

Operator Name: IA Operating, Inc Lease Name: A&E Zimmerman Well #: 12-1
 Sec. 12 Twp. 14 S. R. 20 East West County: Ellis

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Geologist's Well Report, Compensated Density/Neutron Log, Micro Log, Dual Induction Log, Dual Receiver Cement Bond Log	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> Log</td> <td>Formation (Top), Depth and Datum</td> <td><input type="checkbox"/> Sample</td> </tr> <tr> <td>Name</td> <td>Top</td> <td>Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1484'</td> <td>+715</td> </tr> <tr> <td>Topeka</td> <td>3211'</td> <td>-1012</td> </tr> <tr> <td>Toronto</td> <td>3477'</td> <td>-1278</td> </tr> <tr> <td>Lansing</td> <td>3498'</td> <td>-1299</td> </tr> <tr> <td>Arbuckle</td> <td>3806'</td> <td>-1607</td> </tr> <tr> <td>Total Depth</td> <td>3900'</td> <td>-1701</td> </tr> </table>	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample	Name	Top	Datum	Anhydrite	1484'	+715	Topeka	3211'	-1012	Toronto	3477'	-1278	Lansing	3498'	-1299	Arbuckle	3806'	-1607	Total Depth	3900'	-1701
<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample																							
Name	Top	Datum																							
Anhydrite	1484'	+715																							
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Toronto	3477'	-1278																							
Lansing	3498'	-1299																							
Arbuckle	3806'	-1607																							
Total Depth	3900'	-1701																							

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	23#	219'	Common	150	3% CC, 2% gel
Production	7 7/8"	5 1/2"	15.5#	3897'	Common	150	10% salt, 2% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input checked="" type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone		QMDC	240	1/4 lb flo seal

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth
4	3814-22'	250 gal 15% MCA w/5% MAS, retreat w/250 gal w/5% MAS	
4	3822-29'		
4	3678-88', 3653-66'	500 gal 15% MCA	

TUBING RECORD: Size: <u>2 7/8"</u> Set At: <u>3827'</u> Packer At: _____		Liner Run: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>1/01/11</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls. <u>35</u>	Gas Mcf <u>0</u> Water Bbls. <u>10</u> Gas-Oil Ratio _____ Gravity _____

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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RECEIVED
 JAN 24 2011
 KCC WICHITA

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4565

Date	11-2-10	Sec.	Twp.	Range	County	State	On Location	Finish
Lease	A/E Zimmerman	Well No.	12-1	Location		Hays Golf course Rd W to 160 th 1/2 S Wint		
Contractor	Chitos Well Service			Owner		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.		
Type Job	Port Collar			T.D.		3854		
Hole Size	7 7/8			Depth		Charge To IA Operating		
Csg.	5 1/2			Depth		Street		
Tbg. Size	2 1/2			Depth		City State		
Tool				Shoe Joint		The above was done to satisfaction and supervision of owner agent or contractor.		
Cement Left in Csg.				Displace		Cement Amount Ordered 250 QMDC 1/4lb Flop 25x		
Meas-Line						2 sand used 240		

EQUIPMENT

Pumptrk	1	No.	Cementer	Brandon	Common	used 240
Bulktrk	10	No.	Driver	Neste	Poz. Mix	
Bulktrk	Pu	No.	Driver	Cisco & Dave	Gel.	

JOB SERVICES & REMARKS

Remarks:	Calcium
Rat Hole	Hulls
Mouse Hole	Salt
Centralizers	Flowseal 60#
Baskets	Kol-Seal
D/V or Port Collar 1510'	Mud CLR 48
tested tools @ 2840' to 1200psi and held; Spot sand @ 2808'	CFL-117 or CD110 CAF 38
Pull to 1510' open P.C. and mix 240sx and displaced	Sand 2
closed tool and pressured up to 1000psi; 50 Run 535 and wash clean	Handling
Thank You 2/6	Mileage

FLOAT EQUIPMENT

Guide Shoe
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down

Pumptrk Charge port collar
Mileage //

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JAN 24 2011

KCC WICHITA

Tax
Discount
Total Charge

X Signature

[Handwritten Signature]

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4333

Date 10.14.10 Sec. 12 Twp. 14 Range 20 County Ellis State KS On Location _____ Finish 1:45 A.M.

Lease AE Zimmerman Well No. 12-1 Location Wilmont & Old 40 S Golf Course Rd. 3 mi S WINTO

Contractor Martin #16 Owner _____

Type Job Production String To Quality Oilwell Cementing, Inc.
Hole Size 7 7/8 T.D. 3900 You are hereby requested to rent cementing equipment and furnish
Csg. 5/2 15.50 Depth 3898.45 cementer and helper to assist owner or contractor to do work as listed.

Tbg. Size _____ Depth _____ Charge To F.A. Operating

Tool Port Collar #59 Depth 1515 Street _____ City _____ State _____

Cement Left in Csg. 42.45 Shoe Joint 42.45 The above was done to satisfaction and supervision of owner agent or contractor.

Meas Line _____ Displace 9 1/4 B/L Cement Amount Ordered 200 com 10% Salt 2% Gel

EQUIPMENT

Pumptrk <u>9</u>	No.	Cement	Helper
Bulktrk _____	No.	Driver	Driver
Bulktrk <u>8</u>	No.	Driver	Driver

500 gal Mud Clear 48
Common 200
Poz. Mix _____
Gel. 4

JOB SERVICES & REMARKS

Remarks: _____
Rat Hole 30SK
Mouse Hole 15SK
Centralizers 2.5 8.11.14.17.62
Baskets #58
D/V of Port Collar 15.15 @ #59
5/2 set @ 3898.45 - Insert @ 3856
For Circulation Pump 500 gal Mud Clear
Plug farther mousehole Cement Casing
Plug land @ 1500ps - Release Pressure
D/V

Calcium _____
Hulls _____
Salt 17
Flowseal _____
Kol-Seal _____
Mud CLR 48 _____
CFL-117 or CD110.CAF 38 _____
Sand _____
Handling 201
Mileage _____

FLOAT EQUIPMENT

Guide Shoe AFU ~~AFU~~ Float Shoe
Centralizer 1 Basket
Baskets 1 Port Collar
AFU Inserts 1 Latchdown Ass
Float Shoe 25 Seal Searchers
Latch Down 7 Centralizers

Walt

X Signature Martin

Pumptrk Charge prod Long String
Mileage _____

Tax _____
Discount _____
Total Charge _____

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JAN 24 2011
KCC WICHITA

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4326

Date	10-8-10	Sec.	12	Twp.	14	Range	20	County	Ellis	State	KS	On Location		Finish	9:45 p.m.
Lease	NE Zimmerman			Well No.	12-1			Location	Sycamore & Calloway Rd SW 1/2 Sec 20						
Contractor	Martin #16							Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job	Surface							Charge To	T.A. Operating						
Hole Size	12 1/4			T.D.	220			Depth	219						
Csg.	8 7/8 23'			Depth											
Tbg. Size				Depth											
Tool				Depth											
Cement Left in Csg.	15'			Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.										
Meas Line				Displace	1336			Cement Amount Ordered	150 com 3 1/2 lb 2 1/2 lb						

EQUIPMENT

Pumptrk	5	No.	Cementer	Paul	Common	150
			Helper			
Bulktrk		No.	Driver	Paul	Poz. Mix	
			Driver			
Bulktrk	10	No.	Driver	COY	Gel.	3
			Driver			

JOB SERVICES & REMARKS

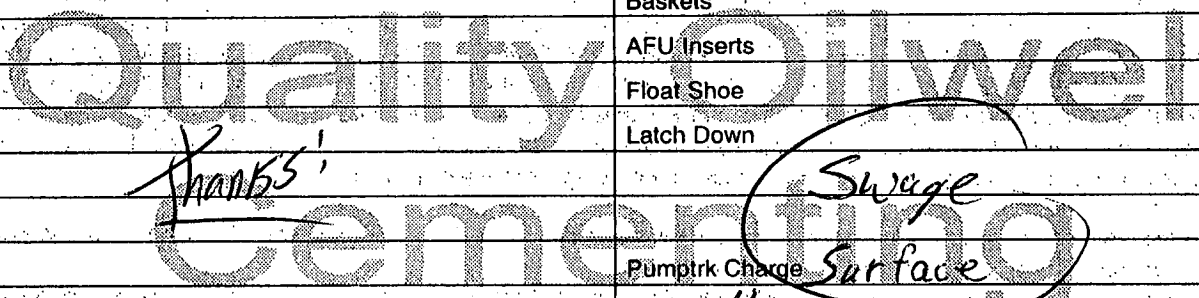
Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38

8 7/8 on bottom. Est. Circulation
Mix 150 com & Displace
Cement Circulation!

Sand	
Handling	158
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	



Thanks!

Swage
Surface

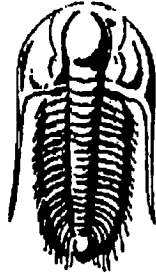
Pumptrk Charge	
Mileage	11

X Signature	Amy Leibel	Tax	
		Discount	
		Total Charge	

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JAN 24 2011

KCC WICHITA



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st North
Suite B
Wichita, KS 67205

ATTN: Randy Kilian

12-14s-20w Ellis,KS

A&E Zimmerman 12-1

Start Date: 2010.10.11 @ 10:43:05

End Date: 2010.10.11 @ 17:34:29

Job Ticket #: 040002 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

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JAN 24 2011
KCC WICHITA

Printed: 2010.10.20 @ 21:20:22 Page 1

IA Operating Inc

A&E Zimmerman 12-1

12-14s-20w Ellis,KS

DST # 1

LKC "C"

2010.10.11



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc

A&E Zimmerman 12-1

9915 W 21st North
Suite B
Wichita, KS 67205
ATTN: Randy Kilian

12-14s-20w Ellis,KS

Job Ticket: 040002 **DST#: 1**

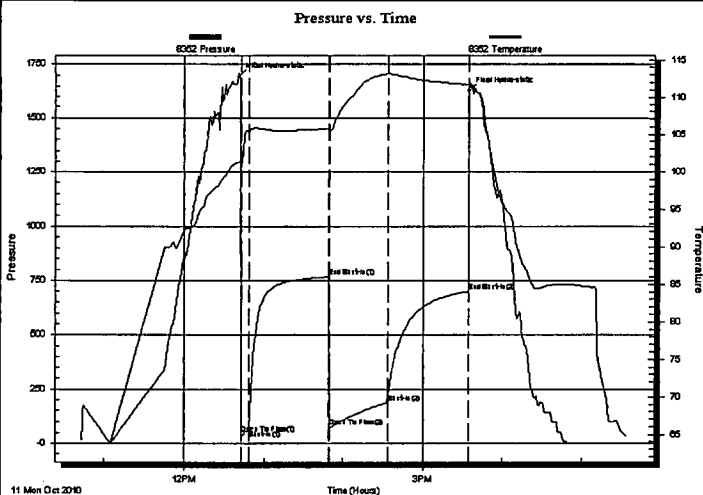
Test Start: 2010.10.11 @ 10:43:05

GENERAL INFORMATION:

Formation: LKC "C"
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:42:50
 Time Test Ended: 17:34:29
 Interval: 3487.00 ft (KB) To 3540.00 ft (KB) (TVD)
 Total Depth: 3540.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Andy Carreira
 Unit No: 31
 Reference Elevations: 2199.00 ft (KB)
 2194.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8352 **Outside**
 Press@RunDepth: 188.38 psig @ 3490.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.10.11 End Date: 2010.10.11 Last Calib.: 2010.10.11
 Start Time: 10:43:05 End Time: 17:34:29 Time On Btm: 2010.10.11 @ 12:40:50
 Time Off Btm: 2010.10.11 @ 15:34:20

TEST COMMENT: IF: BOB, 4 min
 IS: No Return
 FF: BOB, 8 min
 FS: No Return



PRESSURE SUMMARY

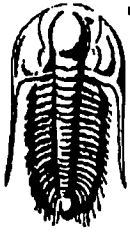
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1692.45	101.29	Initial Hydro-static
2	44.02	101.04	Open To Flow (1)
8	63.52	105.46	Shut-In(1)
69	766.51	105.75	End Shut-In(1)
69	74.08	105.46	Open To Flow (2)
113	188.38	113.15	Shut-In(2)
174	699.86	111.74	End Shut-In(2)
174	1628.24	112.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	OSGMW g=5% o=3% m=12% w=80%	3.48
117.00	OCGM g=20% o=30% m=50%	1.64
0.00	GIP=310ft	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc

A&E Zimmerman 12-1

9915 W 21st North

12-14s-20w Ellis,KS

Suite B

Job Ticket: 040002

DST#: 1

Wichita, KS 67205

Test Start: 2010.10.11 @ 10:43:05

ATTN: Randy Kilian

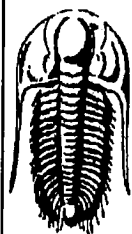
Tool Information

Drill Pipe:	Length: 3487.00 ft	Diameter: 3.80 inches	Volume: 48.91 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 55000.00 lb
			<u>Total Volume: 48.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3487.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	73.00 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			3468.00	
Shut In Tool	5.00			3473.00	
Hydraulic tool	5.00			3478.00	
Packer	5.00			3483.00	20.00 Bottom Of Top Packer
Packer	4.00			3487.00	
Stubb	1.00			3488.00	
Perforations	1.00			3489.00	
Change Over Sub	1.00			3490.00	
Recorder	0.00	8017	Inside	3490.00	
Recorder	0.00	8352	Outside	3490.00	
Drill Pipe	31.00			3521.00	
Change Over Sub	1.00			3522.00	
Perforations	15.00			3537.00	
Bullnose	3.00			3540.00	53.00 Bottom Packers & Anchor

Total Tool Length: 73.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

A&E Zimmerman 12-1

9915 W 21st North

12-14s-20w Ellis,KS

Suite B

Job Ticket: 040002

DST#: 1

Wichita, KS 67205

ATTN: Randy Kilian

Test Start: 2010.10.11 @ 10:43:05

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:

98000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
248.00	OSGMW g=5% o=3% m=12% w=80%	3.479
117.00	OCGM g=20% o=30% m=50%	1.641
0.00	GIP=310ft	0.000

Total Length: 365.00 ft

Total Volume: 5.120 bbl

Num Fluid Samples: 0

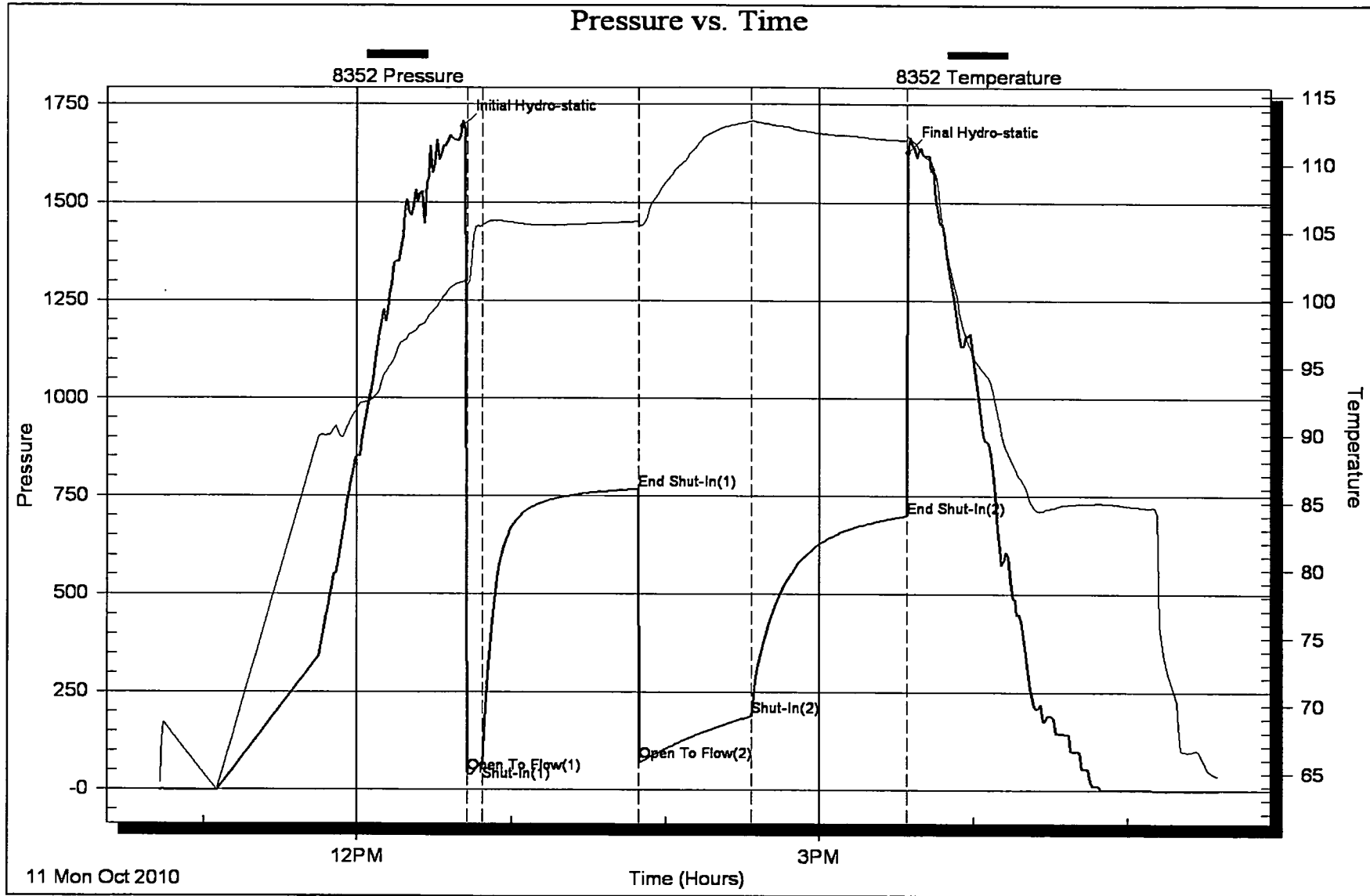
Num Gas Bombs: 0

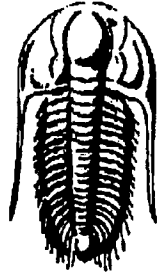
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st North
Suite B
Wichita, KS 67205

ATTN: Randy Kilian

12-14s-20w Ellis,KS

A&E Zimmerman 12-1

Start Date: 2010.10.12 @ 05:33:05

End Date: 2010.10.12 @ 12:53:29

Job Ticket #: 040003 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

IA Operating Inc

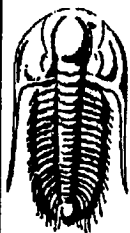
A&E Zimmerman 12-1

12-14s-20w Ellis,KS

DST # 2

LKC"1-J"

2010.10.12



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc

A&E Zimmerman 12-1

9915 W 21st North
Suite B
Wichita, KS 67205
ATTN: Randy Kilian

12-14s-20w Ellis, KS

Job Ticket: 040003

DST#: 2

Test Start: 2010.10.12 @ 05:33:05

GENERAL INFORMATION:

Formation: **LKC "I-J"**

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

Time Tool Opened: 07:22:30

Time Test Ended: 12:53:29

Test Type: **Conventional Bottom Hole**

Tester: **Andy Carreira**

Unit No: **31**

Interval: **3642.00 ft (KB) To 3695.00 ft (KB) (TVD)**

Total Depth: **3695.00 ft (KB) (TVD)**

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

Reference Elevations: **2199.00 ft (KB)**

2194.00 ft (CF)

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

Serial #: 8352

Outside

Press@RunDepth: **147.96 psig @ 3645.00 ft (KB)**

Start Date: **2010.10.12**

End Date:

2010.10.12

Start Time: **05:33:05**

End Time:

12:53:29

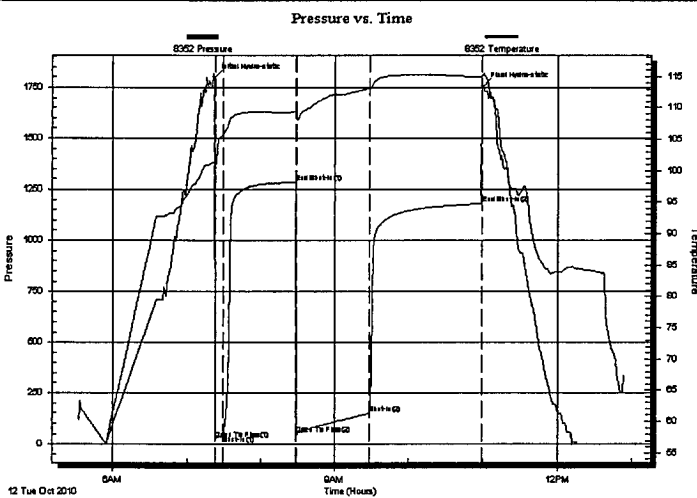
Capacity: **8000.00 psig**

Last Calib.: **2010.10.12**

Time On Btm: **2010.10.12 @ 07:21:30**

Time Off Btm: **2010.10.12 @ 10:59:29**

TEST COMMENT: IF: BOB, 1min
IS: No Return
FF: BOB, Immediately
FS: Gas to surface w hile bleeding, BOB, 9 min



PRESSURE SUMMARY

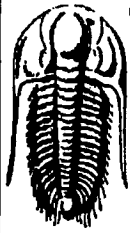
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1797.79	101.33	Initial Hydro-static
1	24.85	100.34	Open To Flow (1)
7	42.76	105.62	Shut-In(1)
67	1283.40	109.23	End Shut-In(1)
68	46.01	108.39	Open To Flow (2)
127	147.96	113.10	Shut-In(2)
217	1180.29	114.86	End Shut-In(2)
218	1757.00	115.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GMO g=30% m=15% o=55%	0.84
300.00	GO g=40% o=60%	4.21

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc

A&E Zimmerman 12-1

9915 W 21st North
Suite B
Wichita, KS 67205
ATTN: Randy Kilian

12-14s-20w Ellis,KS
Job Ticket: 040003 **DST#: 2**
Test Start: 2010.10.12 @ 05:33:05

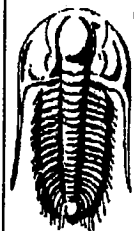
Tool Information

Drill Pipe:	Length: 3642.00 ft	Diameter: 3.80 inches	Volume: 51.09 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 48000.00 lb
			<u>Total Volume: 51.09 bbl</u>	Tool Chased: 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3642.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	73.00 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			3623.00	
Shut In Tool	5.00			3628.00	
Hydraulic tool	5.00			3633.00	
Packer	5.00			3638.00	20.00 Bottom Of Top Packer
Packer	4.00			3642.00	
Stubb	1.00			3643.00	
Perforations	1.00			3644.00	
Change Over Sub	1.00			3645.00	
Recorder	0.00	8017	Inside	3645.00	
Recorder	0.00	8352	Outside	3645.00	
Drill Pipe	31.00			3676.00	
Change Over Sub	1.00			3677.00	
Perforations	15.00			3692.00	
Bullnose	3.00			3695.00	53.00 Bottom Packers & Anchor

Total Tool Length: 73.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

A&E Zimmerman 12-1

9915 W 21st North

12-14s-20w Ellis,KS

Suite B

Job Ticket: 040003

DST#: 2

Wichita, KS 67205

ATTN: Randy Kilian

Test Start: 2010.10.12 @ 05:33:05

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:	50.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	8.79 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GMO g=30% m=15% o=55%	0.842
300.00	GO g=40% o=60%	4.208

Total Length: 360.00 ft Total Volume: 5.050 bbl

Num Fluid Samples: 0

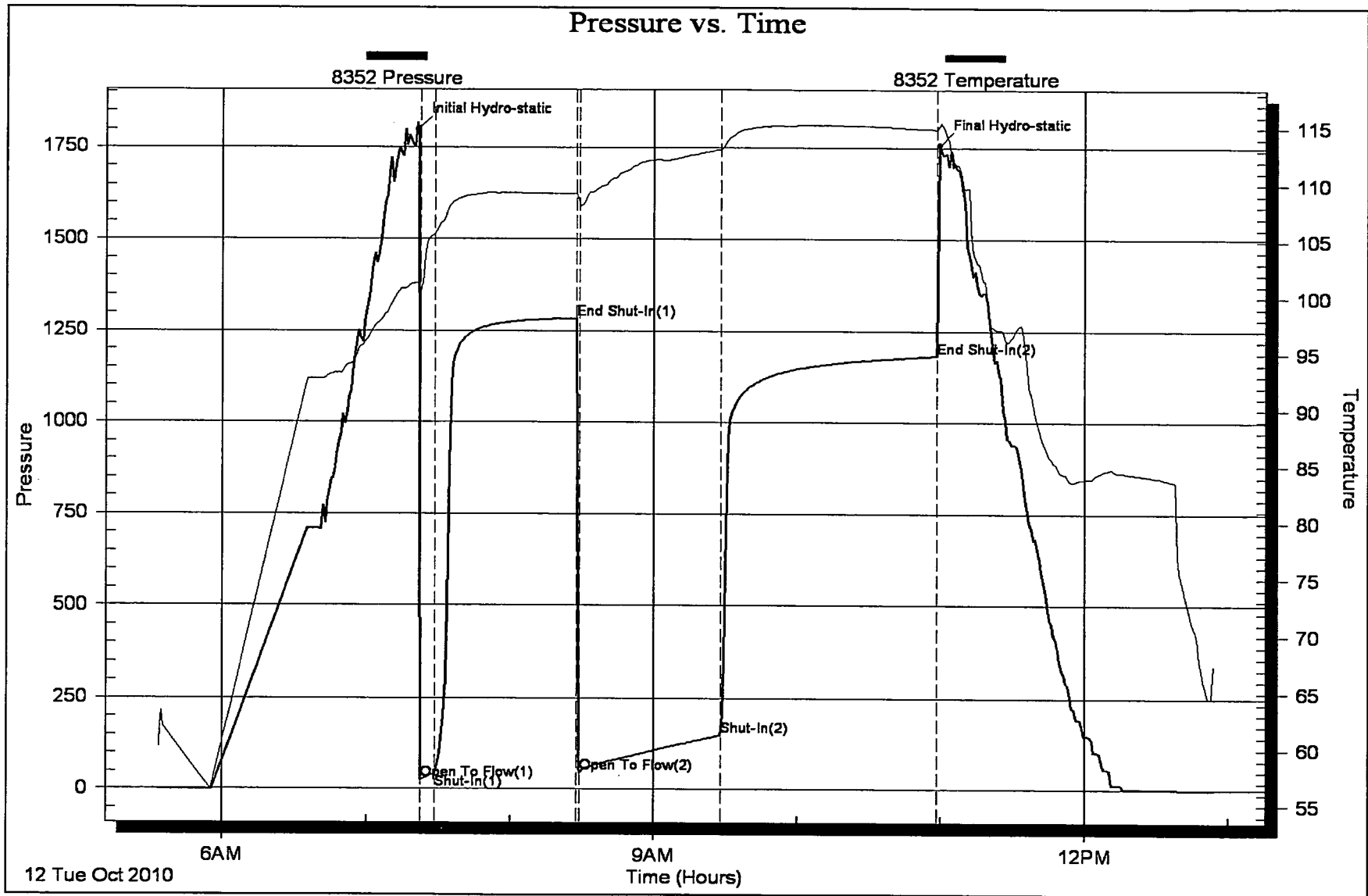
Num Gas Bombs: 0

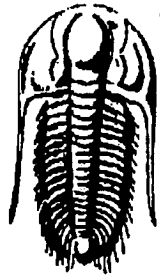
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Prepared For: **IA Operating Inc**

9915 W 21st North
Suite B
Wichita, KS 67205

ATTN: Randy Kilian

12-14s-20w Ellis,KS

A&E Zimmerman 12-1

Start Date: 2010.10.13 @ 08:30:05

End Date: 2010.10.13 @ 16:13:20

Job Ticket #: 040004 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

IA Operating Inc

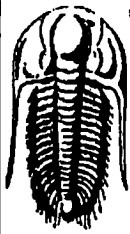
A&E Zimmerman 12-1

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DST # 3

Arbuckle

2010.10.13



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9915 W 21st North
Suite B
Wichita, KS 67205
ATTN: Randy Kilian

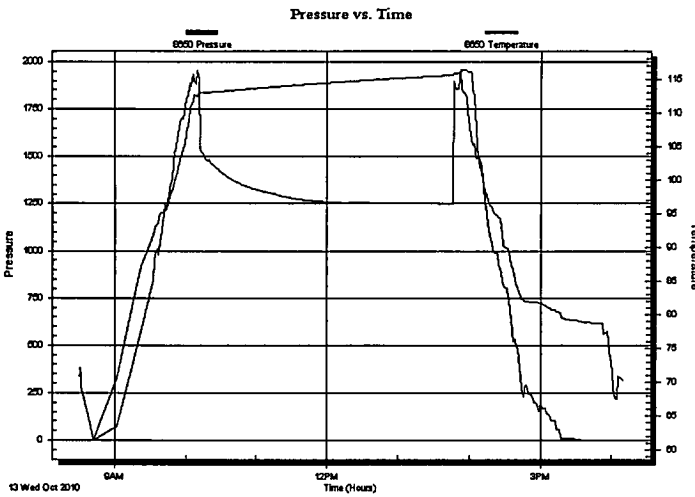
A&E Zimmerman 12-1
12-14s-20w Ellis,KS
Job Ticket: 040004 DST#: 3
Test Start: 2010.10.13 @ 08:30:05

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:11:40
Time Test Ended: 16:13:20
Interval: **3797.00 ft (KB) To 3842.00 ft (KB) (TVD)**
Total Depth: 3900.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle
Tester: Andy Carreira
Unit No: 31
Reference Elevations: 2199.00 ft (KB)
2194.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8650 Below (Straddle)
Press@RunDepth: psig @ 3873.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.10.13 End Date: 2010.10.13 Last Calib.: 2010.10.13
Start Time: 08:30:01 End Time: 16:11:00 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Fair, 7.5 inches
IS: No Return
FF: BOB, 11 min.
FS: Weak surface blow died in 50 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
62.00	OCMV o=10% m=30% w=60%	0.87
62.00	GOCM g=10% o=20% m=70%	0.87
124.00	GMO g=30% m=10% o=60%	1.74
154.00	GO g=10% o=90%	2.16
0.00	GIP=154ft	0.00

Gas Rates

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



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TOOL DIAGRAM

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12-14s-20w Ellis, KS
Job Ticket: 040004 **DST#: 3**
Test Start: 2010.10.13 @ 08:30:05

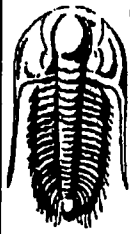
Tool Information

Drill Pipe:	Length: 3802.00 ft	Diameter: 3.80 inches	Volume: 53.33 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 55000.00 lb
			<u>Total Volume: 53.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3797.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	3842.00 ft			
Interval between Packers:	45.00 ft			
Tool Length:	127.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3778.00	
Shut In Tool	5.00			3783.00	
Hydraulic tool	5.00			3788.00	
Packer	5.00			3793.00	20.00 Bottom Of Top Packer
Packer	4.00			3797.00	
Stubb	1.00			3798.00	
Perforations	7.00			3805.00	
Change Over Sub	1.00			3806.00	
Recorder	0.00	8017	Inside	3806.00	
Recorder	0.00	8352	Outside	3806.00	
Drill Pipe	31.00			3837.00	
Change Over Sub	1.00			3838.00	
Blank Spacing	4.00			3842.00	45.00 Tool Interval
Packer	4.00			3846.00	
Stubb	1.00			3847.00	
Perforations	25.00			3872.00	
Change Over Sub	1.00			3873.00	
Recorder	0.00	8650	Below	3873.00	
Drill Pipe	31.00			3904.00	62.00 Bottom Packers & Anchor

Total Tool Length: 127.00



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Test Start: 2010.10.13 @ 08:30:05

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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	OCMW o=10% m=30% w=60%	0.870
62.00	GOCM g=10% o=20% m=70%	0.870
124.00	GMO g=30% m=10% o=60%	1.739
154.00	GO g=10% o=90%	2.160
0.00	GIP=154ft	0.000

Total Length: 402.00 ft Total Volume: 5.639 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

