
124.00	socmw 4%oil86%w ater10%mud	0.65
62.00	GMO15%gas63%oil14%w ater8%mud	0.87
124.00	GMO7%gas81%oil2%w ater10%mud	1.74
62.00	GMO20%gas 50%oil30%mud	0.87
769.00	CO	10.79
0.00	903'Gip	0.00

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18440

**DST#: 4**

ATTN: Mike Davignon

Test Start: 2003.10.20 @ 12:42:19

### Tool Information

Drill Pipe:	Length: 3216.00 ft	Diameter: 3.80 inches	Volume: 45.11 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 45.70 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3335.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.02 ft			
Tool Length:	51.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3315.00	
Shut In Tool	5.00			3320.00	
Hydraulic tool	5.00			3325.00	
Packer	5.00			3330.00	21.00 Bottom Of Top Packer
Packer	5.00			3335.00	
Stubb	1.00			3336.00	
Recorder	0.01	6668	Inside	3336.01	
Perforations	26.00			3362.01	
Recorder	0.01	11085	Outside	3362.02	
Bullnose	3.00			3365.02	30.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>51.02</b>				



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

FLUID SUMMARY

Great Eastern Energy & Develop

Pozas #1

Box 150  
Bogue Ks 67625

14-7s-21w Graham Ks

Job Ticket: 18440

DST#: 4

ATTN: Mike Davignon

Test Start: 2003.10.20 @ 12:42:19

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

34000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2350.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
124.00	socmw 4%oil86%water10%mud	0.646
62.00	GMO15%gas63%oil14%water8%mud	0.870
124.00	GMO7%gas81%oil2%water10%mud	1.739
62.00	GMO20%gas 50%oil30%mud	0.870
769.00	CO	10.787
0.00	903'Gip	0.000

Total Length: 1141.00 ft

Total Volume: 14.912 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

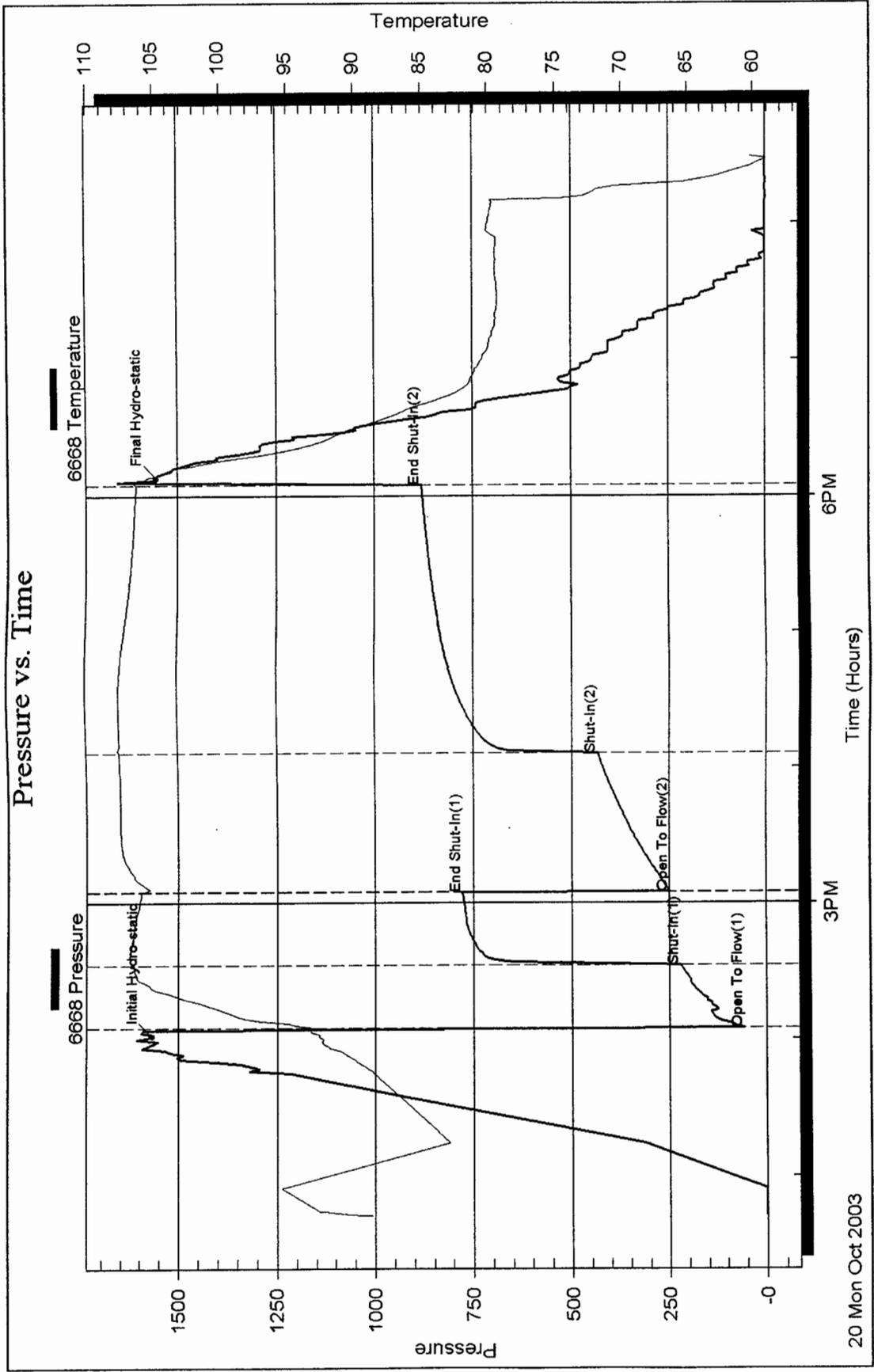
Serial #:

Laboratory Name:

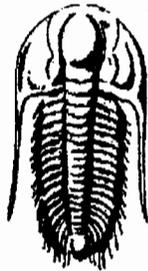
Laboratory Location:

Recovery Comments: RW.23@64F

### Pressure vs. Time



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**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Great Eastern Energy&Develop**

Box 150  
Bogue Ks 67625

ATTN: Mike Davignon

**14-7s-21w Graham Ks**

**Pozas #1**

Start Date: 2003.10.21 @ 01:31:08

End Date: 2003.10.21 @ 06:24:37

Job Ticket #: 18441      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE TESTING, INC.**

### DRILL STEM TEST REPORT

Great Eastern Energy&Develop  
 Box 150  
 Bogue Ks 67625  
 ATTN: Mike Davignon

**Pozas #1**  
**14-7s-21w Graham Ks**  
 Job Ticket: 18441      **DST#: 5**  
 Test Start: 2003.10.21 @ 01:31:08

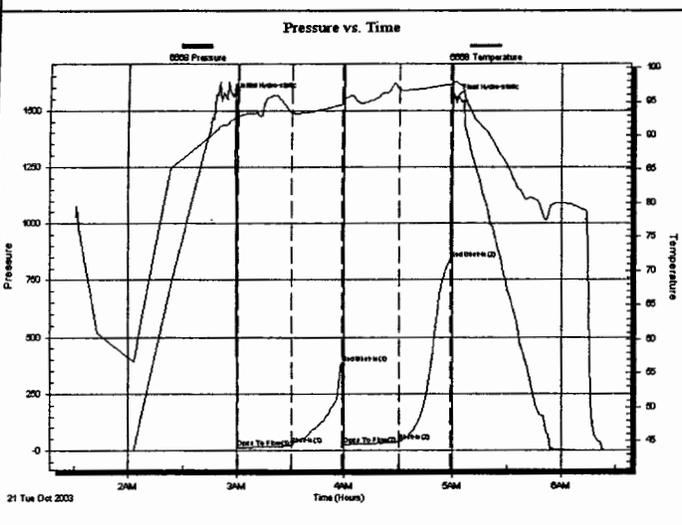
**GENERAL INFORMATION:**

Formation: **LKC D**  
 Deviated: **No Whipstock**      ft (KB)  
 Time Tool Opened: 03:00:37  
 Time Test Ended: 06:24:37  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Ray Schwager**  
 Unit No: **28**  
 Interval: **3364.00 ft (KB) To 3380.00 ft (KB) (TVD)**  
 Reference Elevations: **2081.00 ft (KB)**  
 Total Depth: **3380.00 ft (KB) (TVD)**      **2076.00 ft (CF)**  
 Hole Diameter: **7.85 inches** Hole Condition: **Fair**      **KB to GR/CF: 5.00 ft**

**Serial #: 6668**      **Inside**

Press@RunDepth: **37.89 psig @ 3365.01 ft (KB)**      Capacity: **7000.00 psig**  
 Start Date: **2003.10.21**      End Date: **2003.10.21**      Last Calib.: **2003.10.21**  
 Start Time: **01:31:08**      End Time: **06:24:37**      Time On Btm: **2003.10.21 @ 02:57:37**  
 Time Off Btm: **2003.10.21 @ 05:01:37**

**TEST COMMENT:** IFP-w k surface bl thru-out  
 FFPw k surface bl thru-out  
 Times 30-30-30-30



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1564.13	92.34	Initial Hydro-static
3	12.89	92.77	Open To Flow (1)
33	24.21	93.38	Shut-in(1)
62	385.96	94.63	End Shut-in(1)
63	25.36	95.31	Open To Flow (2)
93	37.89	96.81	Shut-in(2)
122	840.58	97.49	End Shut-in(2)
124	1555.38	97.89	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	HOCM 15%oil 85%mud	0.02
10.00	CO	0.05

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18441 **DST#: 5**

ATTN: Mike Davignon

Test Start: 2003.10.21 @ 01:31:08

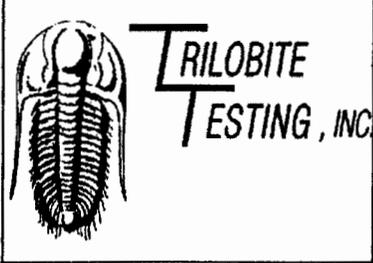
### Tool Information

Drill Pipe:	Length: 3248.00 ft	Diameter: 3.80 inches	Volume: 45.56 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 46.15 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	35000.00 lb
Depth to Top Packer:	3364.00 ft			Final	35000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	16.02 ft				
Tool Length:	37.02 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3344.00	
Shut In Tool	5.00			3349.00	
Hydraulic tool	5.00			3354.00	
Packer	5.00			3359.00	21.00 Bottom Of Top Packer
Packer	5.00			3364.00	
Stubb	1.00			3365.00	
Recorder	0.01	6668	Inside	3365.01	
Perforations	12.00			3377.01	
Recorder	0.01	11085	Outside	3377.02	
Bullhose	3.00			3380.02	16.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>37.02</b>				



**DRILL STEM TEST REPORT** **FLUID SUMMARY**

Great Eastern Energy&Develop	<b>Pozas #1</b>
Box 150	<b>14-7s-21w Graham Ks</b>
Bogue Ks 67625	Job Ticket: 18441 <b>DST#: 5</b>
ATTN: Mike Davignon	Test Start: 2003.10.21 @ 01:31:08

**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: 44.00 sec/qt	Cushion Volume:      bbl	
Water Loss: 7.18 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure:      psig	
Salinity: 2350.00 ppm		
Filter Cake: 1.00 inches		

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
5.00	HOCM 15%oil 85%mud	0.025
10.00	CO	0.049

Total Length: 15.00 ft      Total Volume: 0.074 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

DST Test Number: 5

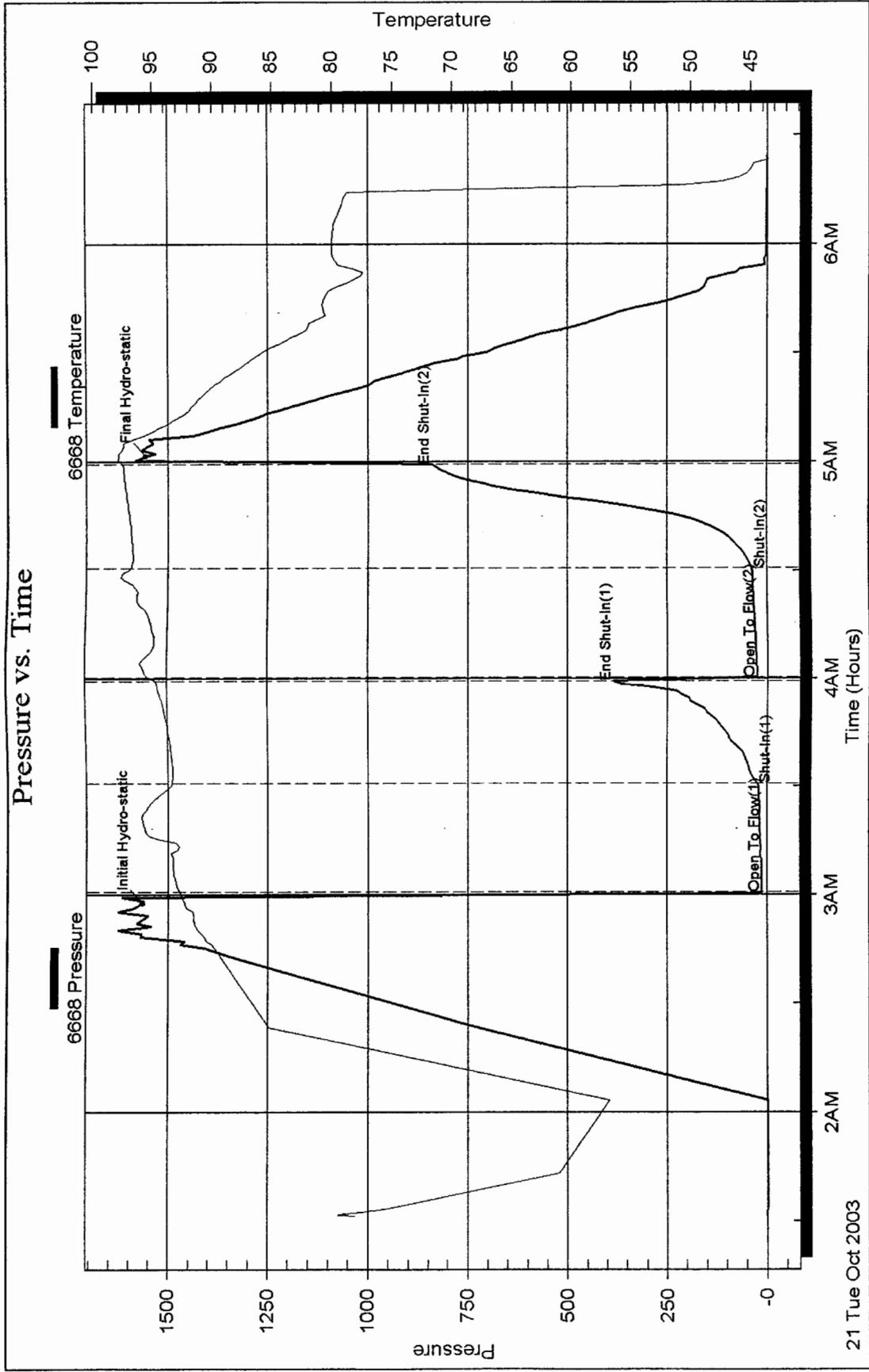
14-7s-21w Graham Ks

Great Eastern Energy&Develop

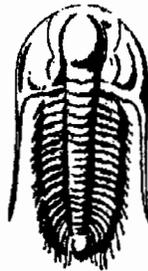
Inside

Serial #: 6668

### Pressure vs. Time



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**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Great Eastern Energy&Develop**

Box 150  
Bogue Ks 67625

ATTN: Mike Daignon

**14-7s-21w Graham Ks**

**Pozas #1**

Start Date: 2003.10.21 @ 11:50:52

End Date: 2003.10.21 @ 18:08:21

Job Ticket #: 18442                      DST #: 6

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



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Great Eastern Energy&Develop  
 Box 150  
 Bogue Ks 67625  
 ATTN: Mike Davignon

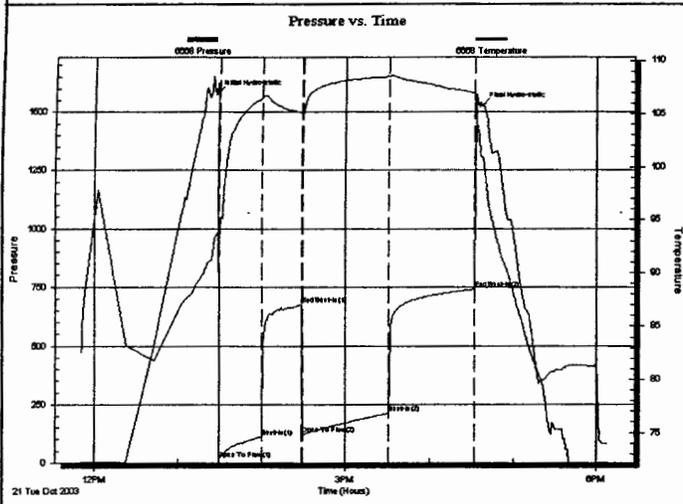
**Pozas #1**  
**14-7s-21w Graham Ks**  
 Job Ticket: 18442      **DST#: 6**  
 Test Start: 2003.10.21 @ 11:50:52

**GENERAL INFORMATION:**

Formation: **LKC F**  
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**  
 Time Tool Opened: 13:29:21 Tester: **Ray Schwager**  
 Time Test Ended: 18:08:21 Unit No: **28**  
 Interval: **3385.00 ft (KB) To 3400.00 ft (KB) (TVD)** Reference Elevations: **2081.00 ft (KB)**  
 Total Depth: **3400.00 ft (KB) (TVD)** **2076.00 ft (CF)**  
 Hole Diameter: **7.85 inches** Hole Condition: **Fair** KB to GR/CF: **5.00 ft**

**Serial #: 6668**      **Inside**  
 Press@RunDepth: **211.74 psig @ 3386.01 ft (KB)** Capacity: **7000.00 psig**  
 Start Date: **2003.10.21** End Date: **2003.10.21** Last Calib.: **2003.10.21**  
 Start Time: **11:50:52** End Time: **18:08:21** Time On Btm: **2003.10.21 @ 13:27:21**  
 Time Off Btm: **2003.10.21 @ 16:36:51**

**TEST COMMENT:** IFP-wk to fr bl 1/2" to 5" bl  
 FFP-w k bl thru-out 1/4" to 1"bl  
 Times 30-30-60-60



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1578.64	93.49	Initial Hydro-static
2	14.26	93.22	Open To Flow (1)
33	110.94	106.51	Shut-in(1)
61	673.88	105.06	End Shut-in(1)
62	120.03	104.80	Open To Flow (2)
123	211.74	108.49	Shut-in(2)
185	739.06	106.95	End Shut-in(2)
190	1528.04	100.90	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
306.00	w ater RW.2@90F	3.20
124.00	mw 15% mud 85% w ater w /show of oil	1.74
5.00	CO	0.07

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Great Eastern Energy&Develop

**Pozas #1**

Box 150  
Bogue Ks 67625

**14-7s-21w Graham Ks**

Job Ticket: 18442      **DST#: 6**

ATTN: Mike Davignon

Test Start: 2003.10.21 @ 11:50:52

### Tool Information

Drill Pipe:	Length: 3274.00 ft	Diameter: 3.80 inches	Volume: 45.93 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 46.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	3385.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.02 ft			
Tool Length:	36.02 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			3365.00	
Shut In Tool	5.00			3370.00	
Hydraulic tool	5.00			3375.00	
Packer	5.00			3380.00	21.00      Bottom Of Top Packer
Packer	5.00			3385.00	
Stubb	1.00			3386.00	
Recorder	0.01	6668	Inside	3386.01	
Perforations	11.00			3397.01	
Recorder	0.01	11085	Outside	3397.02	
Bullnose	3.00			3400.02	15.02      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>36.02</b>				



### DRILL STEM TEST REPORT

### FLUID SUMMARY

Great Eastern Energy&Develop **Pozas #1**  
 Box 150 **14-7s-21w Graham Ks**  
 Bogue Ks 67625 Job Ticket: 18442 DST#: 6  
 ATTN: Mike Davignon Test Start: 2003.10.21 @ 11:50:52

#### 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 <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3700.00 ppm			
Filter Cake: 2.00 inches			

#### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
306.00	w ater RW.2@90F	3.199
124.00	mw 15%mud85%w ater w/show of oil	1.739
5.00	CO	0.070

Total Length: 435.00 ft Total Volume: 5.008 bbl  
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:  
 Laboratory Name: Laboratory Location:  
 Recovery Comments:

Serial #: 6668

Inside

Great Eastern Energy&Develop

14-7s-21w Graham Ks

DST Test Number: 6

### Pressure vs. Time

