

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
October 2008
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

12/16/12

OPERATOR: License # 4767
Name: Ritchie Exploration, Inc.
Address 1: P.O. Box 783188
Address 2: _____
City: Wichita State: KS Zip: 67278 + 3118
Contact Person: John Niernberger
Phone: (316) 691-9500
CONTRACTOR: License # 30606
Name: Murfin Drilling, Co., Inc.
Wellsite Geologist: Tom Funk
Purchaser: NCRA

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.: _____
10/6/10 10/16/10 10/16/10
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 063-21870-00-00
Spot Description: 118' N & 129' W
NW SW SE _____ Sec. 28 Twp. 13 S. R. 31 East West
1108 _____ Feet from North / South Line of Section
2439 _____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Gove
Lease Name: Shiple-Hess 28CD Well #: 1
Field Name: _____

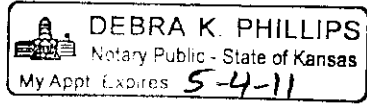
Producing Formation: LKC & Johnson
Elevation: Ground: 2815 Kelly Bushing: 2825
Total Depth: 4540 Plug Back Total Depth: 4476
Amount of Surface Pipe Set and Cemented at: 223 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: 2308 Feet
If Alternate II completion, cement circulated from: surface
feet depth to: 2308 w/ 280 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 10500 ppm Fluid volume: 1000 bbls
Dewatering method used: evaporation
Location of fluid disposal if hauled offsite: AIT II NG 1-10-11
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: Production Manager Date: 12/16/10
Subscribed and sworn to before me this 16th day of December
2010
Notary Public: Debra K Phillips
Date Commission Expires: 5-4-11


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

KCC Office Use ONLY
 Letter of Confidentiality Received 12/16/10 - 12/16/12
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
_____ UIC Distribution
RECEIVED
DEC 17 2010

KCC WICHITA

Operator Name: Ritchie Exploration, Inc. Lease Name: ShIPLEY-Hess 28CD Well #: 1
 Sec. 28 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 <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 <i>(Submit Copy)</i> List All E. Logs Run: Dual Induction Log Compensated Density/Neutron Log	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input checked="" type="checkbox"/> Sample Name Top Datum SEE ATTACHED <div style="text-align: right; font-weight: bold; font-size: 1.2em;"> KCC DEC 16 2010 CONFIDENTIAL </div>
---	---

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	223	common	175	3%cc, 2%gel
Production	7-7/8	5-1/2	15.5	4535	ASC	200	10% salt, 2% gel & 3/4% CD-31

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 (Amount and Kind of Material Used)	Depth
4	4433.5' - 4438' (11/10/10)	500 gallons 15% NE	
4	4170' - 4174' (11/10/10)	1000 gallons 15% NE	

TUBING RECORD: Size: <u>2-7/8</u> Set At: <u>4488'</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	KCC WICHITA
Date of First, Resumed Production, SWD or Enh. <u>11/30/10</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>19.20</u>	Gas Mcf <u>7.09</u>	Water Bbls. _____ Gas-Oil Ratio _____ Gravity <u>36</u>

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 <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
---	--	--



RITCHIE

EXPLORATION, INC.
Wichita, Kansas

#1 Shipley-Hess 28CD

1108' FSL & 2439' FEL

118' N & 129' W of NW SW SE Section 28-13S-31W

Gove County, Kansas

API# 15-063-21870-0000

Elevation: 2815' GL: 2825' KB

Sample Tops			Ref. Well
Anhydrite	2310'	+515	+5
B/Anhydrite	2335'	+490	+3
Heebner	3827'	-1002	+10
Lansing	3868'	-1043	+10
LKC "C"	3902'	-1077	+10
LKC "D"	3916'	-1091	+10
LKC "E"	3948'	-1123	+10
Muncie Shale	4018'	-1193	+10
LKC "H"	4034'	-1209	+12
LKC "I"	4068'	-1243	+9
LKC "J"	4088'	-1263	+8
Stark Shale	4106'	-1281	+10
LKC "K"	4126'	-1301	+9
Hush	4142'	-1317	+12
LKC "L"	4154'	-1329	+12
BKC	4179'	-1354	+12
Marmaton	4210'	-1385	+13
Altamont	4235'	-1410	+14
Pawnee	4304'	-1479	+12
Myric Station	4336'	-1511	+14
Fort Scott	4360'	-1535	+12
Cherokee	4385'	-1560	+10
Johnson	4428'	-1603	+10
Morrow Sand	4460'	-1635	N/A
Mississippian	4473'	-1648	-3
RTD	4540'	-1715	

KCC
DEC 16 2010
CONFIDENTIAL

RECEIVED

DEC 17 2010

KCC WICHITA

ALLIED CEMENTING CO., LLC. 035137A

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

SERVICE POINT: OAKLEY

DATE <u>10-19-10</u>	SEC <u>28</u>	TWP. <u>13S</u>	RANGE <u>31W</u>	CALLED OUT	ON LOCATION <u>11:30 AM</u>	JOB START <u>1:00 PM</u>	JOB FINISH <u>1:30 PM</u>
LEASE <u>SHAPIX-HESS</u>	WELL # <u>2800 21</u>	LOCATION <u>OAKLEY 115-5E-55-W4N</u>			COUNTY <u>GOVE</u>	STATE <u>KS</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)				FNO			

CONTRACTOR <u>ALLIANCE WELL SERVICE</u>	OWNER <u>SAME</u>
TYPE OF JOB <u>PORT COLLAR</u>	
HOLE SIZE _____ T.D. _____	CEMENT _____
CASING SIZE <u>5 1/2"</u> DEPTH _____	AMOUNT ORDERED <u>500* HULLS</u>
TUBING SIZE <u>2 7/8"</u> DEPTH <u>2310'</u>	<u>400 SKS 60/40 POZ 6% GEL 1/4" FLO-SEAL</u>
DRILL PIPE _____ DEPTH _____	
TOOL <u>PORT COLLAR</u> DEPTH <u>2310'</u>	
PRES. MAX _____ MINIMUM _____	COMMON <u>168 SKS @ 15.45 = 2595.60</u>
MEAS. LINE _____ SHOE JOINT _____	POZMIX <u>112 SKS @ 8.00 = 896.00</u>
CEMENT LEFT IN CSG. _____	GEL <u>15 SKS @ 20.80 = 312.00</u>
PERFS. _____	CHLORIDE _____ @ _____
DISPLACEMENT _____	ASC _____ @ _____

EQUIPMENT

PUMP TRUCK CEMENTER <u>TERRY</u>	<u>FLO-SEAL 70*</u>	@ <u>2.50</u>	<u>175.00</u>
#386-28' HELPER <u>LARENSE</u>	<u>HULLS 250*</u>	@ <u>31.85</u>	<u>15925.00</u>
BULK TRUCK # <u>396</u> DRIVER <u>WELL</u>			
BULK TRUCK # _____ DRIVER _____			

HANDLING <u>421 SKS @ 2.40</u>	<u>1010.40</u>
MILEAGE <u>104 PER SK 1 ME/1 E</u>	<u>842.00</u>
TOTAL	<u>5990.25</u>

REMARKS:
PRESSURE SYSTEM TO 1200 PSI. HOLD
OPEN PORT COLLAR MIX 280 SKS 60/40
POZ 6% GEL 1/4" FLO-SEAL. CLOSE PORT
COLLAR. PRESSURE SYSTEM TO 1200 PSI HOLD
RUN 5 TB REVERSE OUT.
CEMENT did circulate.
THANK YOU

SERVICE

DEPTH OF JOB <u>2310'</u>	
PUMP TRUCK CHARGE _____	<u>1185.00</u>
EXTRA FOOTAGE _____ @ _____	
MILEAGE <u>20 MI @ 7.00</u>	<u>140.00</u>
MANIFOLD _____ @ _____	
TOTAL	<u>1325.00</u>

CHARGE TO: RITCHIE EXPLORATION

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL	_____

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 TOMMY A. [Signature]

SIGNATURE _____

SALES TAX (if Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

KCC
DEC 16 2010
CONFIDENTIAL

RECEIVED
DEC 17 2010
KCC WICHITA

[Handwritten mark]

ALLIED CEMENTING CO., LLC. 035478

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

SERVICE POINT: Oakley

DATE <u>10/6/10</u>	SEC <u>29</u>	TWP <u>13</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION	JOB START <u>11:00p</u>	JOB FINISH <u>11:30p</u>
LEASE <u>Shops - 28000</u>	WELL # <u>#1</u>	LOCATION <u>Oakley 115 SE 55 W4</u>			COUNTY <u>Goose</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>							

CONTRACTOR Murfin 14

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 226

CASING SIZE P510 DEPTH 226

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 13.44

OWNER Same

CEMENT AMOUNT ORDERED 175 Com 3000 CC

200 gal

COMMON	<u>175</u>	@	<u>15.45</u>	<u>2703.75</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.00</u>	<u>62.00</u>
CHLORIDE	<u>6</u>	@	<u>57.00</u>	<u>342.00</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>184</u>	@	<u>2.40</u>	<u>441.60</u>
MILEAGE	<u>104.54/mi</u>			<u>368.00</u>
TOTAL				<u>3924.95</u>

KCC
DEC 16 2010
CONFIDENTIAL

EQUIPMENT

PUMP TRUCK CEMENTER Alan

422 HELPER Terry

BULK TRUCK

394 DRIVER Brandon

BULK TRUCK

DRIVER

REMARKS:
Run 8918 casing, Circulate, mix 175 gal, Com 3000cc 200 gal, 200 gal, w/ 13.44 bbl H₂O

CEMENT Did Circulate
Thank You
Alan, Terry, Brandon

CHARGE TO: Ritchie Exploration

STREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE 1000.00

EXTRA FOOTAGE @

MILEAGE 20 @ 20.00 400.00

MANIFOLD @

TOTAL 1150.00

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

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 Greg Unruh

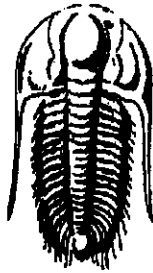
SIGNATURE Greg Unruh

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

RECEIVED
DEC 17 2010
KCC WICHITA



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove,Ks

Shipley-Hess 28CD #1

Start Date: 2010.10.09 @ 23:05:06

End Date: 2010.10.10 @ 07:53:36

Job Ticket #: 40417 DST #: 1

**KCC
DEC 16 2010
CONFIDENTIAL**

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

**RECEIVED
DEC 17 2010
KCC WICHITA**

Ritchie Exploration

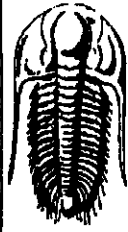
Shipley-Hess 28CD #1

28-13-31 Gove,Ks

DST # 1

KC "C"

2010.10.09



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

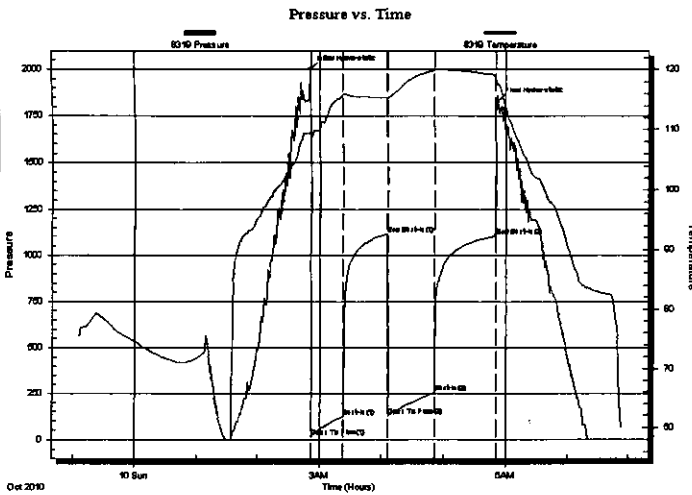
Shiple-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40417 **DST#: 1**
Test Start: 2010.10.09 @ 23:05:06

GENERAL INFORMATION:

Formation: **KC "C"**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 02:52:06
Time Test Ended: 07:53:36
Test Type: **Conventional Bottom Hole**
Tester: **Brett Dickinson**
Unit No: **47**
Interval: **3882.00 ft (KB) To 3910.00 ft (KB) (TVD)**
Reference Elevations: **2825.00 ft (KB)**
Total Depth: **3910.00 ft (KB) (TVD)** **2815.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair** **KB to GR/CF: 10.00 ft**

Serial #: 8319 **Inside**
Press@RunDepth: **253.95 psig @ 3886.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.10.09** End Date: **2010.10.10** Last Calib.: **2010.10.10**
Start Time: **23:05:11** End Time: **07:53:36** Time On Btm: **2010.10.10 @ 02:50:36**
Time Off Btm: **2010.10.10 @ 05:53:06**

TEST COMMENT: F-7.5in blow
ISI-No blow
FF-8in blow
FSI-No blow



PRESSURE SUMMARY

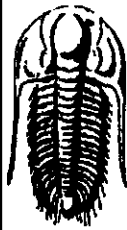
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2001.75	109.53	Initial Hydro-static
2	16.62	108.74	Open To Flow (1)
32	121.72	115.79	Shut-In(1)
76	1115.15	115.45	End Shut-In(1)
76	126.57	115.20	Open To Flow (2)
121	253.95	119.87	Shut-In(2)
180	1102.28	119.13	End Shut-In(2)
183	1828.29	117.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
385.00	Oilspotted SMCW 20%M 80%W	1.89
95.00	Oilspotted MCW 35%M 65%W	0.47
30.00	Oilspotted WCM 20%W 80%M	0.15

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

Shiple-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40417

DST#: 1

ATTN: Tom Funk

Test Start: 2010.10.09 @ 23:05:06

Tool Information

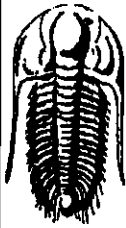
Drill Pipe:	Length: 3330.00 ft	Diameter: 3.80 inches	Volume: 46.71 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3882.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	48.00 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			3863.00	
Shut In Tool	5.00			3868.00	
Hydraulic tool	5.00			3873.00	
Packer	4.00			3877.00	20.00 Bottom Of Top Packer
Packer	5.00			3882.00	
Stubb	1.00			3883.00	
Perforations	3.00			3886.00	
Recorder	0.00	8319	Inside	3886.00	
Recorder	0.00	6719	Outside	3886.00	
Perforations	21.00			3907.00	
Bullnose	3.00			3910.00	28.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shibley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40417 **DST#: 1**
Test Start: 2010.10.09 @ 23:05:06

Mud and Cushion Information

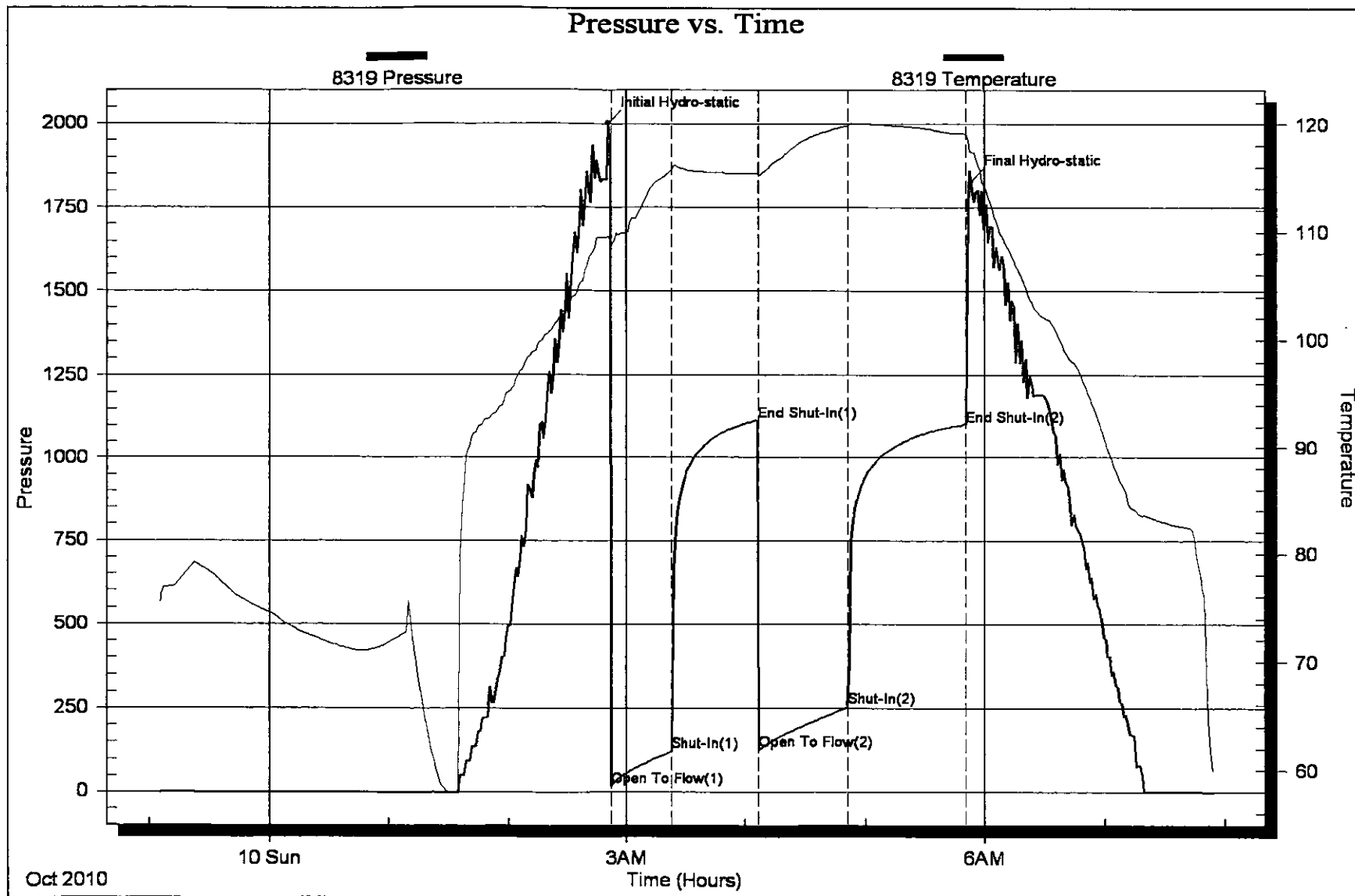
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	85000 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.36 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1500.00 ppm			
Filter Cake: inches			

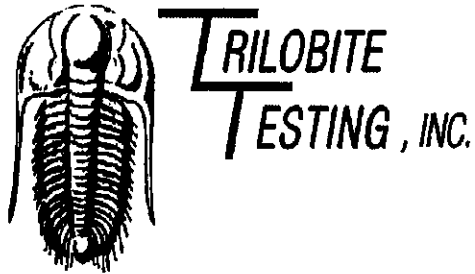
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
385.00	Oilspotted SMCW 20%M 80%W	1.893
95.00	Oilspotted MCW 35%M 65%W	0.467
30.00	Oilspotted WCM 20%W 80%M	0.148

Total Length: 510.00 ft Total Volume: 2.508 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove,Ks

Shiple-Hess 28CD #1

Start Date: 2010.10.10 @ 13:34:19

End Date: 2010.10.10 @ 21:06:49

Job Ticket #: 40418 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Ritchie Exploration

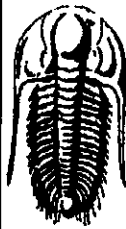
Shiple-Hess 28CD #1

28-13-31 Gove,Ks

DST # 2

KC"D"

2010.10.10



**TRILLOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

ShIPLEY-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40418 DST#: 2
Test Start: 2010.10.10 @ 13:34:19

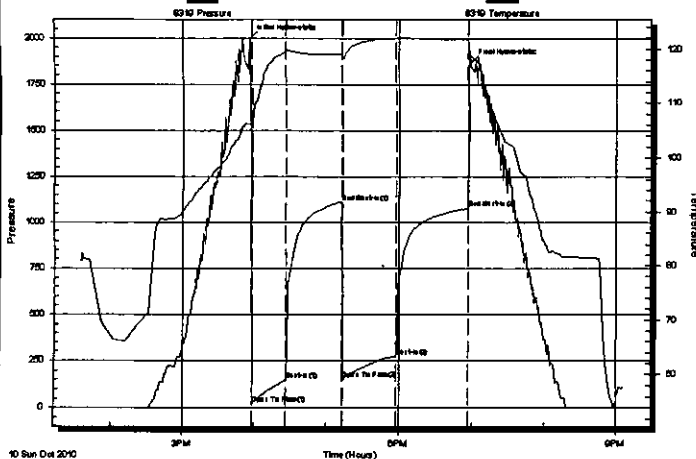
GENERAL INFORMATION:

Formation: **KC"D'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:57:49
Time Test Ended: 21:06:49
Interval: **3910.00 ft (KB) To 3925.00 ft (KB) (TVD)**
Total Depth: **3925.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: Fair
Reference Elevations: **2825.00 ft (KB)**
2815.00 ft (CF)
KB to GR/CF: **10.00 ft**

Serial #: 8319 Inside
Press@RunDepth: **272.55 psig @ 3912.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.10.10** End Date: **2010.10.10**
Start Time: **13:34:24** End Time: **21:06:48** Last Calib.: **2010.10.10**
Time On Btm: **2010.10.10 @ 15:56:49**
Time Off Btm: **2010.10.10 @ 18:59:19**

TEST COMMENT: IF-BOB in 26min
ISI-No blow
FF-8 in blow
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

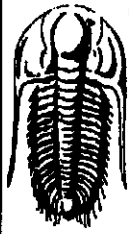
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1997.02	106.19	Initial Hydro-static
1	21.35	106.15	Open To Flow (1)
30	146.65	119.60	Shut-In(1)
76	1110.81	119.03	End Shut-In(1)
77	150.23	118.70	Open To Flow (2)
121	272.55	121.94	Shut-In(2)
180	1076.96	121.68	End Shut-In(2)
183	1869.48	118.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
550.00	VSMCW 90%W 10%M	2.80
20.00	Oilspotted MCW 60%W 40%M	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40418 **DST#: 2**
Test Start: 2010.10.10 @ 13:34:19

Tool Information

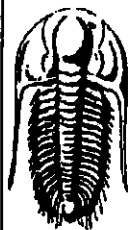
Drill Pipe:	Length: 3362.00 ft	Diameter: 3.80 inches	Volume: 47.16 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3910.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	35.00 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			3891.00	
Shut In Tool	5.00			3896.00	
Hydraulic tool	5.00			3901.00	
Packer	4.00			3905.00	20.00 Bottom Of Top Packer
Packer	5.00			3910.00	
Stubb	1.00			3911.00	
Perforations	1.00			3912.00	
Recorder	0.00	8319	Inside	3912.00	
Recorder	0.00	6719	Outside	3912.00	
Perforations	10.00			3922.00	
Bullnose	3.00			3925.00	15.00 Bottom Packers & Anchor

Total Tool Length: 35.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40418 DST#: 2
Test Start: 2010.10.10 @ 13:34:19

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 57.00 sec/qt
Water Loss: 6.36 in³
Resistivity: ohm.m
Salinity: 1500.00 ppm
Filter Cake: inches

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

Oil API: deg API
Water Salinity: 115000 ppm

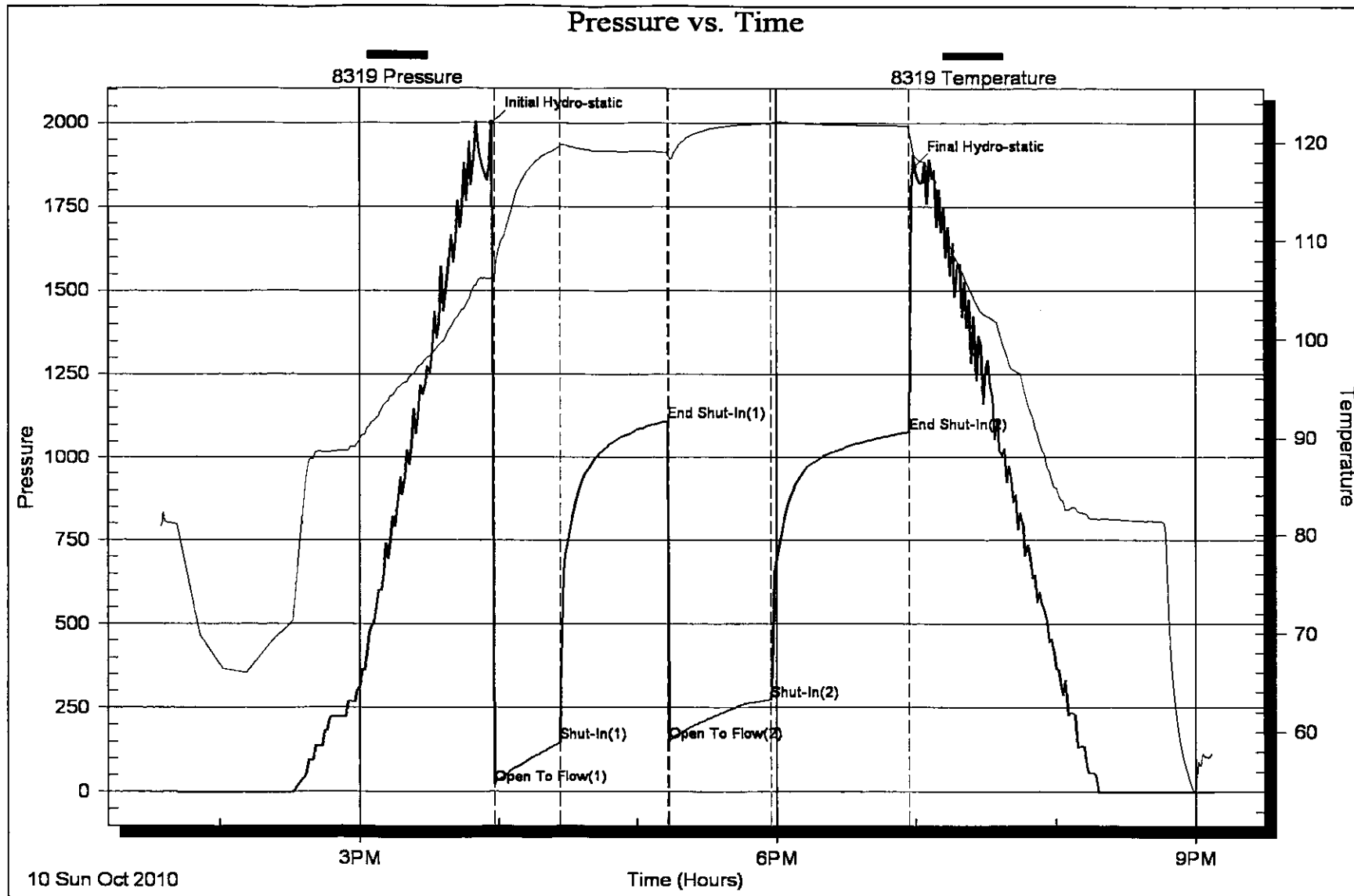
Recovery Information

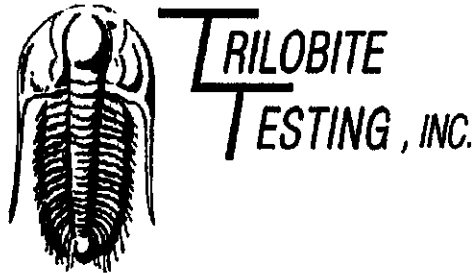
Recovery Table

Length ft	Description	Volume bbl
550.00	VSMCW 90%W 10%M	2.796
20.00	Oilspotted MCW 60%W 40%M	0.281

Total Length: 570.00 ft Total Volume: 3.077 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove, Ks

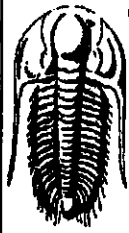
ShIPLEY-Hess 28CD #1

Start Date: 2010.10.11 @ 10:15:25

End Date: 2010.10.11 @ 16:24:25

Job Ticket #: 40419 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

TOOL DIAGRAM

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40419 **DST#: 3**
Test Start: 2010.10.11 @ 10:15:25

Tool Information

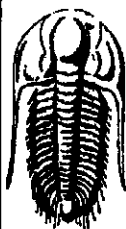
Drill Pipe:	Length: 3487.00 ft	Diameter: 3.80 inches	Volume: 48.91 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4016.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	48.00 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			3997.00	
Shut In Tool	5.00			4002.00	
Hydraulic tool	5.00			4007.00	
Packer	4.00			4011.00	20.00 Bottom Of Top Packer
Packer	5.00			4016.00	
Stubb	1.00			4017.00	
Perforations	3.00			4020.00	
Recorder	0.00	8319	Inside	4020.00	
Recorder	0.00	6719	Outside	4020.00	
Perforations	21.00			4041.00	
Bullnose	3.00			4044.00	28.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Shpley-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40419

DST#: 3

ATTN: Tom Funk

Test Start: 2010.10.11 @ 10:15:25

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: 57.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
2.00	Mud	0.010

Total Length: 2.00 ft

Total Volume: 0.010 bbf

Num Fluid Samples: 0

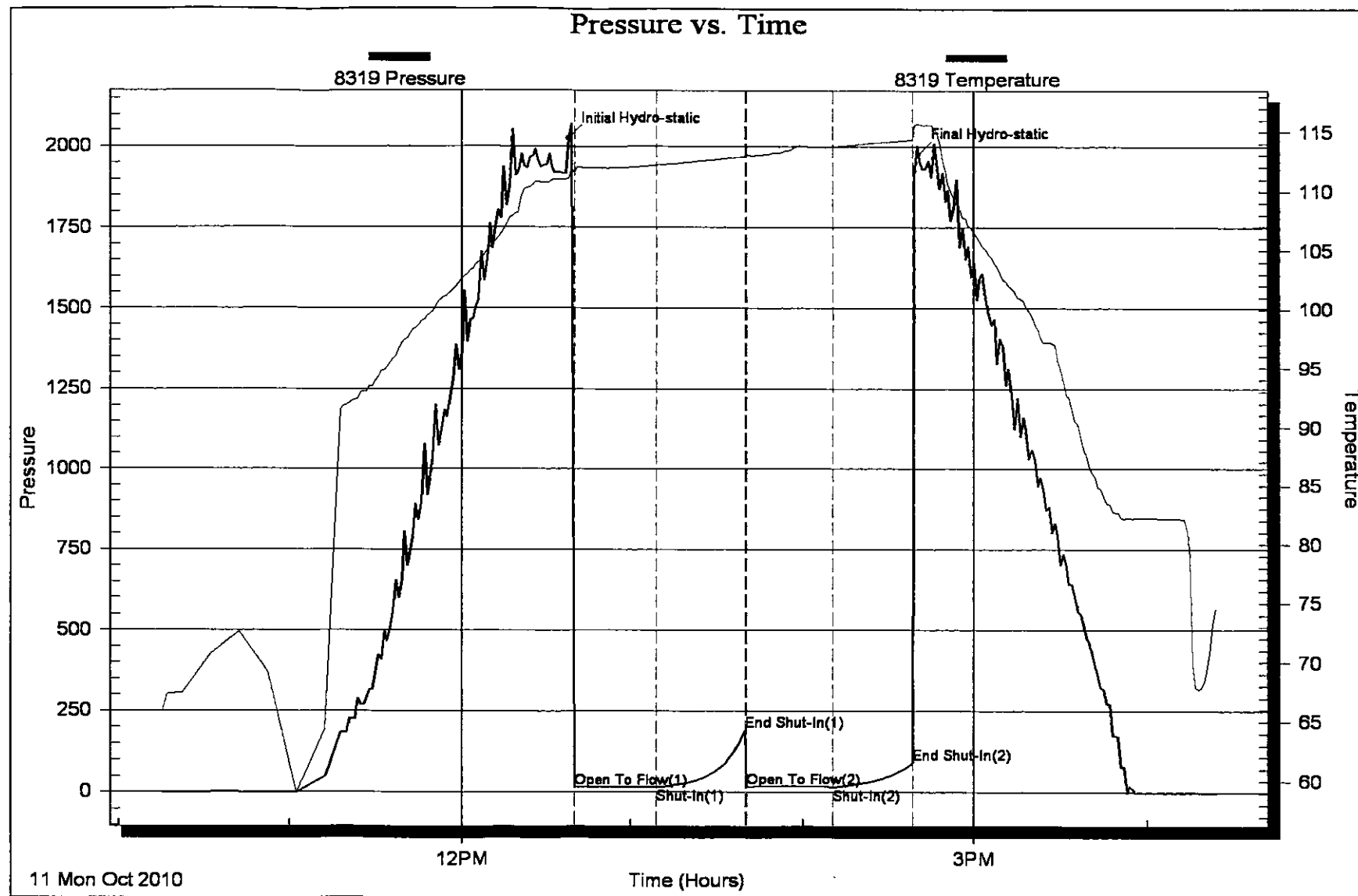
Num Gas Bombs: 0

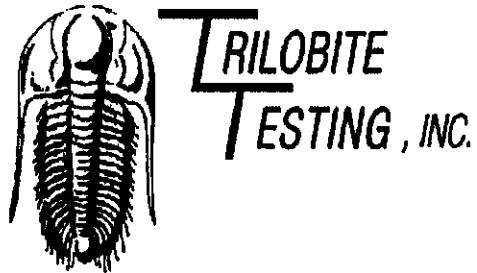
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove,Ks

Shipley-Hess 28CD #1

Start Date: 2010.10.11 @ 22:15:30

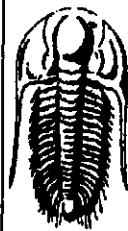
End Date: 2010.10.12 @ 04:29:30

Job Ticket #: 40420 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
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipleigh-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40420 **DST#: 4**
Test Start: 2010.10.11 @ 22:15:30

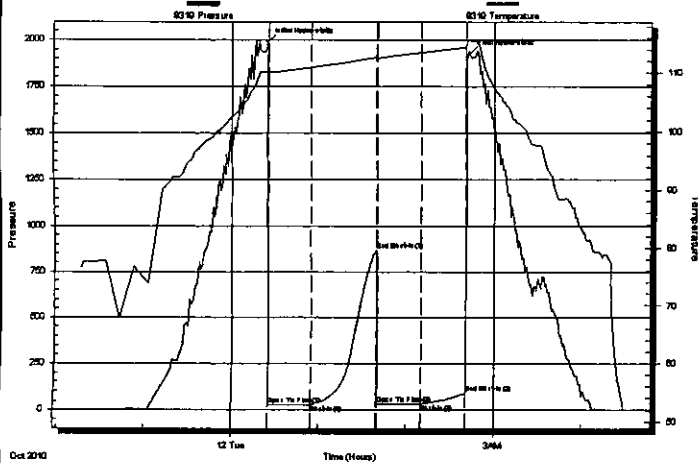
GENERAL INFORMATION:

Formation: **KC "I"**
Deviated: **No Whipstock:** **ft (KB)**
Time Tool Opened: **00:25:00**
Time Test Ended: **04:29:30**
Interval: **4052.00 ft (KB) To 4080.00 ft (KB) (TVD)**
Total Depth: **4080.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Brett Dickinson**
Unit No: **47**
Reference Elevations: **2825.00 ft (KB)**
2815.00 ft (CF)
KB to GR/CF: **10.00 ft**

Serial #: 8319 **Inside**
Press@RunDepth: **31.91 psig @ 4056.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.10.11** End Date: **2010.10.12** Last Calib.: **2010.10.12**
Start Time: **22:15:35** End Time: **04:29:29** Time On Btm: **2010.10.12 @ 00:24:00**
Time Off Btm: **2010.10.12 @ 02:42:30**

TEST COMMENT: IF-1in blow died back to a very weak surface blow
ISI-No blow
FF-No blow
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

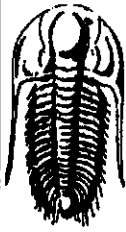
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1990.91	110.12	Initial Hydro-static
1	24.49	110.11	Open To Flow (1)
31	27.88	110.95	Shut-In(1)
75	869.31	112.62	End Shut-In(1)
76	29.70	112.49	Open To Flow (2)
106	31.91	113.47	Shut-In(2)
136	87.45	114.34	End Shut-In(2)
139	1926.46	115.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	VSOOM 5%O 95%M	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shibley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40420 **DST#: 4**
Test Start: 2010.10.11 @ 22:15:30

Tool Information

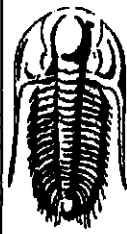
Drill Pipe:	Length: 3520.00 ft	Diameter: 3.80 inches	Volume: 49.38 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 67000.00 lb
Depth to Top Packer:	4052.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	48.00 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			4033.00	
Shut In Tool	5.00			4038.00	
Hydraulic tool	5.00			4043.00	
Packer	4.00			4047.00	20.00 Bottom Of Top Packer
Packer	5.00			4052.00	
Stubb	1.00			4053.00	
Perforations	3.00			4056.00	
Recorder	0.00	8319	Inside	4056.00	
Recorder	0.00	6719	Outside	4056.00	
Perforations	21.00			4077.00	
Bullnose	3.00			4080.00	28.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Shiple-Hess 28CD #1

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

28-13-31 Gove,Ks

Job Ticket: 40420

DST#: 4

ATTN: Tom Funk

Test Start: 2010.10.11 @ 22:15:30

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	VSOCM 5%O 95%M	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

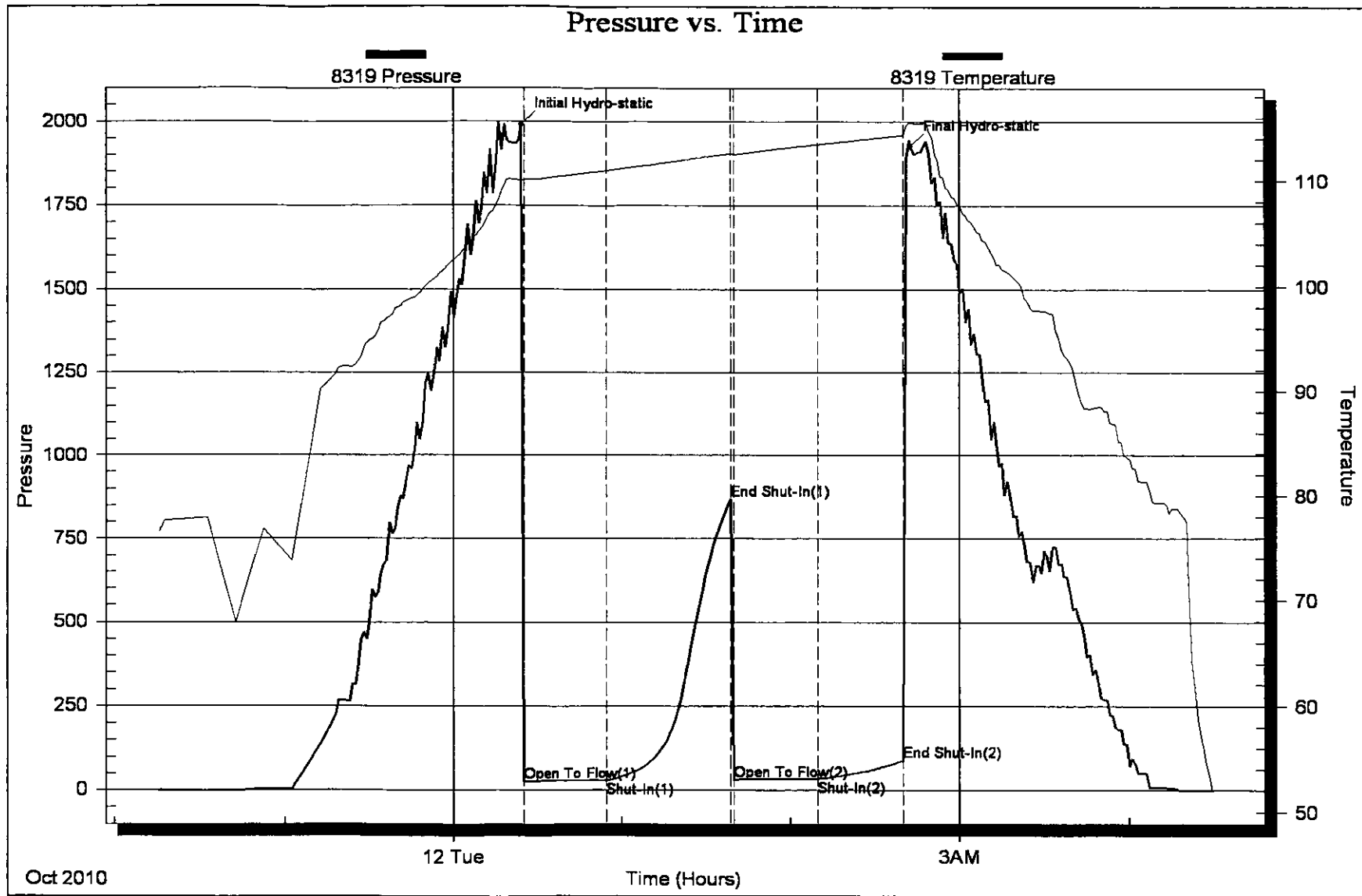
Num Gas Bombs: 0

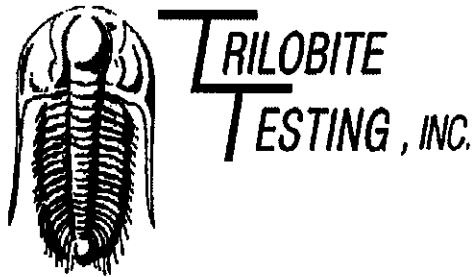
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove,Ks

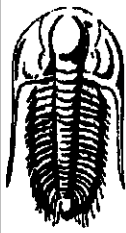
Shipley-Hess 28CD #1

Start Date: 2010.10.12 @ 18:27:14

End Date: 2010.10.13 @ 02:43:44

Job Ticket #: 40421 DST #: 5

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

Shiple-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40421

DST#: 5

ATTN: Tom Funk

Test Start: 2010.10.12 @ 18:27:14

GENERAL INFORMATION:

Formation: **KC"J,K,L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:32:44

Time Test Ended: 02:43:44

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: **4075.00 ft (KB) To 4195.00 ft (KB) (TVD)**

Reference Elevations: 2825.00 ft (KB)

Total Depth: 4195.00 ft (KB) (TVD)

2815.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8319

Inside

Press@RunDepth: 176.18 psig @ 4080.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.10.12

End Date:

2010.10.13

Last Calib.:

2010.10.13

Start Time: 18:27:19

End Time:

02:43:43

Time On Btm:

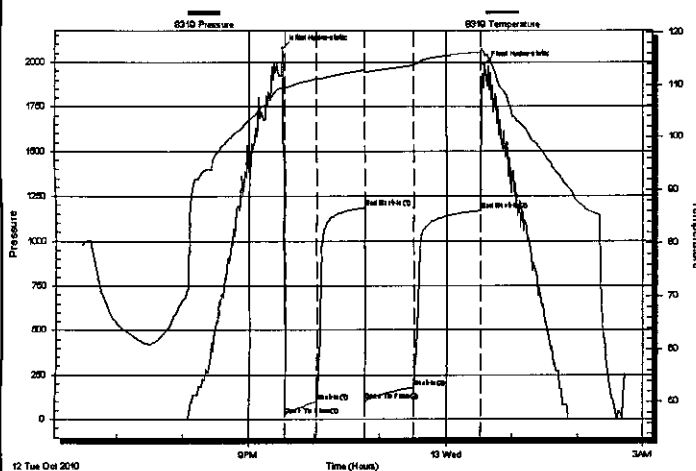
2010.10.12 @ 21:30:44

Time Off Btm:

2010.10.13 @ 00:35:14

TEST COMMENT: IF-BOB in 22min
 IS-Very weak surface blow died in 17 min
 FF-BOB in 29min
 FSI-Very weak surface blow died in 21 min

Pressure vs. Time



PRESSURE SUMMARY

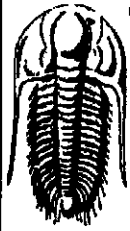
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2076.72	109.52	Initial Hydro-static
2	22.46	109.45	Open To Flow (1)
31	98.38	111.10	Shut-In(1)
75	1184.77	112.83	End Shut-In(1)
76	101.28	112.55	Open To Flow (2)
120	176.18	113.79	Shut-In(2)
181	1168.57	116.19	End Shut-In(2)
185	1986.74	115.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
190.00	GOCM 30%G 10%O 60%M	0.93
155.00	VGOCM 50%G 15%O 35%M	0.76
70.00	SGO 10%G 90%O	0.34
0.00	215ft GIP	0.00

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40421 DST#: 5
Test Start: 2010.10.12 @ 18:27:14

Tool Information

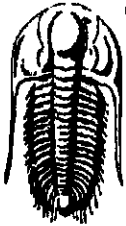
Drill Pipe:	Length: 3520.00 ft	Diameter: 3.80 inches	Volume: 49.38 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4075.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	120.00 ft			
Tool Length:	140.00 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			4056.00	
Shut In Tool	5.00			4061.00	
Hydraulic tool	5.00			4066.00	
Packer	4.00			4070.00	20.00 Bottom Of Top Packer
Packer	5.00			4075.00	
Stubb	1.00			4076.00	
Perforations	4.00			4080.00	
Recorder	0.00	8319	Inside	4080.00	
Recorder	0.00	6719	Outside	4080.00	
Change Over Sub	1.00			4081.00	
Drill Pipe	95.00			4176.00	
Change Over Sub	1.00			4177.00	
Perforations	15.00			4192.00	
Bullnose	3.00			4195.00	120.00 Bottom Packers & Anchor

Total Tool Length: 140.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

Shiple-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40421

DST#: 5

ATTN: Tom Funk

Test Start: 2010.10.12 @ 18:27:14

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.96 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 bbf
190.00	GOCM 30%G 10%O 60%M	0.934
155.00	VGOCM 50%G 15%O 35%M	0.762
70.00	SGO 10%G 90%O	0.344
0.00	215ft GIP	0.000

Total Length: 415.00 ft

Total Volume: 2.040 bbf

Num Fluid Samples: 0

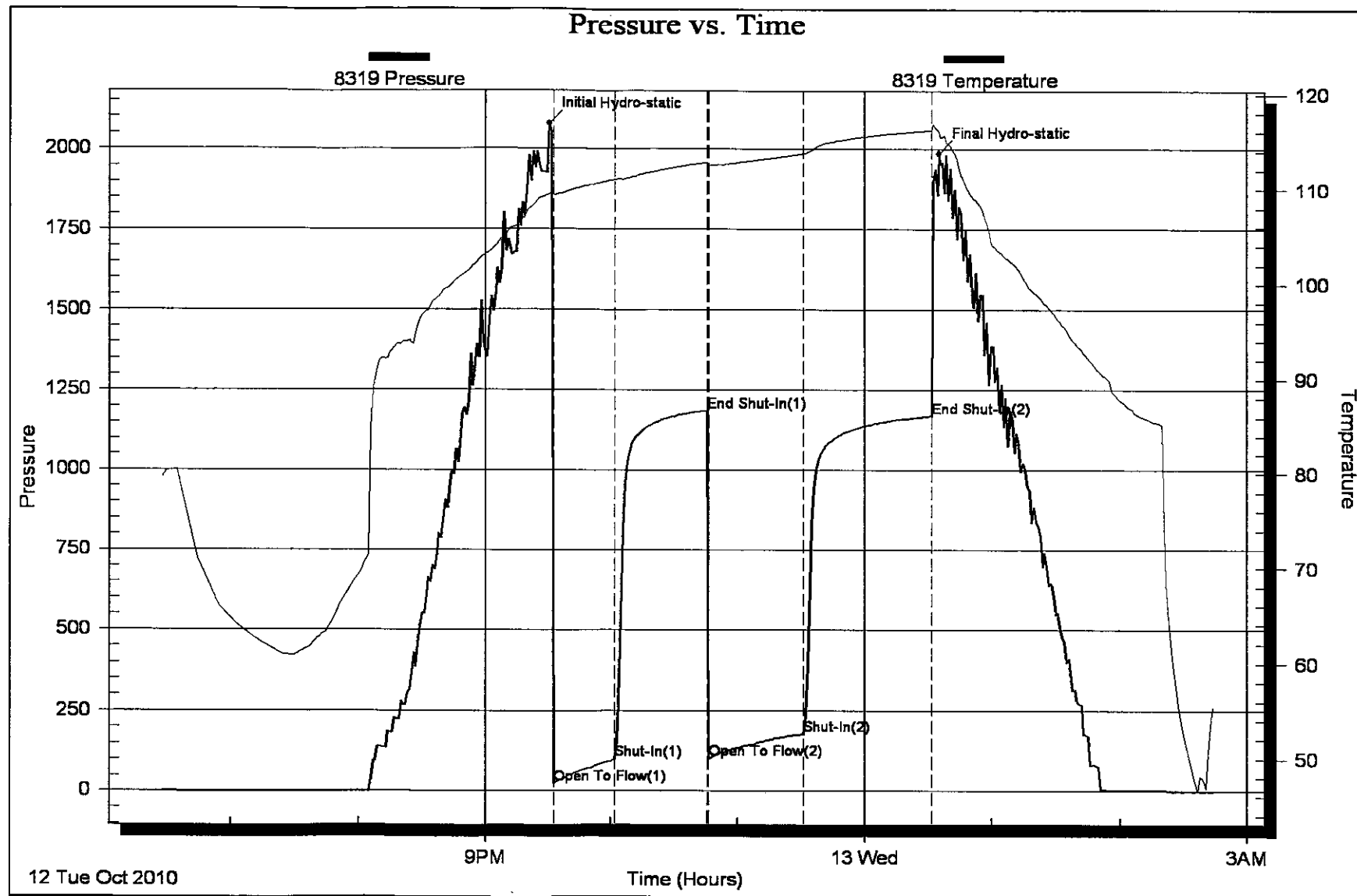
Num Gas Bombs: 0

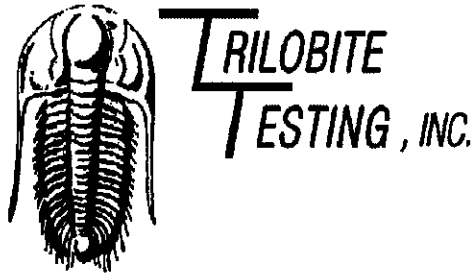
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove,Ks

ShIPLEY-Hess 28CD #1

Start Date: 2010.10.13 @ 19:00:28

End Date: 2010.10.14 @ 01:13:28

Job Ticket #: 40422 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Ritchie Exploration

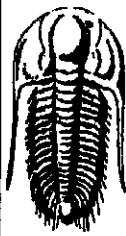
ShIPLEY-Hess 28CD #1

28-13-31 Gove,Ks

DST # 6

Myrick statin, Ft sc

2010.10.13



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40422 DST#: 6
Test Start: 2010.10.13 @ 19:00:28

Tool Information

Drill Pipe:	Length: 3774.00 ft	Diameter: 3.80 inches	Volume: 52.94 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 69000.00 lb
Depth to Top Packer:	4321.00 ft			Final 69000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	84.00 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			4302.00	
Shut In Tool	5.00			4307.00	
Hydraulic tool	5.00			4312.00	
Packer	4.00			4316.00	20.00 Bottom Of Top Packer
Packer	5.00			4321.00	
Stubb	1.00			4322.00	
Perforations	5.00			4327.00	
Recorder	0.00	8319	Inside	4327.00	
Recorder	0.00	6719	Outside	4327.00	
Change Over Sub	1.00			4328.00	
Drill Pipe	32.00			4360.00	
Change Over Sub	1.00			4361.00	
Perforations	21.00			4382.00	
Bullnose	3.00			4385.00	64.00 Bottom Packers & Anchor

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40422 **DST#: 6**
Test Start: 2010.10.13 @ 19:00:28

Mud and Cushion Information

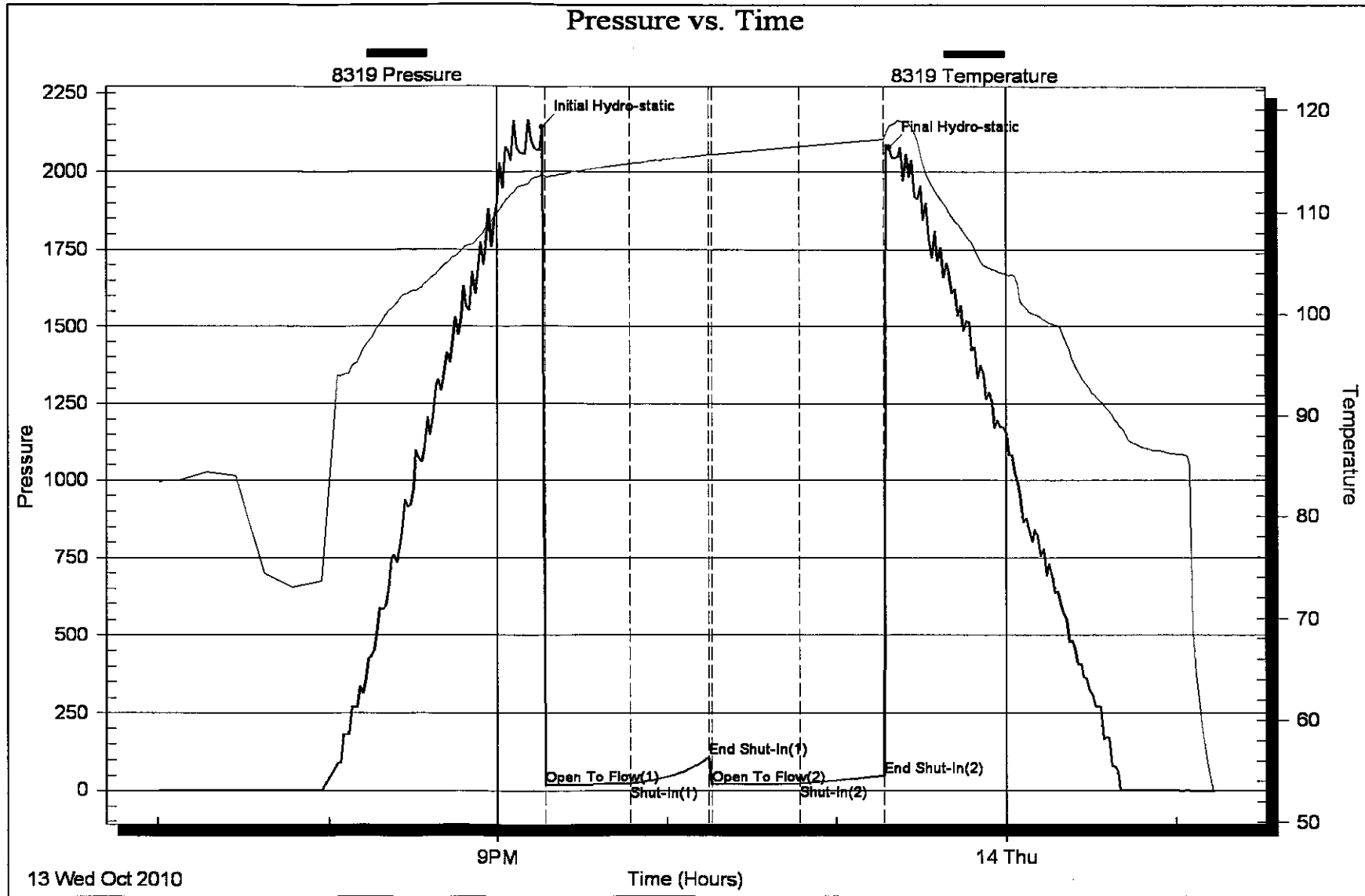
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Oilspotted 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**

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

ATTN: Tom Funk

28-13-31 Gove, Ks

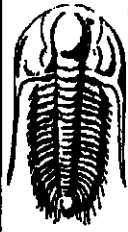
Shipley-Hess 28CD #1

Start Date: 2010.10.14 @ 10:03:38

End Date: 2010.10.14 @ 18:59:08

Job Ticket #: 40423 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
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

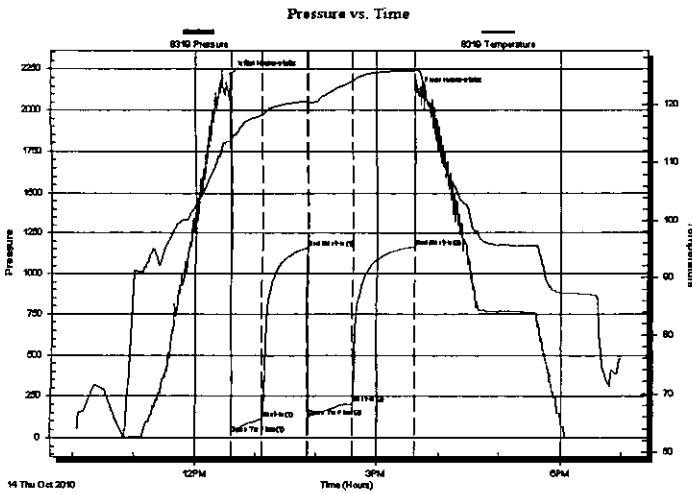
Shiple-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40423 DST#: 7
Test Start: 2010.10.14 @ 10:03:38

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:36:38
Time Test Ended: 18:59:08
Interval: **4406.00 ft (KB) To 4438.00 ft (KB) (TVD)**
Total Depth: **4438.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: Fair
Reference Elevations: **2825.00 ft (KB)**
2815.00 ft (CF)
KB to GR/CF: **10.00 ft**

Serial #: 8319 **Inside**
Press@RunDepth: **204.99 psig @ 4410.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2010.10.14** End Date: **2010.10.14**
Start Time: **10:03:43** End Time: **18:59:08**
Time On Btm: **2010.10.14 @ 12:36:08**
Time Off Btm: **2010.10.14 @ 15:39:38**

TEST COMMENT: F-BOB in 13min
IS-1in blow died in 42min
FF-BOB in 13min
FSI-7in blow died back to 6.5in blow



PRESSURE SUMMARY

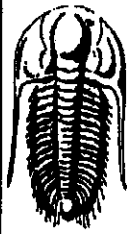
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2217.27	113.80	Initial Hydro-static
1	23.39	113.20	Open To Flow (1)
31	113.40	118.18	Shut-In(1)
76	1160.29	120.56	End Shut-In(1)
76	123.38	120.20	Open To Flow (2)
120	204.99	123.98	Shut-In(2)
180	1166.96	125.82	End Shut-In(2)
184	2117.85	125.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	VGMCO 40%G 10%M 50%O	0.47
190.00	GMCO 25%G 20%M 55%O	0.93
265.00	GO 20%G 80%O	1.39
0.00	655ft GP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

Shipley-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40423

DST#: 7

ATTN: Tom Funk

Test Start: 2010.10.14 @ 10:03:38

Tool Information

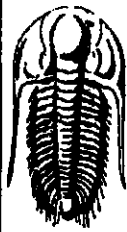
Drill Pipe:	Length: 3868.00 ft	Diameter: 3.80 inches	Volume: 54.26 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4406.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	52.00 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			4387.00	
Shut In Tool	5.00			4392.00	
Hydraulic tool	5.00			4397.00	
Packer	4.00			4401.00	20.00 Bottom Of Top Packer
Packer	5.00			4406.00	
Stubb	1.00			4407.00	
Perforations	3.00			4410.00	
Recorder	0.00	8319	Inside	4410.00	
Recorder	0.00	6719	Outside	4410.00	
Perforations	25.00			4435.00	
Bullnose	3.00			4438.00	32.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

ShIPLEY-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40423

DST#: 7

ATTN: Tom Funk

Test Start: 2010.10.14 @ 10:03:38

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
95.00	VGMCO 40%G 10%M 50%O	0.467
190.00	GMCO 25%G 20%M 55%O	0.934
265.00	GO 20%G 80%O	1.394
0.00	655ft GP	0.000

Total Length: 550.00 ft

Total Volume: 2.795 bbl

Num Fluid Samples: 0

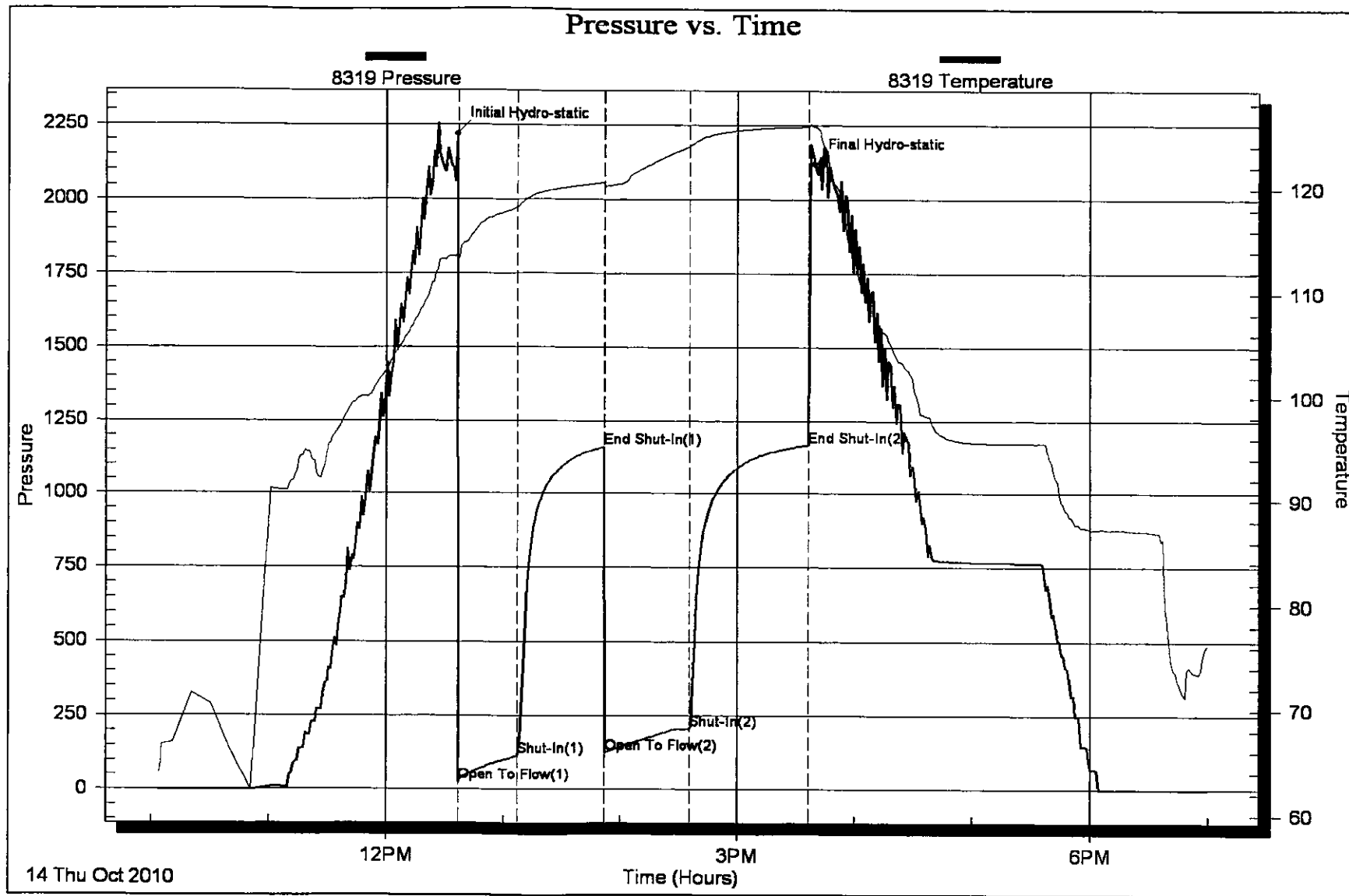
Num Gas Bombs: 0

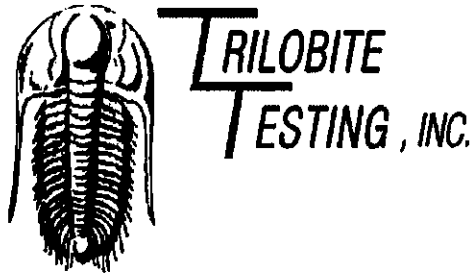
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

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

ATTN: Tom Funk

28-13-31 Gove, Ks

ShIPLEY-Hess 28CD #1

Start Date: 2010.10.15 @ 03:01:21

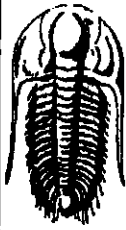
End Date: 2010.10.15 @ 09:25:51

Job Ticket #: 40424 DST #: 8

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

Shiple-Hess 28CD #1

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

28-13-31 Gove, Ks

Job Ticket: 40424

DST#: 8

ATTN: Tom Funk

Test Start: 2010.10.15 @ 03:01:21

GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:18:21

Time Test Ended: 09:25:51

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: **4438.00 ft (KB) To 4469.00 ft (KB) (TVD)**

Reference Elevations: 2825.00 ft (KB)

Total Depth: **4469.00 ft (KB) (TVD)**

2815.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8319

Inside

Press@RunDepth: 27.60 psig @ 4442.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.10.15

End Date:

2010.10.15

Last Calib.:

2010.10.15

Start Time: 03:01:26

End Time:

09:25:50

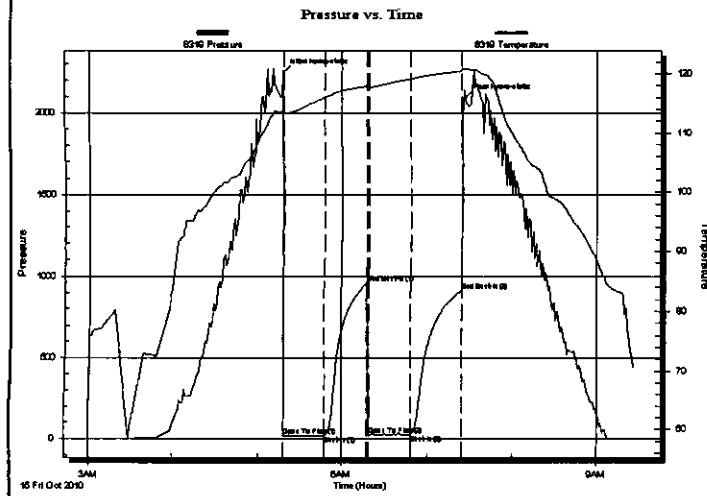
Time On Btm:

2010.10.15 @ 05:17:51

Time Off Btm:

2010.10.15 @ 07:26:51

TEST COMMENT: IF-No blow
IS-No blow
FF-No blow
FSI-No blow



PRESSURE SUMMARY

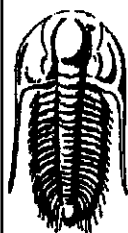
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2249.88	113.79	Initial Hydro-static
1	16.33	113.44	Open To Flow (1)
30	21.13	116.00	Shut-In(1)
60	957.44	117.92	End Shut-In(1)
61	22.46	117.71	Open To Flow (2)
91	27.60	119.12	Shut-In(2)
126	909.44	120.42	End Shut-In(2)
129	2093.07	120.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	VSOCM 5%O 95%M	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

ShIPLEY-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40424 DST#: 8
Test Start: 2010.10.15 @ 03:01:21

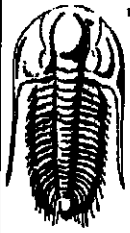
Tool Information

Drill Pipe:	Length: 3902.00 ft	Diameter: 3.80 inches	Volume: 54.73 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4438.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	52.00 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			4419.00	
Shut In Tool	5.00			4424.00	
Hydraulic tool	5.00			4429.00	
Packer	4.00			4433.00	20.00 Bottom Of Top Packer
Packer	5.00			4438.00	
Stubb	1.00			4439.00	
Perforations	3.00			4442.00	
Recorder	0.00	8319	Inside	4442.00	
Recorder	0.00	6719	Outside	4442.00	
Perforations	25.00			4467.00	
Bullnose	3.00			4470.00	32.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration
8100 E 22nd St. N #700
Wichita KS 67278
ATTN: Tom Funk

Shipley-Hess 28CD #1
28-13-31 Gove, Ks
Job Ticket: 40424 DST#: 8
Test Start: 2010.10.15 @ 03:01:21

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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2400.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	VSOCM 5%O 95%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:

