

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33401
Name: Fred Ernst
Address 1: 1104 North Main Street
Address 2: _____
City: Russell State: ks Zip: 67665
Contact Person: Fred Ernst
Phone: (785) 324-0146
CONTRACTOR: License # 33493
Name: American Eagle Drilling
Wellsite Geologist: Clayton Erickson
Purchaser: _____

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Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD SIOW
 Gas D&A ENHR SIGW
 OG GSW Temp. Abd.
 CM (Coal Bed Methane)
 Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____
Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth _____
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 163-23972-00-00
Spot Description: Witt # 1
NW_NW_SE_NW Sec. 3 Twp. 6 S. R. 20 East West
1,528 Feet from North / South Line of Section
1,458 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Rooks
Lease Name: Witt Well #: 1
Field Name: UnNamed
Producing Formation: Lansing
Elevation: Ground: 2143 Kelly Bushing: 2148
Total Depth: 3685 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 263 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: _____ Feet
If Alternate II completion, cement circulated from: _____
feet depth to: _____ w/ _____ sx cm.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls
Dewatering method used: Steel Tank Pits were used
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License #: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Permit #: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: [Signature]
Title: Operator Date: 10-28-2011

KCC Office Use ONLY

Letter of Confidentiality Received
Date: _____
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: [Signature] Date: 5/22/12

Operator Name: Fred Ernst Lease Name: Witt Well #: 1
 Sec. 3 Twp. 6 S. R. 20 East West County: Rooks

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: Dual Induction, Compensated Density Neutron, Borehole Compensated Sonic	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:70%;">Name</td> <td style="width:15%;">Top</td> <td style="width:15%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>1746</td> <td>1776</td> </tr> <tr> <td>Topeka</td> <td>3151</td> <td></td> </tr> <tr> <td>Heebner</td> <td>3350</td> <td></td> </tr> <tr> <td>Toronto</td> <td>3373</td> <td></td> </tr> <tr> <td>Lansing</td> <td>3389</td> <td>3586</td> </tr> <tr> <td>Reagan Sand</td> <td>3633</td> <td></td> </tr> <tr> <td>Granite</td> <td>3695</td> <td>TD</td> </tr> </table>	Name	Top	Datum	Anhydrite	1746	1776	Topeka	3151		Heebner	3350		Toronto	3373		Lansing	3389	3586	Reagan Sand	3633		Granite	3695	TD
Name	Top	Datum																							
Anhydrite	1746	1776																							
Topeka	3151																								
Heebner	3350																								
Toronto	3373																								
Lansing	3389	3586																							
Reagan Sand	3633																								
Granite	3695	TD																							

CASING RECORD <input 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 Pipe	12 1/4	8 5/8	20	183 263	Common	160	3%cc 2% gel

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

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. _____		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbbs.	Gas Mcf	Water Bbbs. 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) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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QUALITY OILWELL CEMENTING, INC.

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

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

No. 5141
8-18-11

Date: 8-17-11	Sec. 3	Twp. 6	Range 20	County Rooks	State Ks	On Location	Finish 12:15 AM
Lease W. H. H.	Well No. 1	Location Stockton, Ks - 11N to Cozy Cove Rd					
Contractor American Eagle Rig #3	Owner 18 W, 12 S, E + S Into			To Quality Oilwell Cementing, Inc.			
Type Job Plug	You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Hole Size: 7 7/8"	T.D. 3685'	Charge To Ernst oil					
Csg. Depth	Street						
Tbg. Size 4 1/2" D.P.	Depth 3656'	City State					
Tool Depth	The above was done to satisfaction and supervision of owner agent or contractor.						
Cement Left in Csg.	Shoe Joint	Cement Amount Ordered 230 Sx 60/40 4% Grd 4 # 1/2"					
Meas Line	Displace 1120/mhd	see					

EQUIPMENT			
Pumptrk 1	No.	Cementer Helper	Cisco
Bulktrk 10	No.	Driver	Cory
Bulktrk p.u.	No.	Driver	Rick

Common	138
Poz. Mix	92
Gel.	8
Calcium	
Hulls	
Salt	
Flowseal	50 #
Köl-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	238
Mileage	

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

3656' - 2 S Sx

1770' - 2 S Sx

975' - 10 Sx

300' - 40 Sx

40' - 10 Sx w/ plug

Rub hole 30 Sx

Cement did Circulate

Bradford Parker

FLOAT EQUIPMENT	
Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	plug
Mileage	68
Tax	
Discount	
Total Charge	

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QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025

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

No. 5267

Cell 785-324-1041

Date	8/12/11	Sec.	3	Twp.	6	Range	20	County	Rooks	State	KS	On Location	Finish	3:00 AM
Lease	Witt		Well No.	1		Location	Logan 55.1E, 1 1/2 S, E + S into							
Contractor	American Eagle Rig #3						Owner	To Quality Oilwell Cementing, Inc.						
Type Job	Surface						You are hereby requested to rent cementing equipment and furnish cement and helper to assist owner or contractor to do work as listed.							
Hole Size	12 1/4"		T.D.	263'		Charge To	Ernst Oil							
Csg.	8 3/8"		Depth	263'		Street								
Tbg. Size			Depth			City	State							
Tool			Depth			The above was done to satisfaction and supervision of owner agent or contractor.								
Cement Left in Csg.	15'		Shoe Joint			Cement Amount Ordered	160 sk Com 3 1/2 cc 2 1/2 gal							
Meas Line			Displace	16 Bbls.										

EQUIPMENT

Pumptrk	9	No.	Cementer	Paul	Common	160
			Helper			
Bulktrk	8	No.	Driver	Matt	Poz. Mix	
			Driver			
Bulktrk	PV	No.	Driver	Cory	Gel	3
			Driver			

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Koi-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Est Circ	Sand
Mix 160 sk	Handling 160
Displace	Mileage
Cement Circulated	

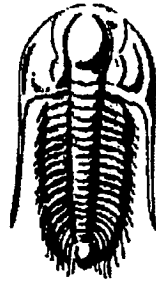
FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Thank You!

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Pumptrk Charge	Surface	Tax	
Mileage	68	Discount	
Signature <i>Buachud Baker</i>		Total Charge	



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ernst Oil**

1104 N Main St.
Russell, KS 67655+1540

ATTN: Clayton Erickson

3-6s-20w Rooks,KS

Witt #1

Start Date: 2011.08.15 @ 16:38:05

End Date: 2011.08.15 @ 21:48:59

Job Ticket #: 44230 DST #: 1

RECEIVED
MAY 18 2012
KCC WICHITA

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

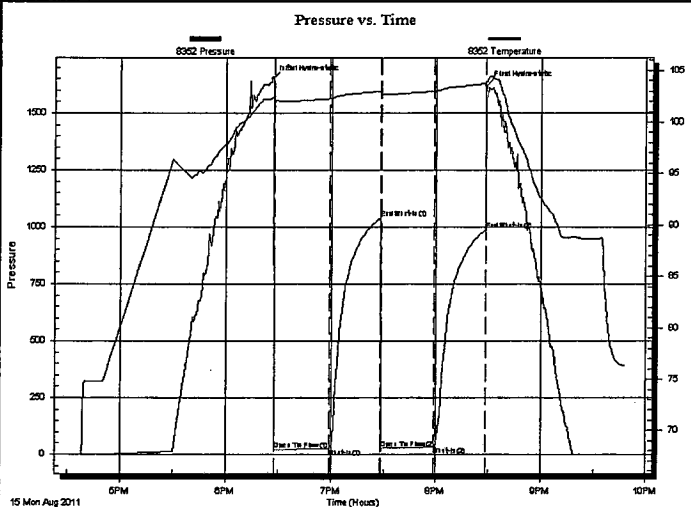
Witt #1
3-6s-20w Rooks,KS
Job Ticket: 44230 DST#: 1
Test Start: 2011.08.15 @ 16:38:05

GENERAL INFORMATION:

Formation: **LKC"C-F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:27:50
 Time Test Ended: 21:48:59
 Interval: **3400.00 ft (KB) To 3468.00 ft (KB) (TVD)**
 Total Depth: 3468.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole
 Tester: Andy Carreira
 Unit No: 39
 Reference Elevations: 2148.00 ft (KB)
 2143.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8352 Outside
 Press@RunDepth: 33.19 psig @ 3407.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.08.15 End Date: 2011.08.15 Last Calib.: 2011.08.15
 Start Time: 16:38:05 End Time: 21:48:59 Time On Btm: 2011.08.15 @ 18:26:10
 Time Off Btm: 2011.08.15 @ 20:28:40

TEST COMMENT: IF:(30min) Weak surface blow died in 27 min.
 IS:(30min) No Return
 FF:(30min) No Blow
 FS:(30min) No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1647.28	102.32	Initial Hydro-static
2	19.84	101.80	Open To Flow (1)
33	26.86	102.26	Shut-In(1)
63	1041.11	102.97	End Shut-In(1)
63	27.73	102.63	Open To Flow (2)
93	33.19	102.97	Shut-In(2)
123	988.32	103.74	End Shut-In(2)
123	1619.16	103.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

Witt #1
3-6s-20w Rooks, KS
Job Ticket: 44230 DST#: 1
Test Start: 2011.08.15 @ 16:38:05

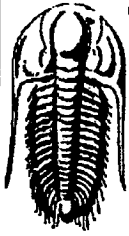
Tool Information

Drill Pipe:	Length: 3380.00 ft	Diameter: 3.80 inches	Volume: 47.41 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 47.41 bbl</u>	Tool Chased 4.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3400.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	96.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3373.00	
Shut In Tool	5.00			3378.00	
Hydraulic tool	5.00			3383.00	
Jars	5.00			3388.00	
Safety Joint	3.00			3391.00	
Packer	5.00			3396.00	28.00 Bottom Of Top Packer
Packer	4.00			3400.00	
Stubb	1.00			3401.00	
Perforations	5.00			3406.00	
Change Over Sub	1.00			3407.00	
Recorder	0.00	8017	Inside	3407.00	
Recorder	0.00	8352	Outside	3407.00	
Drill Pipe	31.00			3438.00	
Change Over Sub	1.00			3439.00	
Perforations	26.00			3465.00	
Bullnose	3.00			3468.00	68.00 Bottom Packers & Anchor
Total Tool Length:	96.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

Witt #1
3-6s-20w Rooks, KS
Job Ticket: 44230 DST#: 1
Test Start: 2011.08.15 @ 16:38:05

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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.96 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

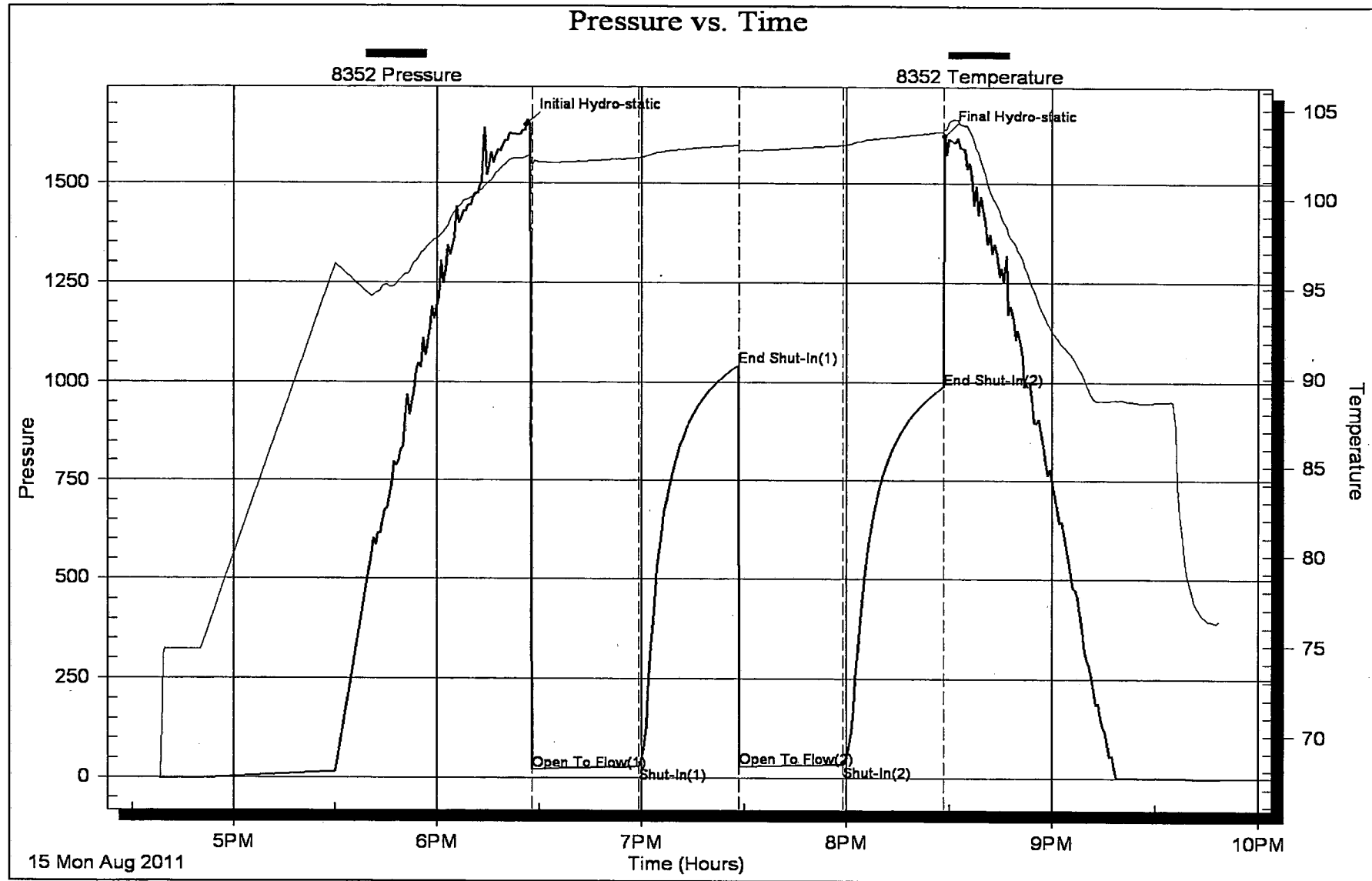
Num Gas Bombs: 0

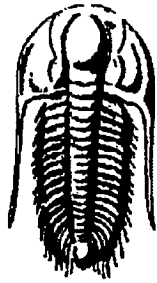
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ernst Oil**

1104 N Main St.
Russell, KS 67655+1540

ATTN: Clayton Erickson

3-6s-20w Rooks,KS

Witt #1

Start Date: 2011.08.16 @ 09:13:05

End Date: 2011.08.16 @ 13:51:20

Job Ticket #: 44231 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

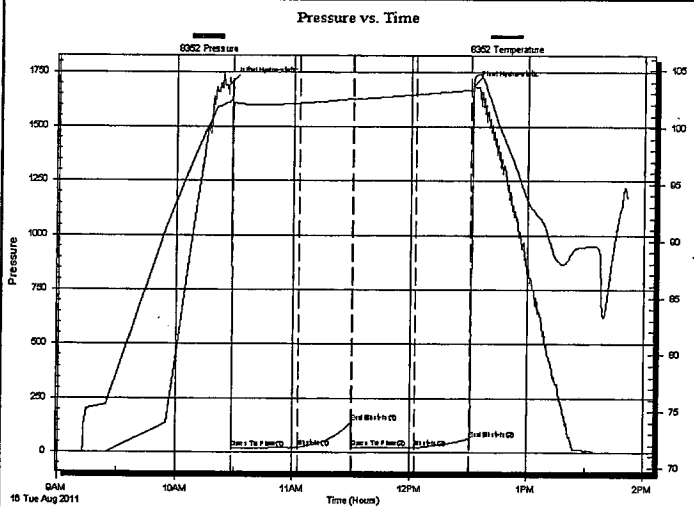
Witt #1
3-6s-20w Rooks,KS
Job Ticket: 44231 **DST#: 2**
Test Start: 2011.08.16 @ 09:13:05

GENERAL INFORMATION:

Formation: **LKC"H,I,J"**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 10:28:40
Time Test Ended: 13:51:20
Test Type: **Conventional Bottom Hole**
Tester: **Andy Carreira**
Unit No: **39**
Interval: **3488.00 ft (KB) To 3553.00 ft (KB) (TVD)**
Reference Elevations: **2148.00 ft (KB)**
2143.00 ft (CF)
Total Depth: **3553.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
KB to GR/CF: **5.00 ft**

Serial #: 8352 **Outside**
Press@RunDepth: **22.91 psig @ 3495.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2011.08.16** End Date: **2011.08.16** Last Calib.: **2011.08.16**
Start Time: **09:13:05** End Time: **13:51:20** Time On Btrr: **2011.08.16 @ 10:28:20**
Time Off Btrr: **2011.08.16 @ 12:32:00**

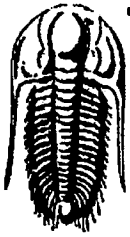
TEST COMMENT: IF:(30min) Weak surface blow died in 5 min.
IS:(30min) No Return
FF:(30min) No Blow
FS:(30min) No Return



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1701.14	102.52	Initial Hydro-static
1	18.69	101.49	Open To Flow (1)
35	22.96	102.12	Shut-In(1)
62	140.34	102.53	End Shut-In(1)
62	21.20	102.44	Open To Flow (2)
95	22.91	102.91	Shut-In(2)
123	65.28	103.32	End Shut-In(2)
124	1689.58	104.15	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	OSM	0.07

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

Witt #1
3-6s-20w Rooks,KS
Job Ticket: 44231 **DST#: 2**
Test Start: 2011.08.16 @ 09:13:05

Tool Information

Drill Pipe:	Length: 3475.00 ft	Diameter: 3.80 inches	Volume: 48.75 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 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: 48.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 37000.00 lb
Depth to Top Packer:	3488.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	93.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3461.00	
Shut In Tool	5.00			3466.00	
Hydraulic tool	5.00			3471.00	
Jars	5.00			3476.00	
Safety Joint	3.00			3479.00	
Packer	5.00			3484.00	28.00 Bottom Of Top Packer
Packer	4.00			3488.00	
Stubb	1.00			3489.00	
Perforations	5.00			3494.00	
Change Over Sub	1.00			3495.00	
Recorder	0.00	8017	Inside	3495.00	
Recorder	0.00	8352	Outside	3495.00	
Drill Pipe	32.00			3527.00	
Change Over Sub	1.00			3528.00	
Perforations	22.00			3550.00	
Bullnose	3.00			3553.00	65.00 Bottom Packers & Anchor
Total Tool Length:	93.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

Witt #1
3-6s-20w Rooks,KS
Job Ticket: 44231 DST#: 2
Test Start: 2011.08.16 @ 09:13:05

Mud and Cushion Information

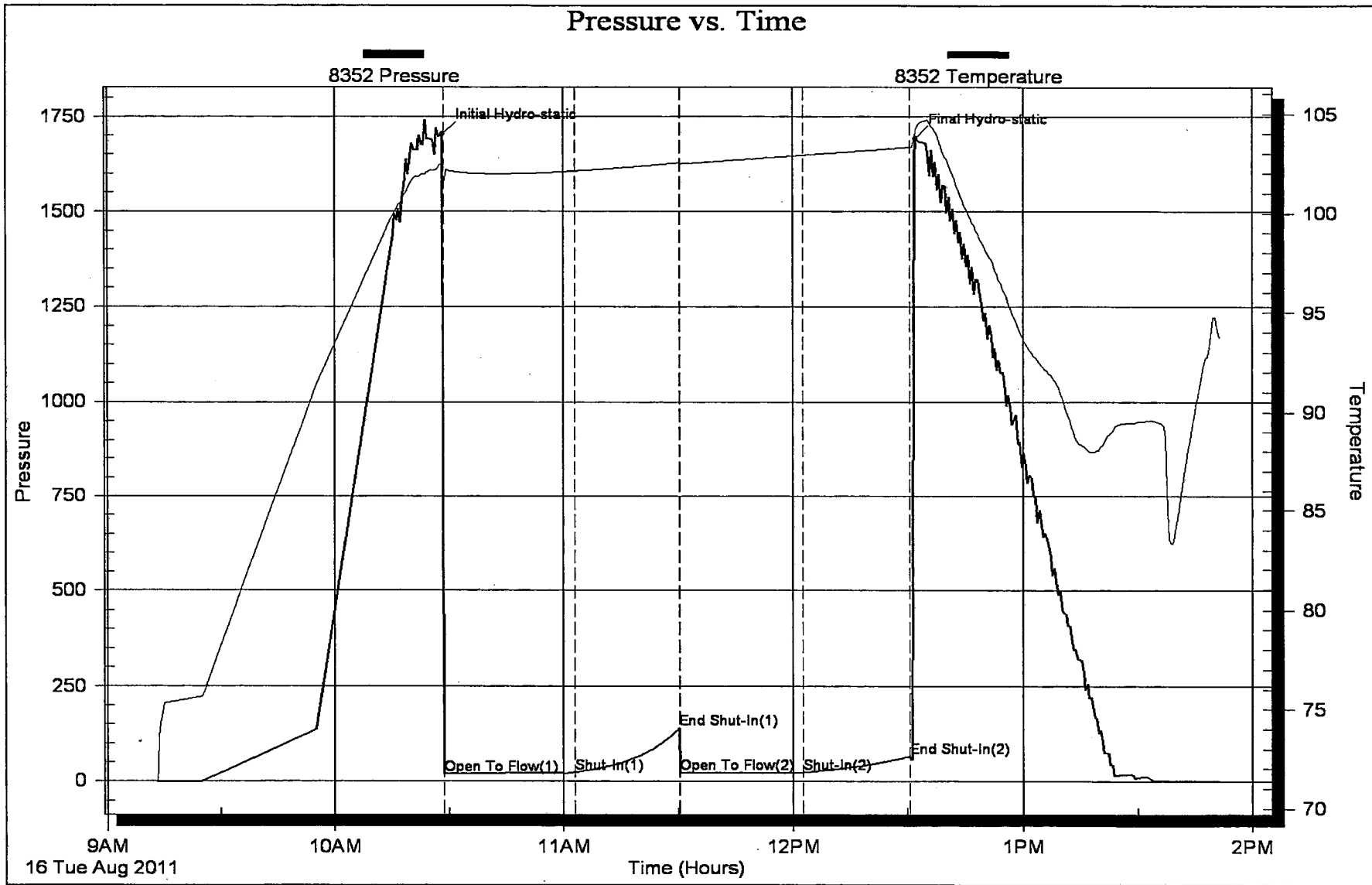
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.95 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 800.00 ppm			
Filter Cake: inches			

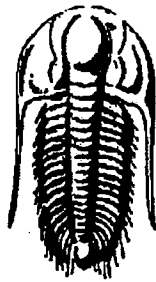
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM	0.070

Total Length: 5.00 ft Total Volume: 0.070 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: **Ernst Oil**

1104 N Main St.
Russell, KS 67655+1540

ATTN: Clayton Erickson

3-6s-20w Rooks,KS

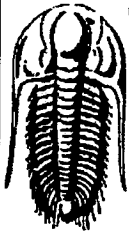
Witt #1

Start Date: 2011.08.16 @ 23:54:05

End Date: 2011.08.17 @ 07:13:20

Job Ticket #: 44232 DST #: 3

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

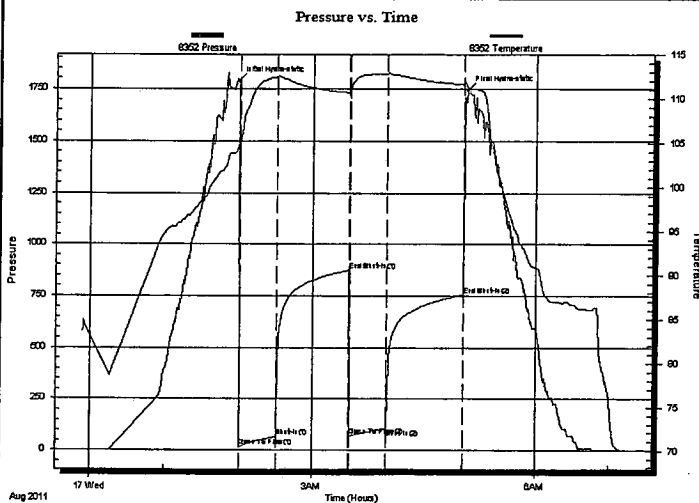
Witt #1
3-6s-20w Rooks,KS
Job Ticket: 44232 **DST#: 3**
Test Start: 2011.08.16 @ 23:54:05

GENERAL INFORMATION:

Formation: **Reagan Sand**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 02:00:10
Time Test Ended: 07:13:20
Test Type: **Conventional Bottom Hole**
Tester: **Andy Carreira**
Unit No: **39**
Interval: **3618.00 ft (KB) To 3628.00 ft (KB) (TVD)**
Reference Elevations: **2148.00 ft (KB)**
Total Depth: **3628.00 ft (KB) (TVD)**
2143.00 ft (CF)
Hole Diameter: **7.88 inches** Hole Condition: **Poor**
KB to GR/CF: **5.00 ft**

Serial #: 8352 **Outside**
Press@RunDepth: **105.83 psig @ 3619.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2011.08.16** End Date: **2011.08.17** Last Calib.: **2011.08.17**
Start Time: **23:54:05** End Time: **07:13:20** Time On Btm: **2011.08.17 @ 01:59:00**
Time Off Btm: **2011.08.17 @ 05:03:59**

TEST COMMENT: IF:(30min) BOB, 26 min.
IS:(60min) No Return
FF:(30min) Built to 8 inches
FS:(60min) No Return



PRESSURE SUMMARY

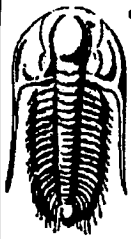
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1787.77	104.64	Initial Hydro-static
2	20.92	104.23	Open To Flow (1)
32	68.50	112.40	Shut-In(1)
91	873.81	110.67	End Shut-In(1)
91	70.44	110.13	Open To Flow (2)
121	105.83	112.80	Shut-In(2)
182	756.26	111.59	End Shut-In(2)
185	1745.31	111.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	MW	2.52
5.00	OCW	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

Witt #1
3-6s-20w Rooks, KS
Job Ticket: 44232 DST#: 3
Test Start: 2011.08.16 @ 23:54:05

Tool Information

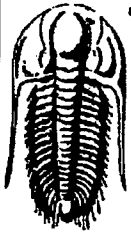
Drill Pipe:	Length: 3600.00 ft	Diameter: 3.80 inches	Volume: 50.50 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 50.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3618.00 ft			Final 39500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3591.00	
Shut In Tool	5.00			3596.00	
Hydraulic tool	5.00			3601.00	
Jars	5.00			3606.00	
Safety Joint	3.00			3609.00	
Packer	5.00			3614.00	28.00 Bottom Of Top Packer
Packer	4.00			3618.00	
Stubb	1.00			3619.00	
Recorder	0.00	8017	Inside	3619.00	
Recorder	0.00	8352	Outside	3619.00	
Perforations	6.00			3625.00	
Bullnose	3.00			3628.00	10.00 Bottom Packers & Anchor

Total Tool Length: 38.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ernst Oil
1104 N Main St.
Russell, KS 67655+1540
ATTN: Clayton Erickson

Witt #1
3-6s-20w Rooks, KS
Job Ticket: 44232 DST#: 3
Test Start: 2011.08.16 @ 23:54:05

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:	30000 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	MW	2.525
5.00	OCW	0.070

Total Length: 185.00ft Total Volume: 2.595 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Resistivity= .19 @ 73 = 30000ppm

