

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
October 2008
Form Must Be Typed

1/7/13

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

KCC

OPERATOR: License # 4767
Name: Ritchie Exploration, Inc. **JAN 07 2011**
Address 1: P.O. Box 783188 **CONFIDENTIAL**
Address 2: _____
City: Wichita State: KS Zip: 67278 + 3118
Contact Person: Peter Fiorini
Phone: (316) 691-9500
CONTRACTOR: License # 30606 **RECEIVED**
Name: Murfin Drilling Co., Inc. **JAN 10 2011**
Wellsite Geologist: Pat Deenihan
Purchaser: _____ **KCC WICHITA**

Designate Type of Completion:
 New Well _____ Re-Entry _____ Workover
_____ Oil _____ SWD _____ SLOW
_____ Gas _____ ENHR _____ SIGW
_____ CM (Coal Bed Methane) _____ Temp. Abd.
 Dry _____ Other _____
(Core, WSW, Expl., Cathodic, 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
_____ Plug Back: _____ Plug Back Total Depth
_____ Commingled _____ Docket No.: _____
_____ Dual Completion _____ Docket No.: _____
_____ Other (SWD or Enhr.?) _____ Docket No.: _____
9/25/10 10/5/10 10/5/10
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 063-21869-0000
Spot Description: 5' N & 160' W
C SE - Se - SE Sec. 29 Twp. 13 S. R. 31 East West
335 Feet from North / South Line of Section
490 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Gove
Lease Name: Hess 29D Well #: 1
Field Name: _____
Producing Formation: _____
Elevation: Ground: 2945 Kelly Bushing: 2955
Total Depth: 4690 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 222 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 cmt.

Drilling Fluid Management Plan **PANJ @ 1-19-11**
(Data must be collected from the Reserve Pit)
Chloride content: 13000 ppm Fluid volume: 1000 bbls
Dewatering method used: evaporation
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License No.: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Docket No.: _____

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.

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: _____
Title: Development/Production Geologist Date: 1/7/11
Subscribed and sworn to before me this 7th day of January,
20 11.
Notary Public: Debra K Phillips
Date Commission Expires: 5-4-11

KCC Office Use ONLY
 Letter of Confidentiality Received **1/7/11 - 1/7/13**
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
_____ UIC Distribution

DEBRA K. PHILLIPS
Notary Public - State of Kansas
My Appt Expires 5-4-11

Operator Name: Ritchie Exploration, Inc. Lease Name: Hess 29D Well #: 1

Sec. 29 Twp. 13 S. R. 31 East West County: Gove

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 copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken Yes No
(Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
(Submit Copy)

List All E. Logs Run:

**Dual Induction Log
Compensated Density/Neutron Log**

Log Formation (Top), Depth and Datum Sample
Name Top Datum

SEE ATTACHED

**KCC
JAN 07 2011
CONFIDENTIAL**

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	222	common	175	3%cc, 2%gel

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
____ Perforate				
____ Protect Casing				
____ Plug Back TD				
____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth

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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 Bbls.	Gas Mcf	Water Bbls. Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, Submit ACO-18.)	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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KCC
JAN 07 2011
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#1 Hess 29D
335' FSL & 490' FEL
5' N & 160' W of C SE SE SE Section 29-13S-31W
Gove County, Kansas
API# 15-063-21869-0000
Elevation: 2945' GL: 2955' KB

<u>Sample Tops</u>		<u>Ref.</u>	<u>Well</u>
Anhydrite	2434'	+521	-5
B/Anhydrite	2452'	+503	+3
Heebner	3950'	-995	-6
Lansing	4000'	-1045	-9
Lansing "C"	4029'	-1074	-5
Lansing "D"	4044'	-1089	-2
Lansing "E"	4075'	-1120	-4
Lansing "F"	4085'	-1130	-3
Lansing "G"	4099'	-1144	-2
Muncie	4154'	-1199	-16
Lansing "H"	4170'	-1215	-18
Lansing "I"	4201'	-1246	-17
Lansing "J"	4222'	-1267	-16
Lansing "K"	4248'	-1293	-14
Hush.	4274'	-1319	-12
Lansing "L"	4289'	-1334	-17
BKC	4314'	-1359	-16
Altamont	4362'	-1407	-16
Pawnee	4441'	-1486	-19
Myric Station	4473'	-1518	-16
Fort Scott	4493'	-1539	-20
Cherokee Shale	4518'	-1563	-16
Johnson	4565'	-1610	-21
Morrow Sand	4596'	-1641	-18
Mississippian	4624'	-1669	-25
RTD	4690'	-1735	

RECEIVED
JAN 10 2011
KCC WICHITA

ALLIED CEMENTING CO., LLC. 035652

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Oakley
9-26-10

DATE <u>9-25-10</u>	SEC <u>29</u>	TWP <u>13s</u>	RANGE <u>31W</u>	CALLED OUT	ON LOCATION	JOB START <u>1:00 AM</u>	JOB FINISH <u>11:30 AM</u>
LEASE <u>Hass 290</u>	WELL # <u>1</u>	LOCATION <u>Oakley 11S 3E</u>			COUNTY <u>Gove</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>			<u>5S 1E 10</u>				

CONTRACTOR McFarlin Drilling Rig 14 OWNER same
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4 T.D. 225'
 CASING SIZE 8 3/8 DEPTH 225'
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. 15'
 PERFS. _____
 DISPLACEMENT 13.33 BBL

EQUIPMENT

PUMP TRUCK CEMENTER <u>Andrew</u>
<u>423-281</u> HELPER <u>Larene</u>
BULK TRUCK
<u>396</u> DRIVER <u>Wil</u>
BULK TRUCK
_____ DRIVER _____

REMARKS:

Cement did circulate

Thank you

CHARGE TO: Ritchie Exploration
 STREET _____
 CITY _____ STATE _____ ZIP _____

CEMENT

AMOUNT ORDERED <u>125 sks com</u>	
<u>39cc 249cc</u>	
COMMON <u>125 sks</u> @ <u>15.45</u>	<u>203.25</u>
POZMIX _____ @ _____	
GEL <u>3 sks</u> @ <u>20.80</u>	<u>62.40</u>
CHLORIDE <u>6 sks</u> @ <u>58.20</u>	<u>349.20</u>
ASC _____ @ _____	
HANDLING <u>184 sks</u> @ <u>2.40</u>	<u>441.60</u>
MILEAGE <u>10^{1/2} sk/mile</u>	<u>368.00</u>
TOTAL	<u>3924.95</u>

SERVICE

DEPTH OF JOB <u>225'</u>	
PUMP TRUCK CHARGE <u>1218.00</u>	
EXTRA FOOTAGE _____ @ _____	
MILEAGE <u>20 miles</u> @ <u>7.00</u>	<u>140.00</u>
MANIFOLD _____ @ _____	
TOTAL	<u>1158.00</u>

PLUG & FLOAT EQUIPMENT

RECEIVED _____ @ _____
 _____ @ _____
JAN 10 2011 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____

KCC WICHITA

TOTAL _____

SALES TAX (If Any) _____
 TOTAL CHARGES _____
 DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME Corey Unruh
 SIGNATURE Corey Unruh

KCC
JAN 07 2011
CONFIDENTIAL

[Handwritten Signature]

ALLIED CEMENTING CO., LLC. 039024

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Oakley KS

DATE 10-5-10	SEC. 29	TWP. 13	RANGE 31	CALLED OUT	ON LOCATION 11:00am	JOB START 1:30pm	JOB FINISH 2:00pm
LEASE Hess 29.0	WELL# #1	LOCATION Oakley 125-36-45			COUNTY Gove	STATE KS	
OLD OR NEW (Circle one)							

CONTRACTOR Murphy #21

TYPE OF JOB PTA

HOLE SIZE 27/8 T.D. 4690

CASING SIZE _____ DEPTH _____

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2 DEPTH 2445

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT _____

OWNER _____

CEMENT

AMOUNT ORDERED 220 SKS 60/40

49.5 SKS 11/4 Closeal

COMMON	<u>132</u>	@ <u>15.45</u>	<u>2039.40</u>
POZMIX	<u>88</u>	@ <u>8.00</u>	<u>704.00</u>
GEL	<u>8</u>	@ <u>20.80</u>	<u>166.40</u>
CHLORIDE		@	
ASC		@	
		@	
<u>Closeal</u>	<u>55</u>	@ <u>2.50</u>	<u>137.50</u>
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>230</u>	@ <u>2.40</u>	<u>552.00</u>
MILEAGE	<u>110 x 9.25 mi/c</u>		<u>460.00</u>
TOTAL			<u>4059.30</u>

EQUIPMENT

PUMP TRUCK CEMENTER Fuzzy

431 HELPER Kelly

BULK TRUCK

296 DRIVER Brandon

BULK TRUCK

_____ DRIVER _____

REMARKS:

25 SKS @ 2445'

100 SKS @ 1525'

40 SKS @ 272'

10 SKS @ 40' w/ plus

30 SKS RT

15 SKS MH

Job complete @ 2:00pm

Thanks Fuzzy crew

CHARGE TO: Richie Exploration

STREET _____

CITY _____ STATE _____ ZIP _____

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME COREG Unruh

SIGNATURE Coreg Unruh

SERVICE

DEPTH OF JOB 2445'

PUMP TRUCK CHARGE 1017.00

EXTRA FOOTAGE @ _____

MILEAGE 20 @ 7.00 140.00

MANIFOLD @ _____

@ _____

@ _____

TOTAL 1157.00

PLUG & FLOAT EQUIPMENT

1.8516 plug @ 40.00

RECEIVED @ _____

JAN 10 2011 @ _____

KCC WICHITA @ _____

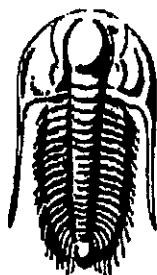
TOTAL 40.00

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

KCC
JAN 07 2011
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**
8100 E 22nd St N #700
Wichita, KS 67278

KCC
JAN 07 2011
CONFIDENTIAL

ATTN: Pat Deenihan

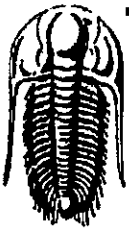
29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.09.29 @ 09:00:23
End Date: 2010.09.29 @ 16:45:38
Job Ticket #: 039664 DST #: 1

RECEIVED
JAN 10 2011
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

Ritchie Exploration Inc
8100 E 22nd St N #700
Wichita, KS 67278
ATTN: Pat Deenihan

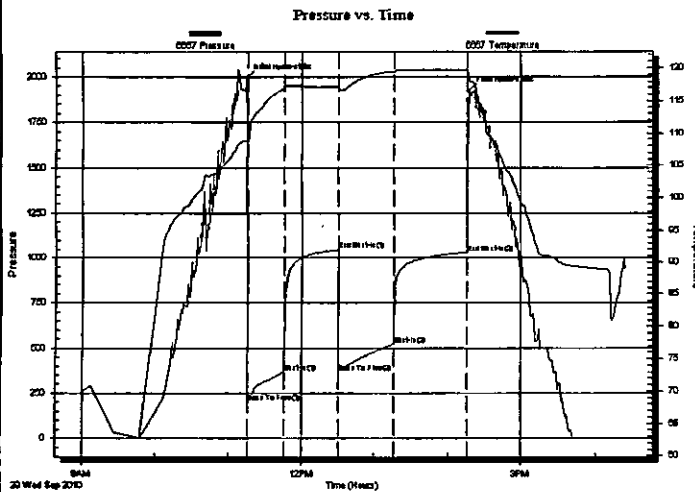
Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 039664 DST#: 1
Test Start: 2010.09.29 @ 09:00:23

GENERAL INFORMATION:

Formation: **C-D-E-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:15:08
 Time Test Ended: 16:45:38
 Interval: 4010.00 ft (KB) To 4094.00 ft (KB) (TVD)
 Total Depth: 4094.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Shane McBride
 Unit No: 40
 Reference Elevations: 2955.00 ft (KB)
 2945.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
 Press@RunDepth: 521.61 psig @ 4011.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.09.29 End Date: 2010.09.29 Last Calib.: 2010.09.29
 Start Time: 09:00:23 End Time: 16:25:38 Time On Btm: 2010.09.29 @ 11:14:53
 Time Off Btm: 2010.09.29 @ 14:17:23

TEST COMMENT: B.O.B. in 12 1/2 min.
 No return
 B.O.B. in 18 min.
 No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1995.98	108.97	Initial Hydro-static
1	202.85	108.69	Open To Flow (1)
32	368.51	116.99	Shut-In(1)
76	1046.60	117.24	End Shut-In(1)
76	366.74	116.83	Open To Flow (2)
121	521.61	119.48	Shut-In(2)
181	1029.12	119.64	End Shut-In(2)
183	1924.71	118.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
914.00	water w/oil scum 100%w	7.89
166.00	m c w 35% m 65% w/oil scum	2.33

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N#700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 039664

DST#: 1

ATTN: Pat Deenihan

Test Start: 2010.09.29 @ 09:00:23

Tool Information

Drill Pipe:	Length: 3458.00 ft	Diameter: 3.80 inches	Volume: 48.51 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: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 90000.00 lb
			Total Volume: 51.17 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4010.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	84.00 ft			
Tool Length:	111.00 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			3984.00	
Shut In Tool	5.00			3989.00	
Hydraulic tool	5.00			3994.00	
Jars	5.00			3999.00	
Safety Joint	2.00			4001.00	
Packer	5.00			4006.00	27.00 Bottom Of Top Packer
Packer	4.00			4010.00	
Stubb	1.00			4011.00	
Recorder	0.00	6771	Outside	4011.00	
Recorder	0.00	6667	Inside	4011.00	
Perforations	12.00			4023.00	
Change Over Sub	1.00			4024.00	
Drill Pipe	64.00			4088.00	
Change Over Sub	1.00			4089.00	
Bullnose	5.00			4094.00	84.00 Bottom Packers & Anchor

Total Tool Length: 111.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 039664

DST#: 1

ATTN: Pat Deenihan

Test Start: 2010.09.29 @ 09:00:23

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

37000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
914.00	w ater w /oil scum 100%w	7.893
166.00	m c w 35%m 65%w w /oil scum	2.329

Total Length: 1080.00 ft Total Volume: 10.222 bbl

Num Fluid Samples: 0

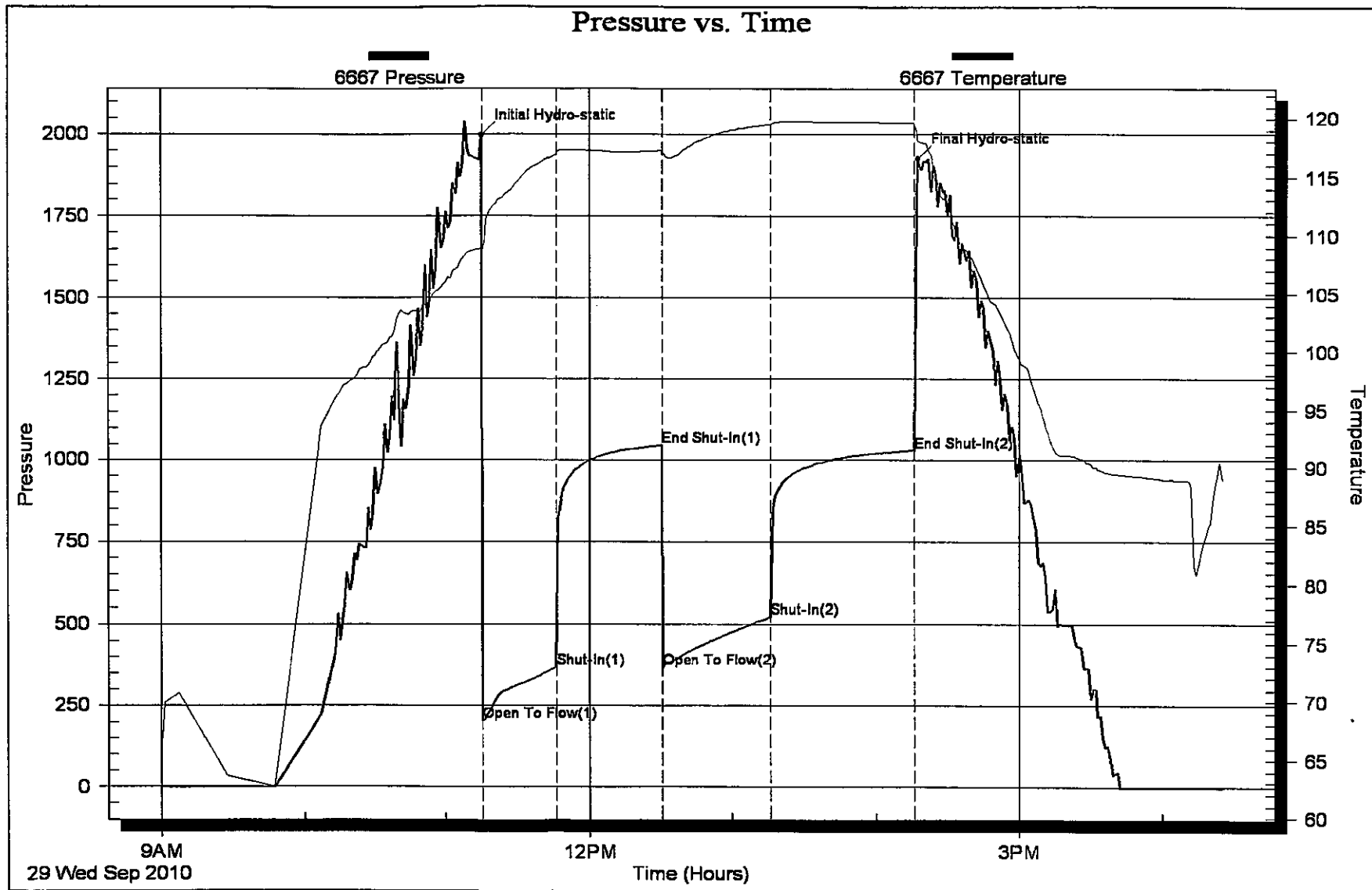
Num Gas Bombs: 0

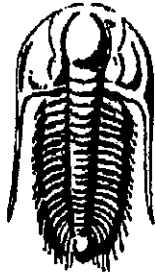
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .139 @ 95°f= 37,000 chlor





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.09.30 @ 02:46:12

End Date: 2010.09.30 @ 08:55:57

Job Ticket #: 039665 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Ritchie Exploration Inc

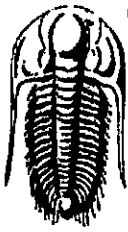
Hess #1-29 D

29-13s-31w Gove KS

DST # 2

H

2010.09.30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 039665

DST#: 2

ATTN: Pat Deenihan

Test Start: 2010.09.30 @ 02:46:12

GENERAL INFORMATION:

Formation: H
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:43:27
Time Test Ended: 08:55:57

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

Interval: 4136.00 ft (KB) To 4165.00 ft (KB) (TVD)
Total Depth: 4165.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2955.00 ft (KB)
2945.00 ft (CF)
KB to GR/CF: 10.00 ft

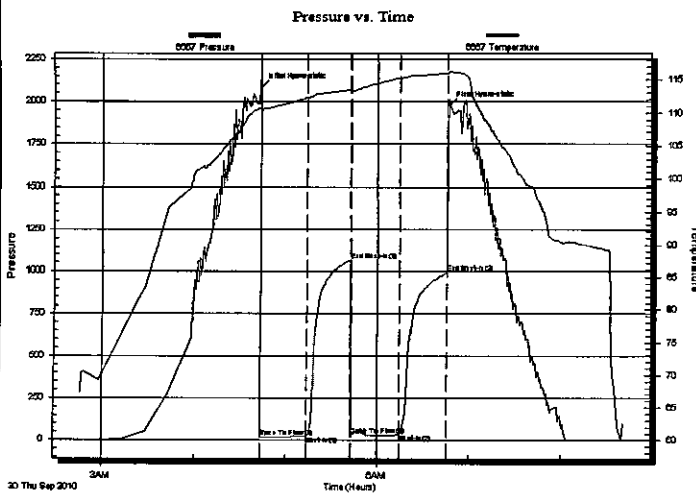
Serial #: 6667

Inside

Press@RunDepth: 32.70 psig @ 4137.00 ft (KB)
Start Date: 2010.09.30 End Date: 2010.09.30
Start Time: 02:46:12 End Time: 08:40:57

Capacity: 8000.00 psig
Last Calib.: 2010.09.30
Time On Btm: 2010.09.30 @ 04:43:12
Time Off Btm: 2010.09.30 @ 06:46:27

TEST COMMENT: 1/2" in blow died in 28 min.
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2087.51	110.78	Initial Hydro-static
1	15.76	109.87	Open To Flow (1)
31	23.50	112.31	Shut-In(1)
60	1064.58	113.48	End Shut-In(1)
61	31.00	113.17	Open To Flow (2)
92	32.70	115.26	Shut-In(2)
122	990.95	115.96	End Shut-In(2)
124	1978.67	116.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 039665

DST#: 2

ATTN: Pat Deenihan

Test Start: 2010.09.30 @ 02:46:12

Tool Information

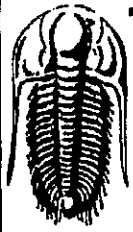
Drill Pipe:	Length: 3585.00 ft	Diameter: 3.80 inches	Volume: 50.29 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 90000.00 lb
			Total Volume: 52.95 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4136.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	56.00 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			4110.00	
Shut In Tool	5.00			4115.00	
Hydraulic tool	5.00			4120.00	
Jars	5.00			4125.00	
Safety Joint	2.00			4127.00	
Packer	5.00			4132.00	27.00 Bottom Of Top Packer
Packer	4.00			4136.00	
Stubb	1.00			4137.00	
Recorder	0.00	6771	Outside	4137.00	
Recorder	0.00	6667	Inside	4137.00	
Perforations	23.00			4160.00	
Bullnose	5.00			4165.00	29.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc
8100 E 22nd St N #700
Wichita, KS 67278
ATTN: Pat Deenihan

Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 039665 DST#: 2
Test Start: 2010.09.30 @ 02:46:12

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil APt	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 65.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.73 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

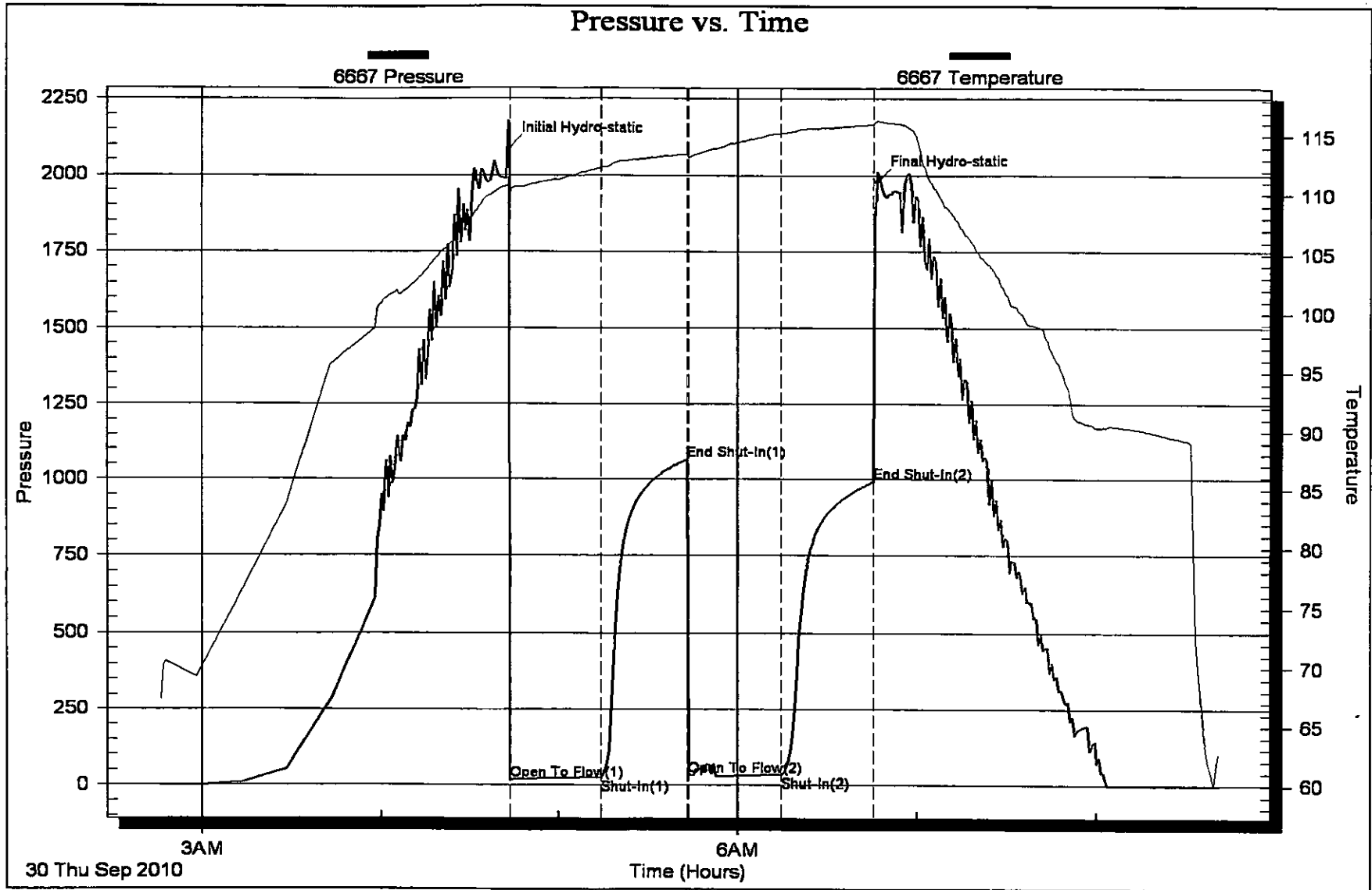
Length ft	Description	Volume bbl
5.00	Mud	0.025

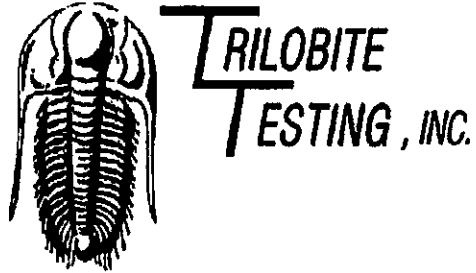
Total Length: 5.00 ft Total Volume: 0.025 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.09.30 @ 19:46:05

End Date: 2010.10.01 @ 01:45:50

Job Ticket #: 039666 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Ritchie Exploration Inc

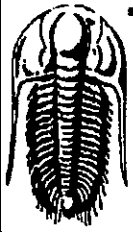
Hess #1-29 D

29-13s-31w Gove KS

DST # 3

LJ

2010.09.30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc
8100 E 22nd St N #700
Wichita, KS 67278
ATTN: Pat Deenihan

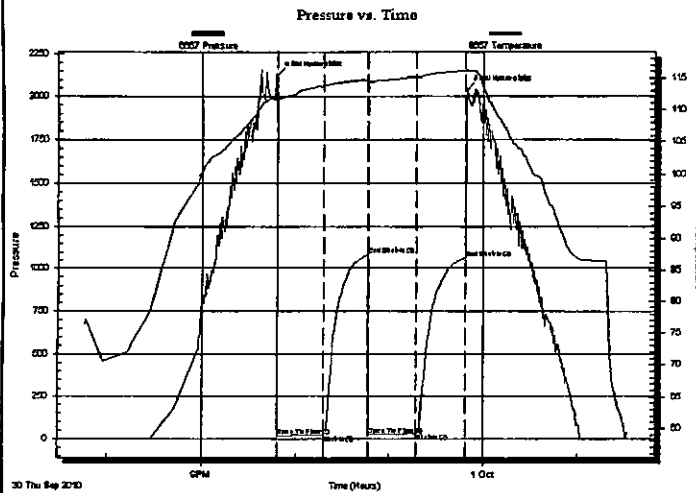
Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 039666 DST#: 3
Test Start: 2010.09.30 @ 19:46:05

GENERAL INFORMATION:

Formation: I-J
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:48:05
Time Test Ended: 01:45:50
Interval: 4170.00 ft (KB) To 4230.00 ft (KB) (TVD)
Total Depth: 4230.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Reference Elevations: 2955.00 ft (KB)
2945.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
Press@RunDepth: 33.42 psig @ 4171.00 ft (KB)
Start Date: 2010.09.30 End Date: 2010.10.01
Start Time: 19:46:05 End Time: 01:31:50
Capacity: 8000.00 psig
Last Calib.: 2010.10.01
Time On Btm: 2010.09.30 @ 21:47:50
Time Off Btm: 2010.09.30 @ 23:49:35

TEST COMMENT: 1/2" in blow died in 20 min
No return
No blow
No return



PRESSURE SUMMARY

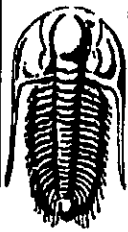
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.57	112.12	Initial Hydro-static
1	17.41	111.67	Open To Flow (1)
31	24.91	113.80	Shut-In(1)
59	1083.54	114.75	End Shut-In(1)
60	26.41	114.39	Open To Flow (2)
90	33.42	115.09	Shut-In(2)
121	1061.42	116.08	End Shut-In(2)
122	2039.82	116.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100% m	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

ATTN: Pat Deenihan

Job Ticket: 039666

DST#: 3

Test Start: 2010.09.30 @ 19:46:05

Tool Information

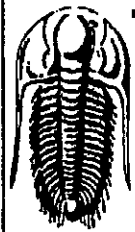
Drill Pipe:	Length: 3616.00 ft	Diameter: 3.80 inches	Volume: 50.72 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 90000.00 lb
			Total Volume: 53.38 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4170.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	87.00 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			4144.00	
Shut In Tool	5.00			4149.00	
Hydraulic tool	5.00			4154.00	
Jars	5.00			4159.00	
Safety Joint	2.00			4161.00	
Packer	5.00			4166.00	27.00 Bottom Of Top Packer
Packer	4.00			4170.00	
Stubb	1.00			4171.00	
Recorder	0.00	6771	Outside	4171.00	
Recorder	0.00	6667	Inside	4171.00	
Perforations	20.00			4191.00	
Change Over Sub	1.00			4192.00	
Drill Pipe	32.00			4224.00	
Change Over Sub	1.00			4225.00	
Bullnose	5.00			4230.00	60.00 Bottom Packers & Anchor

Total Tool Length: 87.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 039666

DST#: 3

ATTN: Pat Deenihan

Test Start: 2010.09.30 @ 19:46:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 67.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.51 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

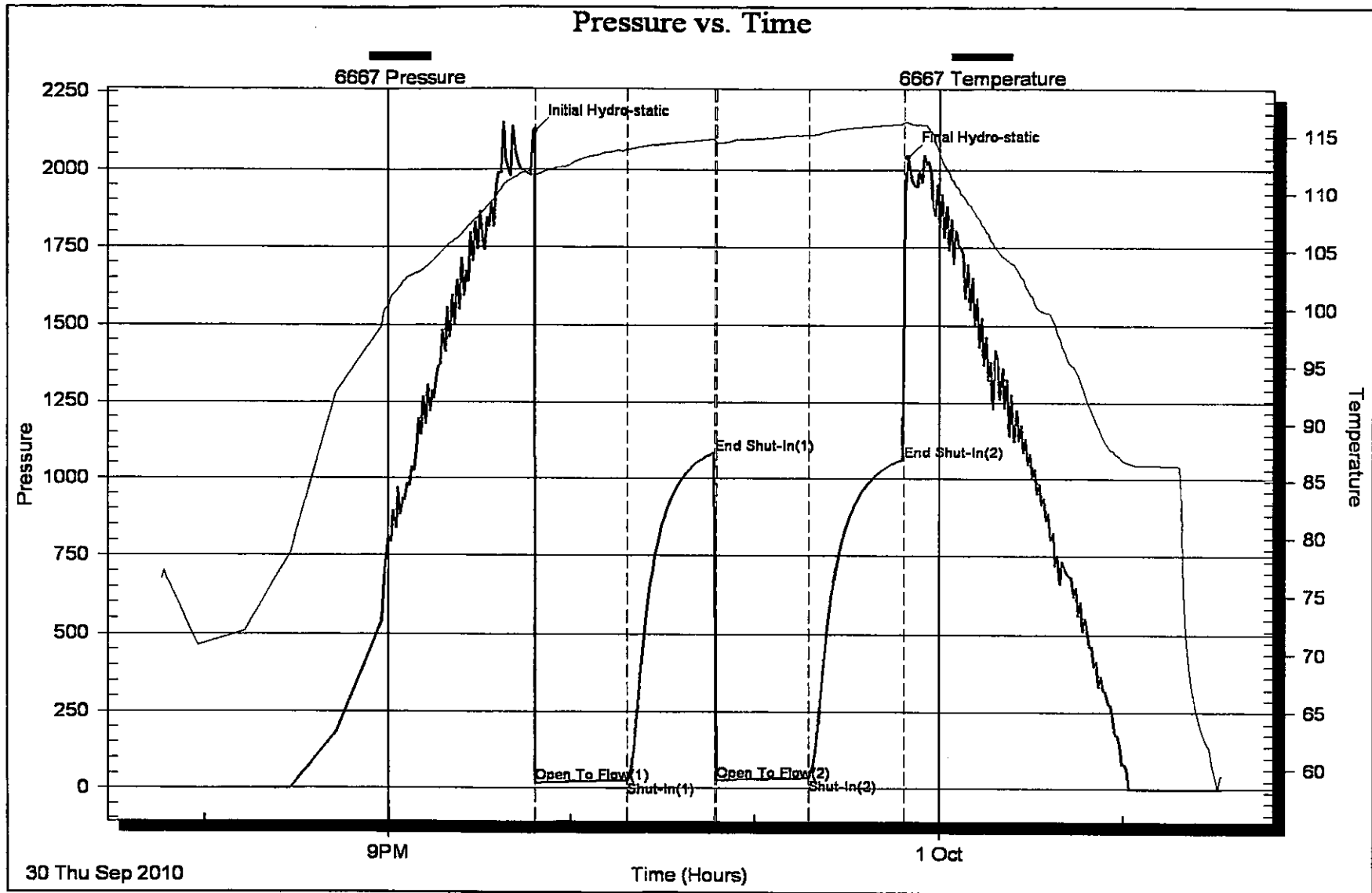
Num Gas Bombs: 0

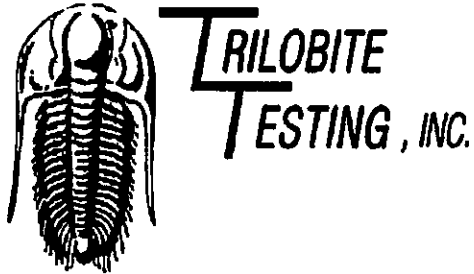
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.10.02 @ 09:02:58

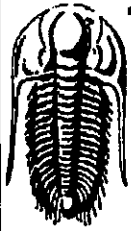
End Date: 2010.10.02 @ 15:20:13

Job Ticket #: 39667 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc
8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 39667 DST#: 4
Test Start: 2010.10.02 @ 09:02:58

GENERAL INFORMATION:

Formation: Myric & Ft Scott
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:11:13
Time Test Ended: 15:20:13

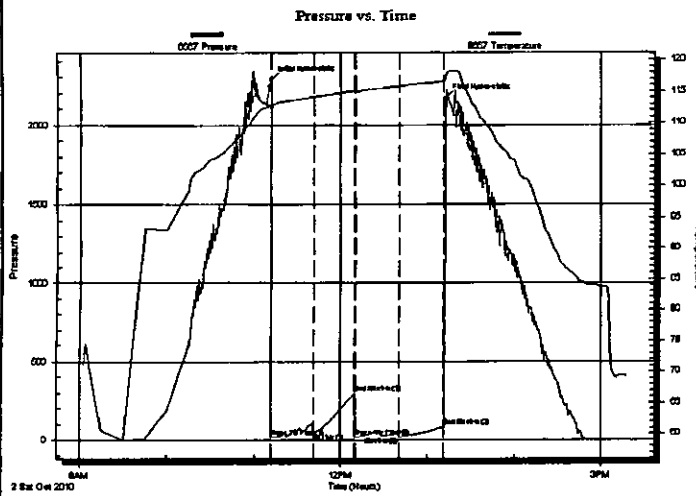
Interval: 4458.00 ft (KB) To 4516.00 ft (KB) (TVD)
Total Depth: 4516.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

Reference Elevations: 2955.00 ft (KB)
2945.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6667 Inside
Press@RunDepth: 19.32 psig @ 4459.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.10.02 End Date: 2010.10.02 Last Calib.: 2010.10.02
Start Time: 09:02:58 End Time: 15:18:13 Time On Btrc: 2010.10.02 @ 11:10:58
Time Off Btm: 2010.10.02 @ 13:12:13

TEST COMMENT: 1/2 inch blow, died in 6 min.
No return.
No blow.
No return.



PRESSURE SUMMARY

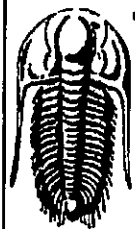
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2284.37	112.80	Initial Hydro-static
1	17.51	112.19	Open To Flow (1)
30	41.79	114.02	Shut-in(1)
60	298.12	115.06	End Shut-in(1)
60	19.23	114.94	Open To Flow (2)
90	19.32	115.77	Shut-in(2)
121	88.98	116.57	End Shut-in(2)
122	2168.33	117.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	mud 100%m	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39667

DST#: 4

ATTN: Pat Deenihan

Test Start: 2010.10.02 @ 09:02:58

Tool Information

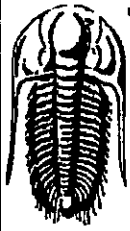
Drill Pipe:	Length: 3960.00 ft	Diameter: 3.80 inches	Volume: 55.55 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	70.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4458.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	85.00 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			4432.00	
Shut In Tool	5.00			4437.00	
Hydraulic tool	5.00			4442.00	
Jars	5.00			4447.00	
Safety Joint	2.00			4449.00	
Packer	5.00			4454.00	27.00 Bottom Of Top Packer
Packer	4.00			4458.00	
Stubb	1.00			4459.00	
Recorder	0.00	6771	Outside	4459.00	
Recorder	0.00	6667	Inside	4459.00	
Perforations	18.00			4477.00	
Change Over Sub	1.00			4478.00	
Drill Pipe	32.00			4510.00	
Change Over Sub	1.00			4511.00	
Bullnose	5.00			4516.00	58.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc
8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 39667 DST#: 4
Test Start: 2010.10.02 @ 09:02:58

Mud and Cushion Information

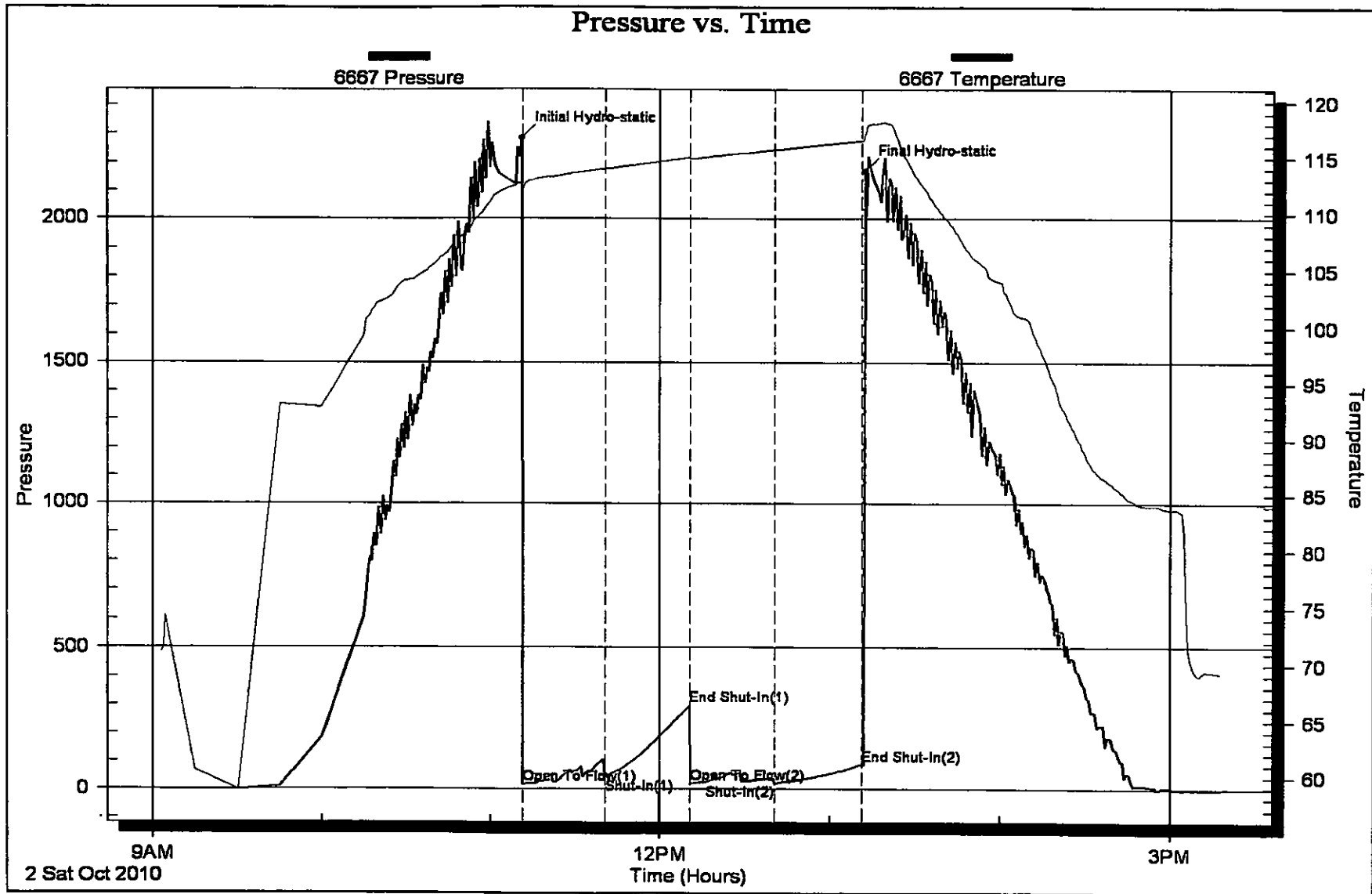
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.92 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 1.00 inches			

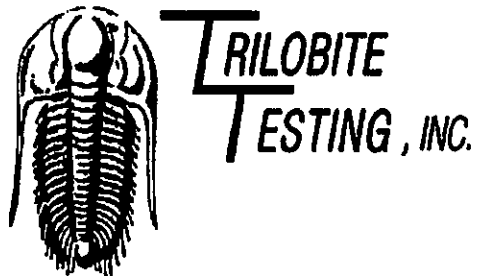
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	mud 100%m	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.10.02 @ 23:10:00

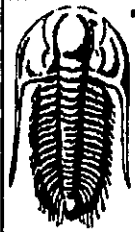
End Date: 2010.10.03 @ 05:43:45

Job Ticket #: 39668 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRIOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc
8100 E 22nd St N #700
Wichita, KS 67278
ATTN: Pat Deenihan

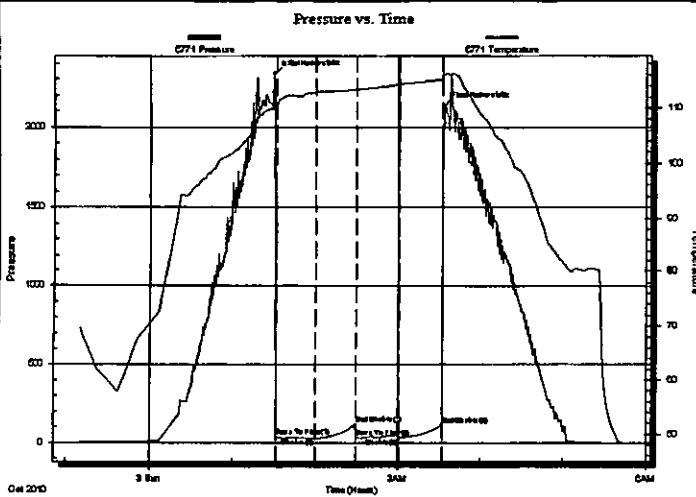
Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 39668 DST#: 5
Test Start: 2010.10.02 @ 23:10:00

GENERAL INFORMATION:

Formation: Cha. Ls.
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:31:00
Time Test Ended: 05:43:45
Interval: 4909.00 ft (KB) To 4558.00 ft (KB) (TVD)
Total Depth: 4558.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Reference Elevations: 2955.00 ft (KB)
2945.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6771 Outside
Press@RunDepth: 31.53 psig @ 4910.00 ft (KB)
Start Date: 2010.10.02 End Date: 2010.10.03
Start Time: 23:10:15 End Time: 05:43:45
Capacity: 8000.00 psig
Last Calib.: 2010.10.03
Time On Btm: 2010.10.03 @ 01:29:30
Time Off Btm: 2010.10.03 @ 03:33:30

TEST COMMENT: IF: 1/4 inch blow died in 25 min.
IS: No return.
FF: No Blow.
FS: No return.



PRESSURE SUMMARY

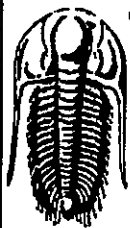
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2332.64	110.10	Initial Hydro-static
2	38.62	110.19	Open To Flow (1)
31	26.22	112.99	Shut-In(1)
60	119.57	113.37	End Shut-In(1)
61	34.41	113.36	Open To Flow (2)
92	31.53	114.27	Shut-In(2)
123	113.21	115.16	End Shut-In(2)
124	2134.29	116.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud w /oil scum 100%m	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39668

DST#: 5

ATTN: Pat Deenihan

Test Start: 2010.10.02 @ 23:10:00

Tool Information

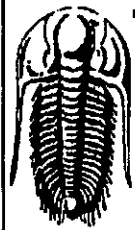
Drill Pipe:	Length: 4366.00 ft	Diameter: 3.80 inches	Volume: 61.24 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	63.90 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4909.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	49.00 ft			
Tool Length:	76.00 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			4883.00	
Shut In Tool	5.00			4888.00	
Hydraulic tool	5.00			4893.00	
Jars	5.00			4898.00	
Safety Joint	2.00			4900.00	
Packer	5.00			4905.00	27.00 Bottom Of Top Packer
Packer	4.00			4909.00	
Stubb	1.00			4910.00	
Recorder	0.00	6771	Outside	4910.00	
Recorder	0.00	6667	Inside	4910.00	
Perforations	9.00			4919.00	
Change Over Sub	1.00			4920.00	
Drill Pipe	32.00			4952.00	
Change Over Sub	1.00			4953.00	
Bullnose	5.00			4958.00	49.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39668

DST#: 5

ATTN: Pat Deenihan

Test Start: 2010.10.02 @ 23:10:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.94 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud w/oil scum 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

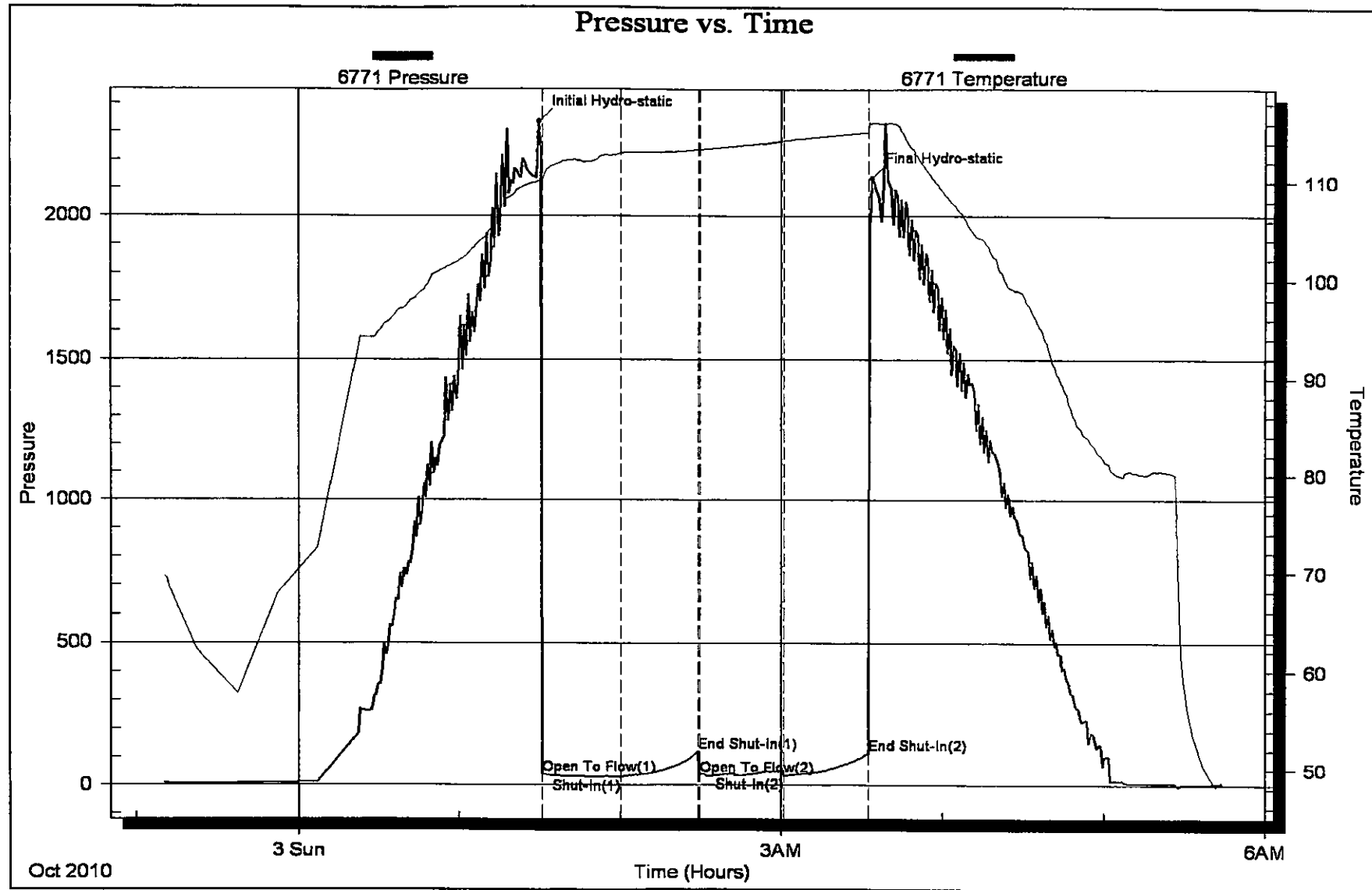
Num Gas Bombs: 0

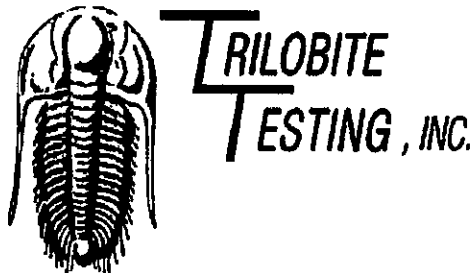
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.10.03 @ 12:27:46

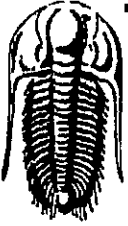
End Date: 2010.10.03 @ 18:59:16

Job Ticket #: 39669 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc
 8100 E 22nd St N#700
 Wichita, KS 67278
 ATTN: Pat Deenihan

Hess #1-29 D
29-13s-31w Gove KS
 Job Ticket: 39669 **DST#: 6**
 Test Start: 2010.10.03 @ 12:27:46

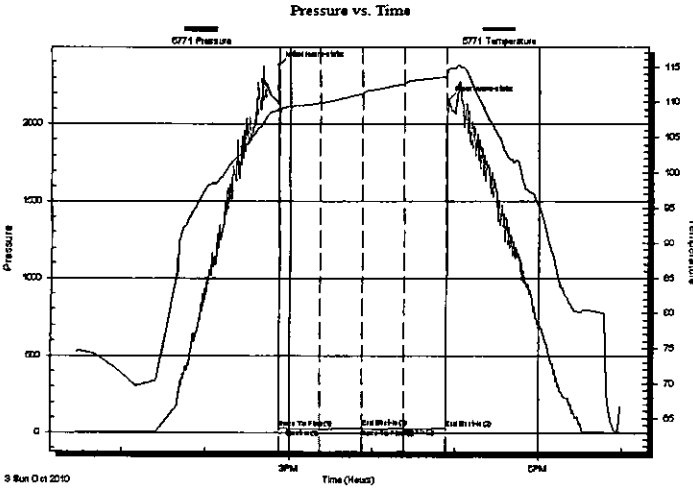
GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:52:31
 Time Test Ended: 18:59:16
 Interval: 4538.00 ft (KB) To 4575.00 ft (KB) (TVD)
 Total Depth: 4575.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole
 Tester: Shane McBride
 Unit No: 40
 Reference Elevations: 2955.00 ft (KB)
 2945.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: **6771** Outside
 Press@RunDepth: 28.61 psig @ 4539.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.10.03 End Date: 2010.10.03 Last Calib.: 2010.10.03
 Start Time: 12:28:01 End Time: 18:59:16 Time On Btm: 2010.10.03 @ 14:51:46
 Time Off Btm: 2010.10.03 @ 16:54:31

TEST COMMENT: IF: Surface blow, died @ 20 minutes.
 ISl: No return.
 FF: No Blow.
 FS1: No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2378.58	109.15	Initial Hydro-static
1	33.04	108.28	Open To Flow (1)
31	26.17	109.90	Shut-In(1)
61	35.27	111.23	End Shut-In(1)
61	26.79	111.25	Open To Flow (2)
91	28.61	112.56	Shut-In(2)
122	29.97	113.67	End Shut-In(2)
123	2154.77	114.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100% m	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39669

DST#: 6

ATTN: Pat Deenihan

Test Start: 2010.10.03 @ 12:27:46

Tool Information

Drill Pipe:	Length: 3997.00 ft	Diameter: 3.80 inches	Volume: 56.07 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: 30000.00 lb
Drill Collar:	Length: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	58.73 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4538.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	64.00 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			4512.00	
Shut In Tool	5.00			4517.00	
Hydraulic tool	5.00			4522.00	
Jars	5.00			4527.00	
Safety Joint	2.00			4529.00	
Packer	5.00			4534.00	27.00 Bottom Of Top Packer
Packer	4.00			4538.00	
Stubb	1.00			4539.00	
Recorder	0.00	6771	Outside	4539.00	
Recorder	0.00	6667	Inside	4539.00	
Perforations	31.00			4570.00	
Bullnose	5.00			4575.00	37.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39669

DST#: 6

ATTN: Pat Deenihan

Test Start: 2010.10.03 @ 12:27:46

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 56.00 sec/qt
Water Loss: 8.33 in³
Resistivity: 0.00 ohm.m
Salinity: 3800.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 0 deg API
Water Salinity: 0 ppm

Recovery Information

Recovery Table

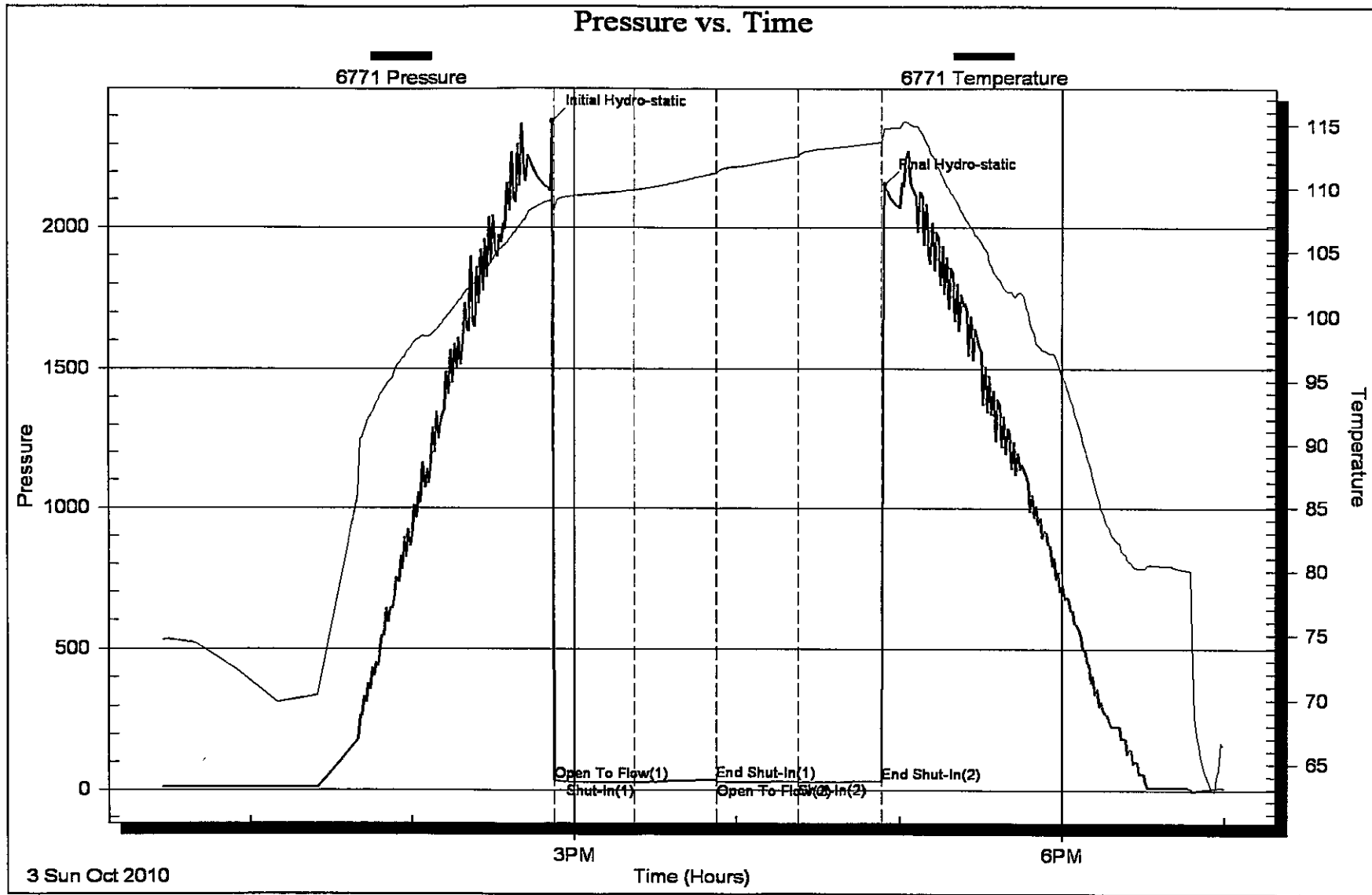
Length ft	Description	Volume bbl
2.00	Mud 100% m	0.010

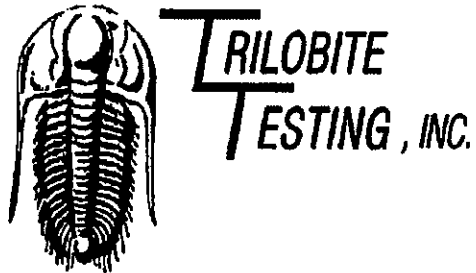
Total Length: 2.00 ft Total Volume: 0.010 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

29-13s-31w Gove KS

Hess #1-29 D

Start Date: 2010.10.04 @ 06:46:07

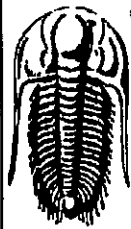
End Date: 2010.10.04 @ 12:48:52

Job Ticket #: 39670 DST #: 7

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc
8100 E 22nd St N#700
Wichita, KS 67278
ATTN: Pat Deenihan

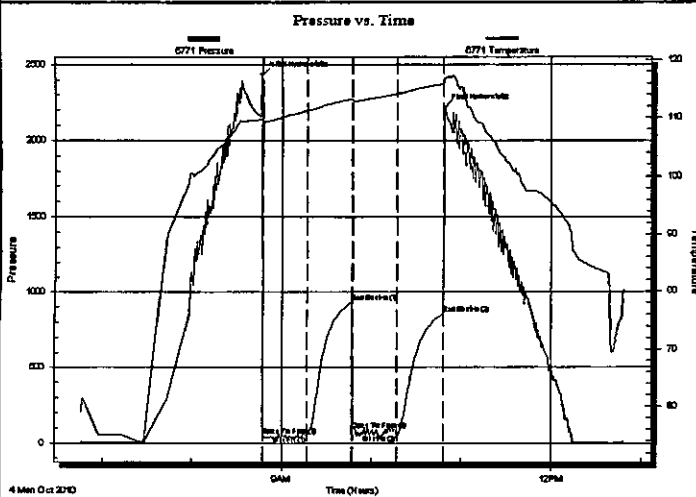
Hess #1-29 D
29-13s-31w Gove KS
Job Ticket: 39670 DST#: 7
Test Start: 2010.10.04 @ 06:46:07

GENERAL INFORMATION:

Formation: Mrw Sd.
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:47:22
Time Test Ended: 12:48:52
Interval: 4575.00 ft (KB) To 4621.00 ft (KB) (TVD)
Total Depth: 4094.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40
Reference Elevations: 2955.00 ft (KB)
2945.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6771 Outside
Press@RunDepth: 52.85 psig @ 4576.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.10.04 End Date: 2010.10.04 Last Calib.: 1899.12.30
Start Time: 06:46:07 End Time: 12:48:52 Time On Btm: 2010.10.04 @ 08:46:22
Time Off Btm: 2010.10.04 @ 10:48:22

TEST COMMENT: IF: Surface blow died @ 20 min.
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

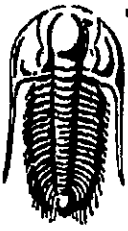
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2429.91	109.79	Initial Hydro-static
1	48.51	108.62	Open To Flow (1)
31	48.22	111.22	Shut-In(1)
61	930.14	113.23	End Shut-In(1)
62	88.10	112.90	Open To Flow (2)
91	52.85	114.07	Shut-In(2)
121	855.53	115.79	End Shut-In(2)
122	2217.06	116.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39670

DST#: 7

ATTN: Pat Deenihan

Test Start: 2010.10.04 @ 06:46:07

Tool Information

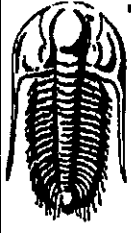
Drill Pipe:	Length: 4029.00 ft	Diameter: 3.80 inches	Volume: 56.52 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 541.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 59.18 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial: lb
Depth to Top Packer:	4575.00 ft			Final: lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	73.00 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			4549.00	
Shut In Tool	5.00			4554.00	
Hydraulic tool	5.00			4559.00	
Jars	5.00			4564.00	
Safety Joint	2.00			4566.00	
Packer	5.00			4571.00	27.00 Bottom Of Top Packer
Packer	4.00			4575.00	
Stubb	1.00			4576.00	
Recorder	0.00	6771	Outside	4576.00	
Recorder	0.00	6667	Inside	4576.00	
Perforations	6.00			4582.00	
Change Over Sub	1.00			4583.00	
Drill Pipe	32.00			4615.00	
Change Over Sub	1.00			4616.00	
Bullnose	5.00			4621.00	46.00 Bottom Packers & Anchor

Total Tool Length: 73.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc

Hess #1-29 D

8100 E 22nd St N #700
Wichita, KS 67278

29-13s-31w Gove KS

Job Ticket: 39670

DST#: 7

ATTN: Pat Deenihan

Test Start: 2010.10.04 @ 06:46:07

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: 67.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.38 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length: ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

