



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1195686
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

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

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1195686

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift 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 <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Schwerdt 1-2
Doc ID	1195686

Tops

Name	Top	Datum
Anhydrite (top)	3108	+74
Anhydrite (base)	3148	+34
Neva	3592	-410
Foraker	3704	-522
Wabaunsee	3868	-686
Topeka	3916	-734
Deer Creek Sand	3952	-770
Oread	4025	-843
Heebner	4098	-916
Lansing/KS City A	4132	-950
LKC B	4186	-1004
LKC C	4240	-1058
LKC D	4290	-1108
LKC E	4328	-1146
LKC F	4378	-1196
Pawnee	4543	-1361
Cherokee	4578	-1396
RTD	4628	
LTD	4620	-1438

WELL FILE

ALLIED OIL & GAS SERVICES, LLC 061395

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Dakota, KS

DATE <u>1-7-14</u>	SEC. <u>2</u>	TWP. <u>15</u>	RANGE <u>36W</u>	CALLED OUT	ON LOCATION <u>622009</u>	JOB START <u>7:30AM</u>	JOB FINISH <u>9:00AM</u>
LEASE <u>Schwartz</u>	WELL # <u>1-2</u>	LOCATION <u>Beardley, N 70 PPA A W 20th 7</u>			COUNTY <u>Rawlins</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Boreco 20002

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 308

CASING SIZE 8 5/8 DEPTH 308

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15'

PERFS. _____

DISPLACEMENT 18 1/2

OWNER Demo

CEMENT

AMOUNT ORDERED 225 sks com 3% cc

2% gel

COMMON	<u>225 sks @ 17.00</u>	<u>4027.50</u>
POZMIX	@	
GEL	<u>4 sks @ 23.00</u>	<u>93.00</u>
CHLORIDE	<u>8 sks @ 64.00</u>	<u>512.00</u>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	<u>243.30 skt @ 2.50</u>	<u>608.25</u>
MILEAGE	<u>11.10 Tex 150 x 2.50</u>	<u>1443.00</u>
		TOTAL <u>6679.75</u>

EQUIPMENT

PUMP TRUCK CEMENTER Kelly, John Q

431 HELPER Wayne

BULK TRUCK

818+287 DRIVER Juan James (TWS)

BULK TRUCK

_____ DRIVER _____

REMARKS:

Hooked up to circulate
mixed 225 sks com 3% cc 2% gel
displaced with 18 1/2 bbl water
shut in

Cement did circulate

Thank You
Kelly & crew

SERVICE

DEPTH OF JOB	<u>308</u>
PUMP TRUCK CHARGE	<u>1512.25</u>
EXTRA FOOTAGE	@
MILEAGE <u>MILV 50</u>	@ <u>7.70</u> <u>385.00</u>
MANIFOLD <u>Head</u>	@ <u>27.00</u> <u>NC</u>
<u>MILV 50</u>	@ <u>44.00</u> <u>NC</u>
	@
TOTAL <u>1897.25</u>	

CHARGE TO: Boreco

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

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

To: Allied Oil & Gas Services, 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.

SALES TAX (If Any) _____

TOTAL CHARGES 8,576.73

DISCOUNT 2,401.48 IF PAID IN 30 DAYS

6,175.24 Net

PRINTED NAME Craig Weeks

SIGNATURE Craig Weeks



CEMENTING LOG

STAGE NO.

Date 1-7-14 District Madison Ticket No. 61395
Company Barocco Rig Barocco #102
Lease Schwenger-Schwerdt Well No. 1-2
County Pawnee State KS
Location Beardslay N 10 R 4A
6370 Rd 7 2 1/2 W Winto c

CEMENT DATA:
Spacer Type: Water
Amt. 56bl Sks Yield 46224 ft^3/sk Density 152 PPG

CASING DATA: Conductor PTA Squeeze Misc Surface Intermediate Production Liner
Size 8 5/8 Type New Weight 34# Collar

LEAD: Pump Time hrs. Type Excess
Amt. 265 Sks Yield 11344 ft^3/sk Density 152 PPG
TAIL: Pump Time hrs. Type Excess
Amt. Sks Yield ft^3/sk Density PPG
WATER: Lead gals/sk Tail gals/sk Total Bbls.

Casing Depths: Top Ground level Bottom 308

Pump Trucks Used 431
Bulk Equip. 8184287

Drill Pipe: Size Weight Collars
Open Hole: Size T.D. ft. P.B. to ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. 10637 Lin. ft./Bbl.
Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.
Drill Pipe: Bbls/Lin. ft. Lin. ft./Bbl.
Annulus: Bbls/Lin. ft. Lin. ft./Bbl.
Perforations: From ft. to ft. Amt.

Float Equip: Manufacturer
Shoe: Type Depth
Float: Type Depth
Centralizers: Quantity Plugs Top Btm.
Stage Collars
Special Equip.
Disp. Fluid Type Amt. Bbls. Weight PPG
Mud Type Weight PPG

COMPANY REPRESENTATIVE CEMENTER

Table with columns: TIME, PRESSURES PSI (DRILL PIPE CASING, ANNULUS), FLUID PUMPED DATA (TOTAL FLUID, Pumped Per Time Period, RATE Bbls Min.), REMARKS. Includes handwritten notes: 'got to location', 'hooked up to circulate', 'mixed 265 lbs from 3+2 displaced with water', 'shut in'.

ALLIED OIL & GAS SERVICES, LLC 061449

Federal Tax I.D. # 20-8661475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley KS
(1-21-14)

DATE <u>1-20-14</u>	SEC. <u>2</u>	TWP. <u>1</u>	RANGE <u>36</u>	CALLED OUT	ON LOCATION <u>7:00pm.</u>	JOB START <u>11:00am</u>	JOB FINISH <u>12:00am.</u>
LEASE <u>Schwardt</u>	WELL# <u>1-2</u>	LOCATION <u>Beardsley 1st to Art 1st to Rd 7</u>	COUNTY <u>Rawlins</u>	STATE <u>KS</u>			
OLD OR <u>(NEW)</u> (Circle one)		<u>4 N W, W, N, W, N into</u>					

CONTRACTOR Berexco 2

TYPE OF JOB Production (long string)

HOLE SIZE <u>7 7/8</u>	T.D. <u>4625'</u>
CASING SIZE <u>4 1/2</u>	DEPTH <u>4523'</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT <u>43.60</u>
CEMENT LEFT IN CSG. <u>43.50'</u>	
PERFS.	
DISPLACEMENT <u>69.43 bbl water</u>	

OWNER Same

CEMENT

AMOUNT ORDERED 350 sks Lite 3/4 #

Flo-seal, 200 sks Com. 10% salt, 2% gel, 4# Gilsomite

COMMON	<u>200</u>	@ <u>17.90</u>	<u>3580.00</u>
POZMIX		@	
GEL		@	
CHLORIDE		@	
Life <u>Life</u>	<u>350</u>	@ <u>15.90</u>	<u>5565.00</u>
<u>Salt</u>	<u>20 sks</u>	@ <u>26.35</u>	<u>527.00</u>
<u>Gel</u>	<u>4 sks</u>	@ <u>23.40</u>	<u>93.60</u>
<u>Gilsomite</u>	<u>800 #</u>	@ <u>.98</u>	<u>784.00</u>
<u>Flo-seal</u>	<u>262 #</u>	@ <u>2.97</u>	<u>778.14</u>
HANDLING <u>604.42 ft³</u>	@ <u>2.48</u>		<u>1498.96</u>
MILEAGE <u>26.89 hours 50 mix 2.60</u>			<u>3495.70</u>
TOTAL			<u>16322.40</u>

EQUIPMENT

PUMP TRUCK	CEMENTER <u>Paul Beaver</u>
# <u>120</u>	HELPER <u>Tyler Flipse</u>
BULK TRUCK	
# <u>5166</u>	DRIVER <u>Brandon Wilkinson</u>
BULK TRUCK	
# <u>600</u>	DRIVER <u>Juan 2 (JWS)</u>

REMARKS:

Break circ. Drop ball, ball went through shoe @ 400', circ 1 hr, mix 30 sks in P.H. mix 20 sks to m.H. mix 300 sks lite failed by 200 sks com down casing, shutdown, wash up lines into pit, Displace w/ water plug did land @ 1600' w/ 1100# lift pressure Cement did not circulate. Thank You!

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			<u>2765.75</u>
EXTRA FOOTAGE		@	
MILEAGE <u>milv</u>	<u>50</u>	@ <u>7.70</u>	<u>385.00</u>
MANIFOLD <u>Head</u>		@ <u>275</u>	<u>N/C</u>
<u>milv</u>	<u>50</u>	@ <u>4.40</u>	<u>N/C</u>
TOTAL			<u>3150.75</u>

CHARGE TO: Berexco LLC

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

Industrial Rubber 4 1/2

<u>DFU Float shoe</u>	@		<u>217.00</u>
<u>Latchdown plug Assy</u>	@		<u>155.00</u>
<u>Centralizers</u>	<u>10</u>	@ <u>35.00</u>	<u>350.00</u>
<u>Recip Scratchers</u>	<u>20</u>	@ <u>35.00</u>	<u>700.00</u>
TOTAL			<u>1422.00</u>

To: Allied Oil & Gas Services, 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.

SALES TAX (If Any) _____

TOTAL CHARGES 20,895.15

DISCOUNT 5,452.48 IF PAID IN 30 DAYS

15,442.66 Net.

PRINTED NAME _____

SIGNATURE Ed [Signature]

Date 1-20-14 District Oakley KS Ticket No. 061449
 Company Berexco LLC Rig Berexco 2
 Lease Schwerdt Well No. 1-2
 County Rawlins State KS
 Location 2-1-36 Field _____

CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size 4 1/2 Type New Weight 11.6# Collar _____

Casing Depths: Top KB Bottom 4,523'

Drill Pipe: Size _____ Weight _____ Collars _____
 Open Hole: Size 7 7/8 T.D. 4,625 ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing: Bbbs/Lin. ft. .0155 Lin. ft./Bbl. _____
 Open Holes: Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:

Spacer Type: _____
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG _____

LEAD: Pump Time _____ hrs. Type Lite 3/4#
Flo-seal Excess _____

Amt. 350 Sks Yield 1.76 ft³/sk Density 12.92 PPG _____

TAIL: Pump Time _____ hrs. Type Com 10% salt
2% gel, 4" Gilsomite Excess _____

Amt. 200 Sks Yield 1.49 ft³/sk Density 14.56 PPG _____

WATER: Lead 9.28 gals/sk Tail 6.7 gals/sk Total _____ Bbbs.

Pump Trucks Used 120 - Tyler
 Bulk Equip. 566 - Brandon
1000 - Juan 2 (TWS)

Float Equip: Manufacturer Industrial Rubber
 Shoe: Type AFU Floatshoe Depth 4,523'
 Float: Type Latchdog plug Assy Depth 4,472.50
 Centralizers: Quantity 10 Plugs Top _____ Btm. _____
 Stage Collars _____
 Special Equip. recpt. scratchers (20)
 Disp. Fluid Type water Amt. 69.43 Bbbs. Weight _____ PPG _____
 Mud Type _____ Weight _____ PPG _____

COMPANY REPRESENTATIVE _____

CEMENTER Paul Beaver

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbbs Min.	
11:00			6.63 bbl	6.63 bbl		Hold safety meeting run pipe / Float equip Break circ. / Drop ball Ball went through shoe @ 400# mix 30 sks lite in R.H. mix 20 sks lite in M.H. mix 300 sks lite @ 12.9# tail w/ 200sk Com @ 14.5# stop cement washup pump + lines to pit release plug Displace w/ water plug did land @ 1600 # 11.1 pressure 1100 # cement did not circulate Hold safety meeting Thank you.
			4.42 bbl	11.05 bbl		
			66.29 bbl	77.34 bbl		
			31.94 bbl	109.28 bbl		
			6.0 bbl	115.28 bbl		
			69.43 bbl	184.71 bbl		



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 55889

DST#: 1

ATTN: Pete Vollmer

Test Start: 2014.01.12 @ 09:38:00

GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:58:15

Time Test Ended: 22:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: 3990.00 ft (KB) To 4044.00 ft (KB) (TVD)

Reference Elevations: 3182.00 ft (KB)

Total Depth: 4044.00 ft (KB) (TVD)

3169.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8671

Inside

Press@RunDepth: 387.76 psig @ 3991.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.12

End Date: 2014.01.12

Last Calib.: 2014.01.12

Start Time: 09:38:05

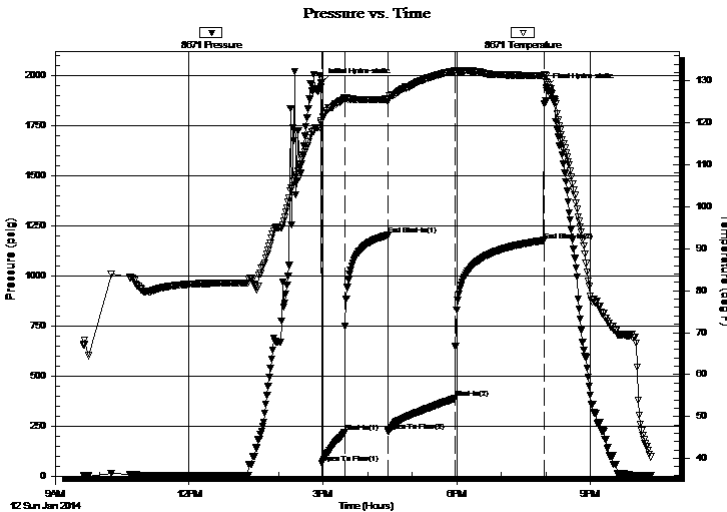
End Time: 22:21:00

Time On Btm: 2014.01.12 @ 14:57:45

Time Off Btm: 2014.01.12 @ 20:00:30

TEST COMMENT: 30 - IF: 3" Blow at open, built to BOB (11") in 16 1/2 min.
60 - IS: No blow back
90 - FF: Blow started at 2 min., built to BOB at 31 min.
120 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1963.85	120.46	Initial Hydro-static
1	62.80	120.41	Open To Flow (1)
32	218.47	125.93	Shut-In(1)
90	1202.52	125.65	End Shut-In(1)
90	223.00	125.03	Open To Flow (2)
181	387.76	132.37	Shut-In(2)
300	1175.87	131.25	End Shut-In(2)
303	1938.38	129.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
440.00	Water 93%w, 7%m	2.16
183.00	MCW 66%w, 34%m	1.76
93.00	WCM 65%m, 35%w	1.30
84.00	Mud 100%	1.18

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 55889

DST#: 1

ATTN: Pete Vollmer

Test Start: 2014.01.12 @ 09:38:00

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:

32000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
440.00	Water 93%w , 7%m	2.164
183.00	MCW 66%w , 34%m	1.756
93.00	WCM 65%m, 35%w	1.305
84.00	Mud 100%	1.178

Total Length: 800.00 ft Total Volume: 6.403 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

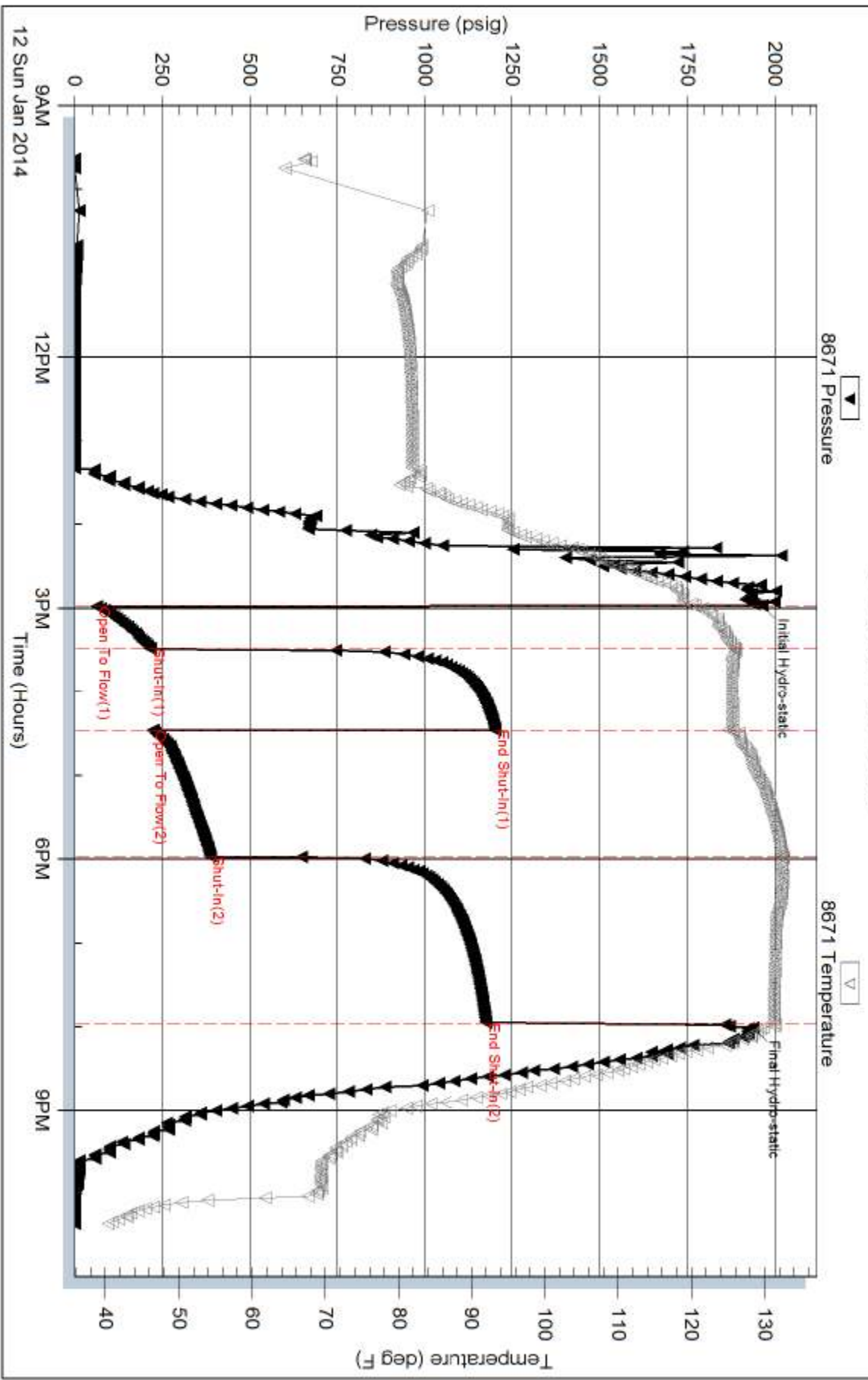
Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .390 ohsm @ 39.2 deg F

Chlorides = 32,000 ppm

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 55890

DST#: 2

ATTN: Pete Vollmer

Test Start: 2014.01.13 @ 11:31:00

GENERAL INFORMATION:

Formation: **LKC "A"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 13:39:45
 Tester: James Winder
 Time Test Ended: 21:04:15
 Unit No: 57
 Interval: **4090.00 ft (KB) To 4170.00 ft (KB) (TVD)**
 Reference Elevations: 3182.00 ft (KB)
 Total Depth: 4170.00 ft (KB) (TVD)
 3169.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 13.00 ft

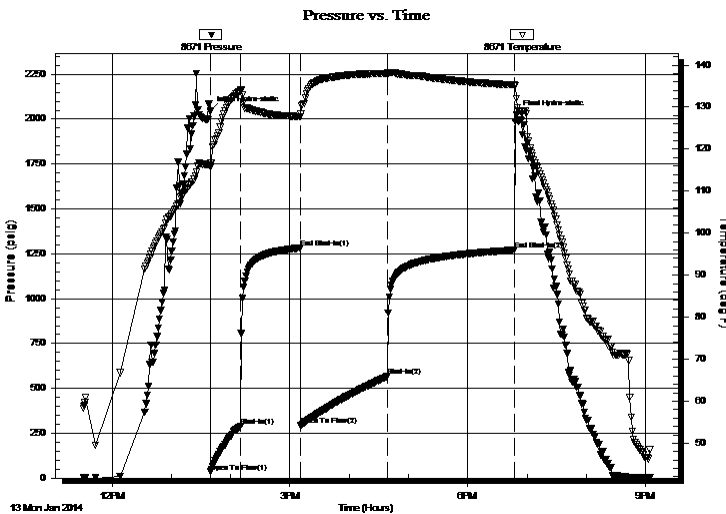
Serial #: 8671

Inside

Press @ Run Depth: 566.75 psig @ 4091.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.13 End Date: 2014.01.13 Last Calib.: 2014.01.13
 Start Time: 11:31:05 End Time: 21:04:15 Time On Btm: 2014.01.13 @ 13:39:30
 Time Off Btm: 2014.01.13 @ 18:49:15

TEST COMMENT: 30 - IF: 1" Blow at open, built to BOB (11") in 9 1/2 min.
 60 - IS: No blow back
 90 - FF: Blow built to BOB in 13 min.
 120 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2047.87	116.60	Initial Hydro-static
1	34.96	115.67	Open To Flow (1)
31	287.26	133.78	Shut-In(1)
91	1282.65	127.74	End Shut-In(1)
92	293.93	128.37	Open To Flow (2)
179	566.75	137.98	Shut-In(2)
308	1269.95	135.25	End Shut-In(2)
310	2022.64	132.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
905.00	Water 97%w , 3%m	7.88
295.00	MCW 70%w , 30%m	4.14

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 55890

DST#: 2

ATTN: Pete Vollmer

Test Start: 2014.01.13 @ 11:31:00

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:

25000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
905.00	Water 97%w , 3%m	7.876
295.00	MCW 70%w , 30%m	4.138

Total Length: 1200.00 ft Total Volume: 12.014 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

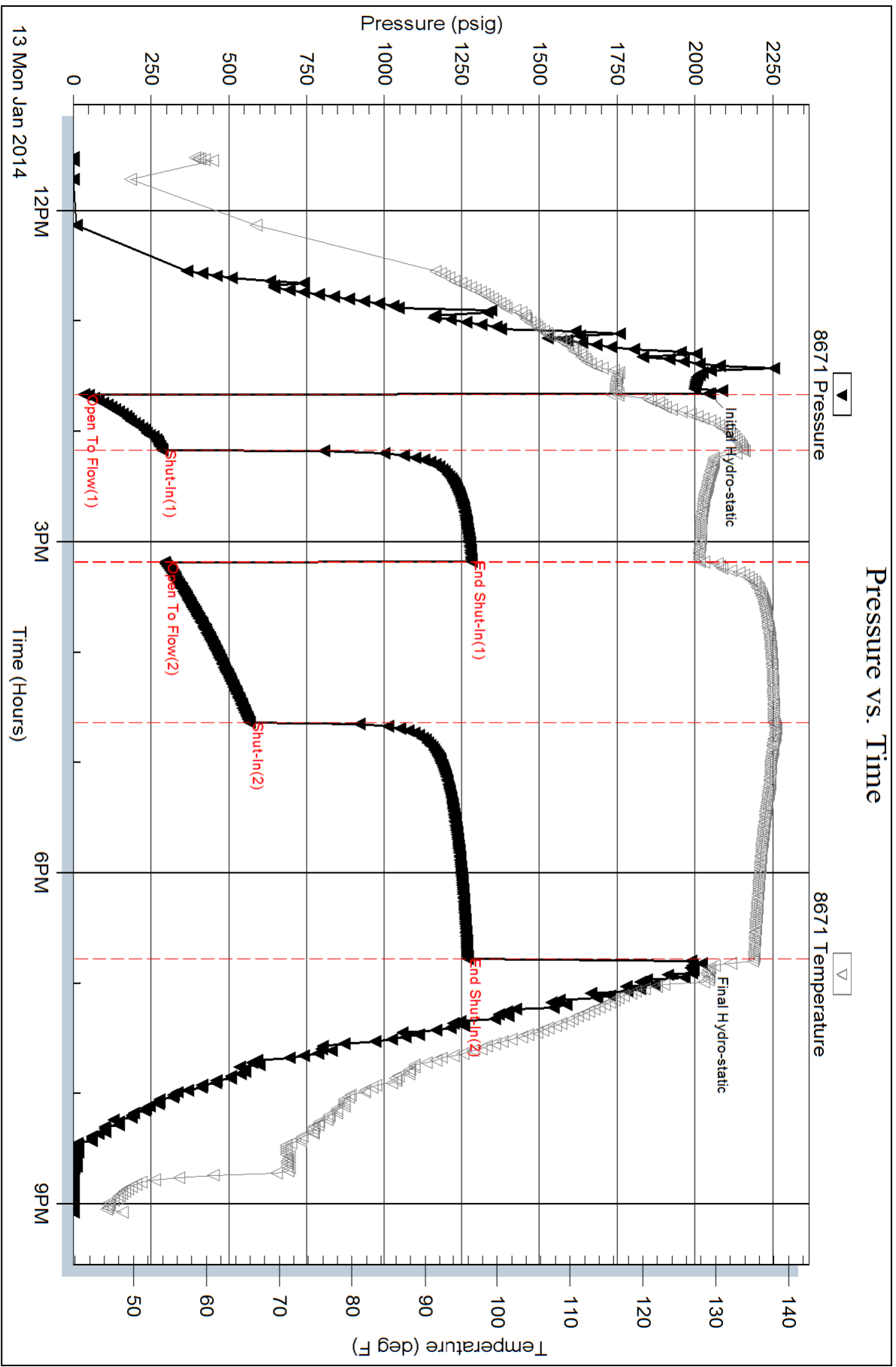
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .409 ohms @ 46.7 deg F

Chlorides = 25,000 ppm





TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 55891

DST#: 3

ATTN: Pete Vollmer

Test Start: 2014.01.14 @ 06:35:00

GENERAL INFORMATION:

Formation: **LKC "B"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 08:56:15
 Tester: James Winder
 Time Test Ended: 16:23:30
 Unit No: 57
 Interval: **4150.00 ft (KB) To 4210.00 ft (KB) (TVD)**
 Reference Elevations: 3182.00 ft (KB)
 Total Depth: 4210.00 ft (KB) (TVD)
 3169.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 13.00 ft

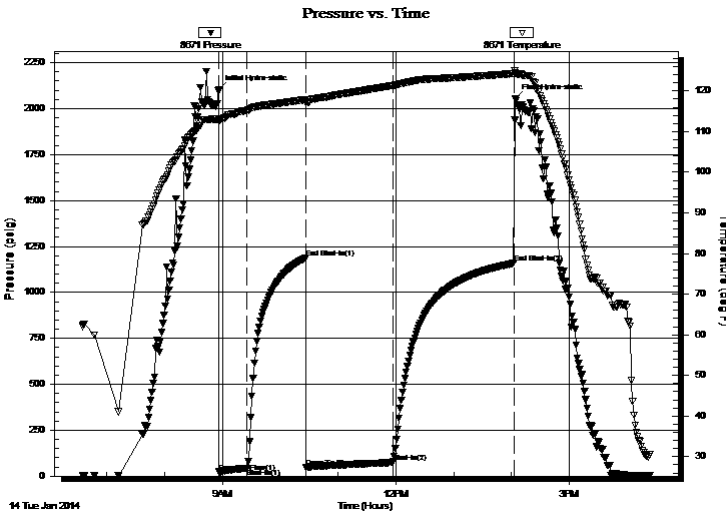
Serial #: 8671

Inside

Press@RunDepth: 74.41 psig @ 4151.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.14 End Date: 2014.01.14 Last Calib.: 2014.01.14
 Start Time: 06:35:05 End Time: 16:23:30 Time On Btm: 2014.01.14 @ 08:56:00
 Time Off Btm: 2014.01.14 @ 14:04:00

TEST COMMENT: 30 - IF: Blow built to 1 1/4"
 60 - ISI: No blow back
 90 - FF: No blow
 120 - FSI: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2100.98	113.13	Initial Hydro-static
1	23.35	112.53	Open To Flow (1)
30	43.71	115.18	Shut-In(1)
91	1188.50	117.85	End Shut-In(1)
91	48.27	117.17	Open To Flow (2)
181	74.41	121.33	Shut-In(2)
307	1158.96	124.27	End Shut-In(2)
308	2052.67	124.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
92.00	WCM w/trace oil 90% m, 10% w	0.45
60.00	Mud w/trace oil	0.30

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 55891

DST#: 3

ATTN: Pete Vollmer

Test Start: 2014.01.14 @ 06:35:00

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: 75.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
92.00	WCM w /trace oil 90%m, 10%w	0.452
60.00	Mud w /trace oil	0.295

Total Length: 152.00 ft Total Volume: 0.747 bbl

Num Fluid Samples: 0

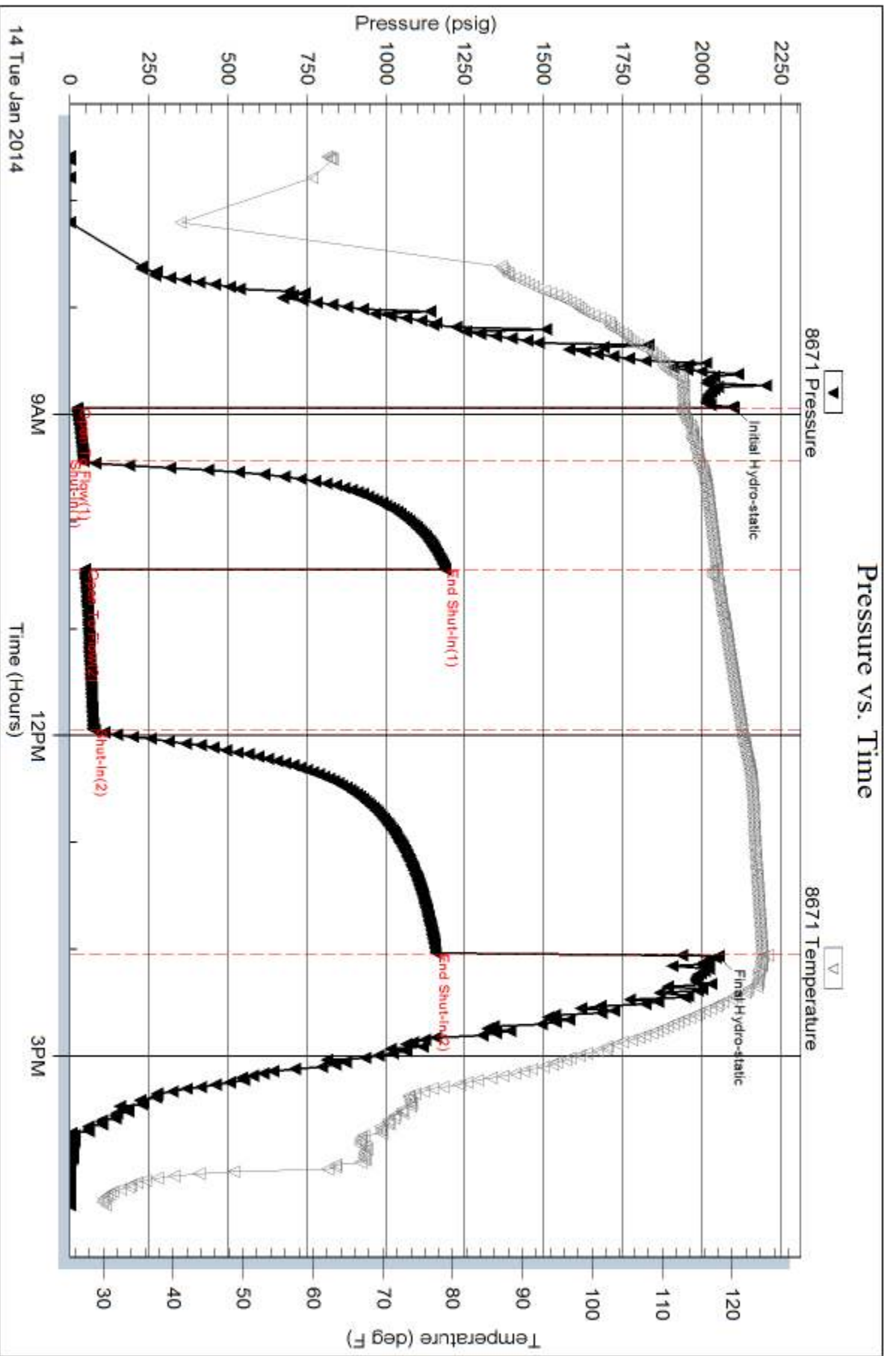
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56682

DST#: 4

ATTN: Pete Vollmer

Test Start: 2014.01.15 @ 01:25:00

GENERAL INFORMATION:

Formation: **KCL " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:31:00

Time Test Ended: 07:37:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob hamel

Unit No: 57

Interval: **4188.00 ft (KB) To 4250.00 ft (KB) (TVD)**

Total Depth: 4250.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3182.00 ft (KB)

3169.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8671

Inside

Press@RunDepth: psig @ 4225.00 ft (KB)

Start Date: 2014.01.15

End Date:

2014.01.15

Capacity: 8000.00 psig

Last Calib.:

1899.12.30

Start Time: 01:25:05

End Time:

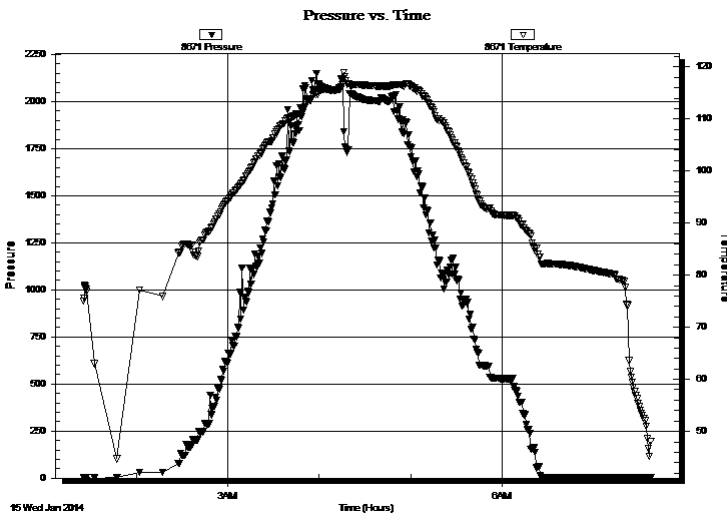
07:37:44

Time On Btm:

Time Off Btm:

TEST COMMENT: Packer failure...

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56682

DST#: 4

ATTN: Pete Vollmer

Test Start: 2014.01.15 @ 01:25:00

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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl

Total Length: ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

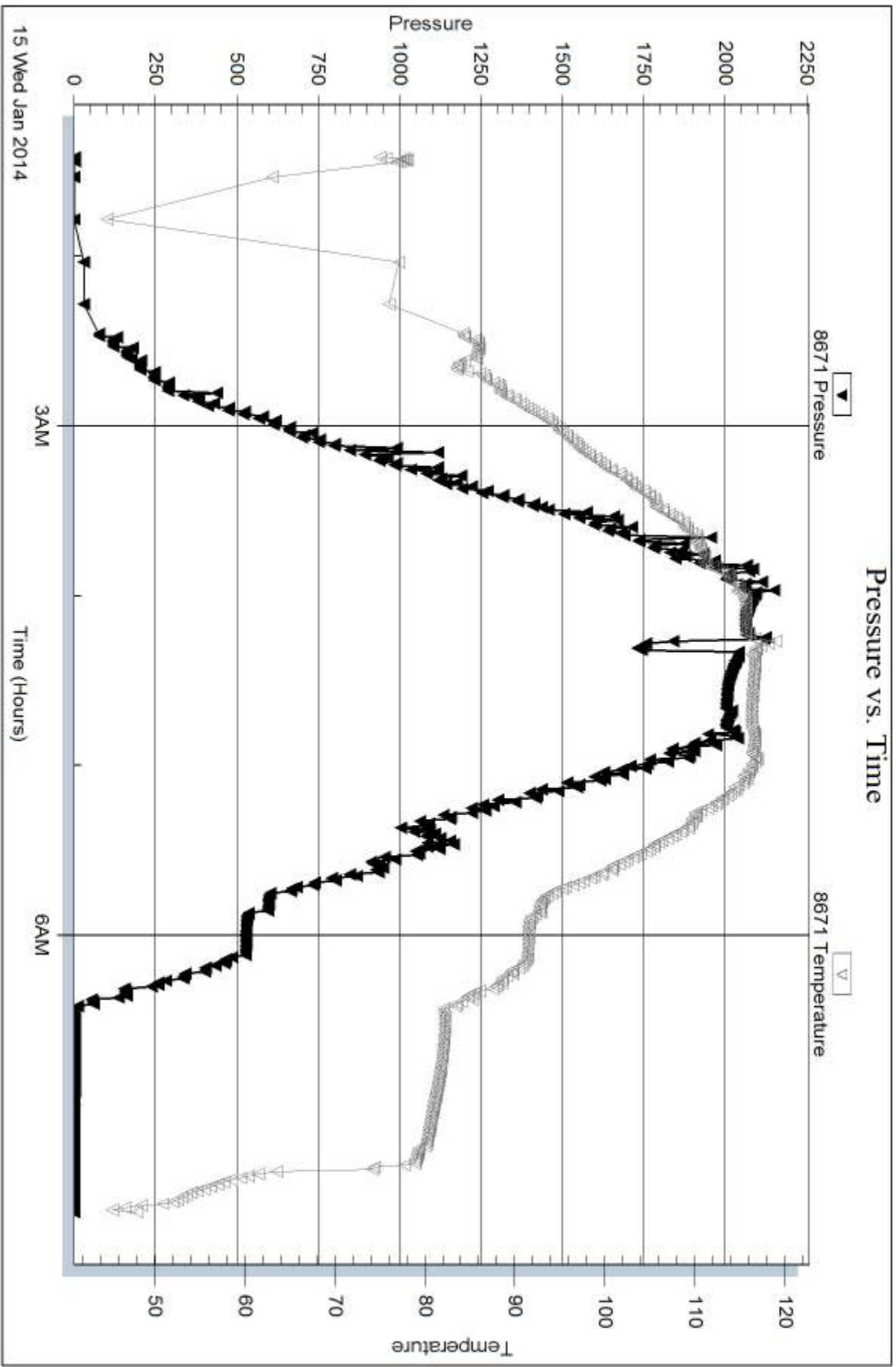
Serial #: 8671

Inside

Berexco, LLC

Schw erdt #1-2

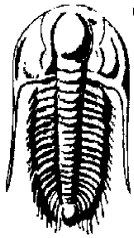
DST Test Number: 4



Tribble Testing, Inc

Ref. No: 56682

Printed: 2014.01.15 @ 17:02:03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56683

DST#: 5

ATTN: Pete Vollmer

Test Start: 2014.01.15 @ 08:30:00

GENERAL INFORMATION:

Formation: **KCL " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:44:30

Time Test Ended: 17:41:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 57

Interval: 4200.00 ft (KB) To 4250.00 ft (KB) (TVD)

Total Depth: 4250.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3182.00 ft (KB)

3169.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8671

Inside

Press @ Run Depth: 48.52 psig @ 4235.00 ft (KB)

Start Date: 2014.01.15

End Date: 2014.01.15

Start Time: 08:30:05

End Time: 17:41:00

Capacity: 8000.00 psig

Last Calib.: 2014.01.15

Time On Btm: 2014.01.15 @ 10:41:30

Time Off Btm: 2014.01.15 @ 15:45:30

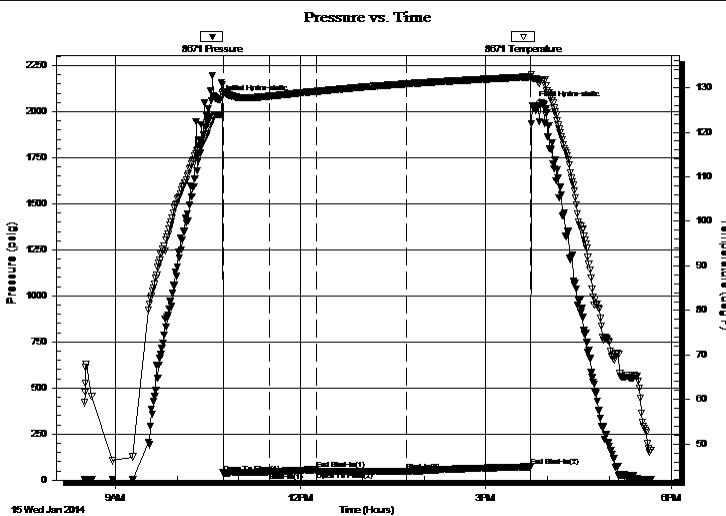
TEST COMMENT: I.F. - 30 - 1/4 INT. BLOW BUILT TO (1 1/4 " IN 30 MIN.)

I.S.I. - 60 - NO B.B,

F.F. - 90 - W.S.B NO BUILD

F.S.I. - 120 - NO B.B.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2063.39	123.94	Initial Hydro-static
3	38.89	128.51	Open To Flow (1)
49	44.88	128.09	Shut-In(1)
94	57.10	129.19	End Shut-In(1)
95	46.09	129.19	Open To Flow (2)
182	48.52	130.87	Shut-In(2)
303	72.67	132.43	End Shut-In(2)
304	2034.06	132.05	Final Hydro-static

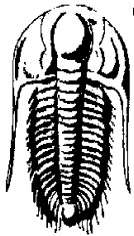
Recovery

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

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56683

DST#: 5

ATTN: Pete Vollmer

Test Start: 2014.01.15 @ 08:30:00

GENERAL INFORMATION:

Formation: **KCL " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:44:30

Time Test Ended: 17:41:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 57

Interval: 4200.00 ft (KB) To 4250.00 ft (KB) (TVD)

Total Depth: 4250.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3182.00 ft (KB)

3169.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8320

Press @ Run Depth: psig @ ft (KB)

Start Date: 2014.01.15

End Date: 2014.01.15

Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Start Time: 08:30:05

End Time: 17:42:00

Time On Btm:

Time Off Btm:

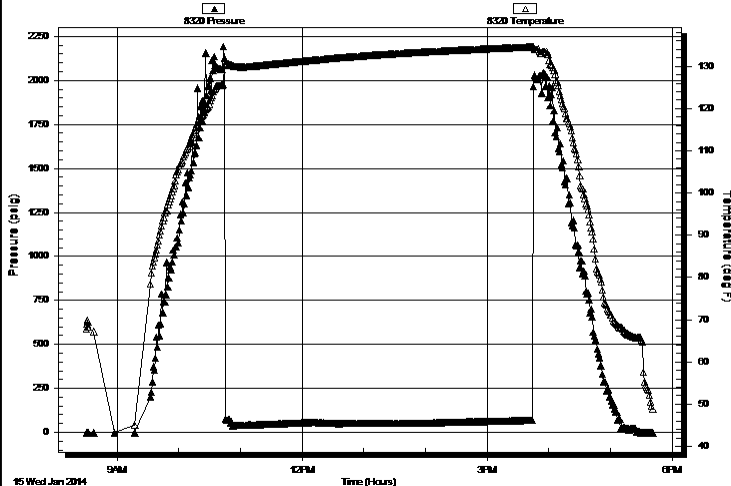
TEST COMMENT: I.F. - 30 - 1/4 INT. BLOW BUILT TO (1 1/4 " IN 30 MIN.)

I.S.I. - 60 - NO B.B,

F.F. - 90 - W.S.B NO BUILD

F.S.I. - 120 - NO B.B.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

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

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56683

DST#: 5

ATTN: Pete Vollmer

Test Start: 2014.01.15 @ 08:30:00

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: 75.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 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

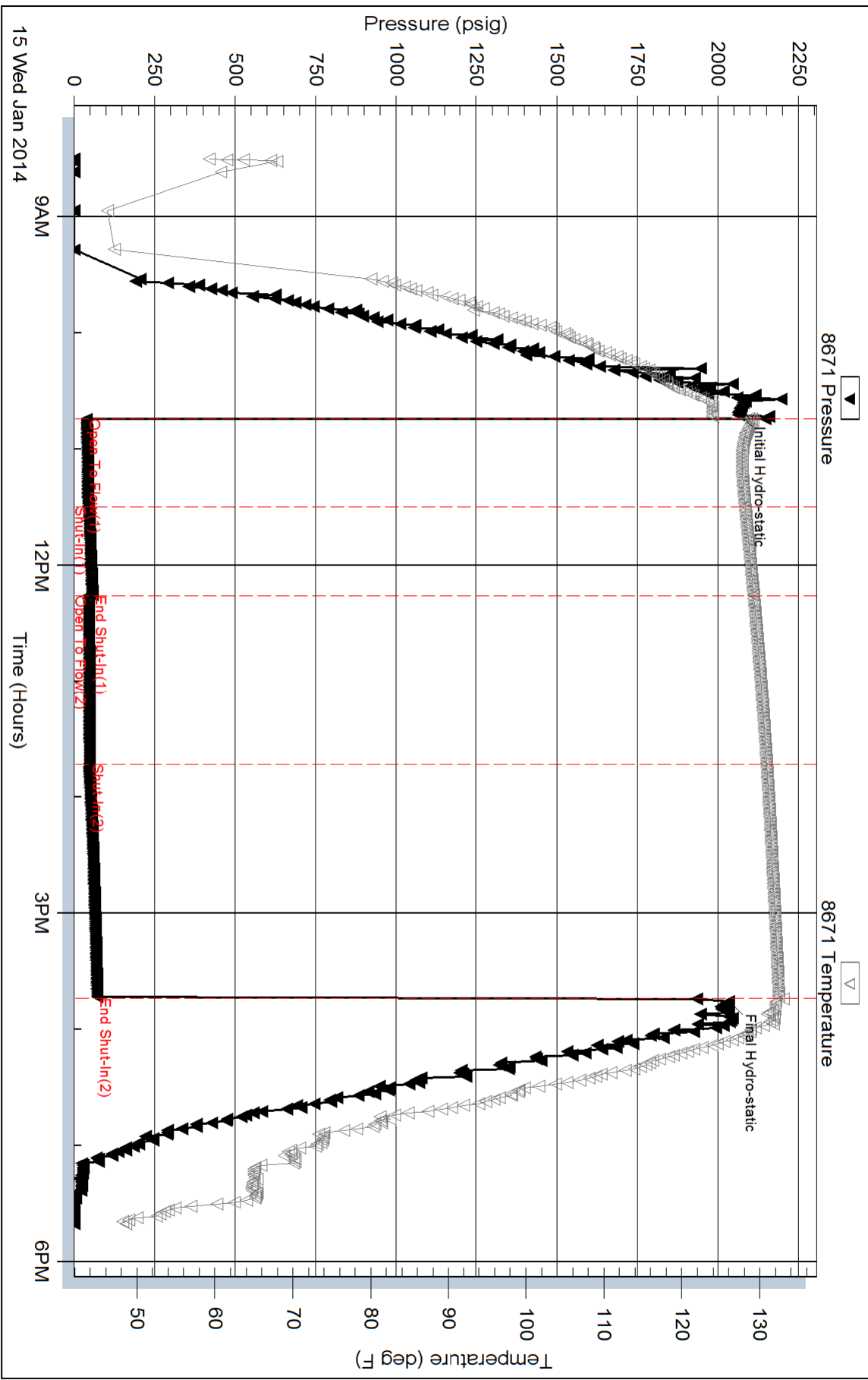
Serial #:

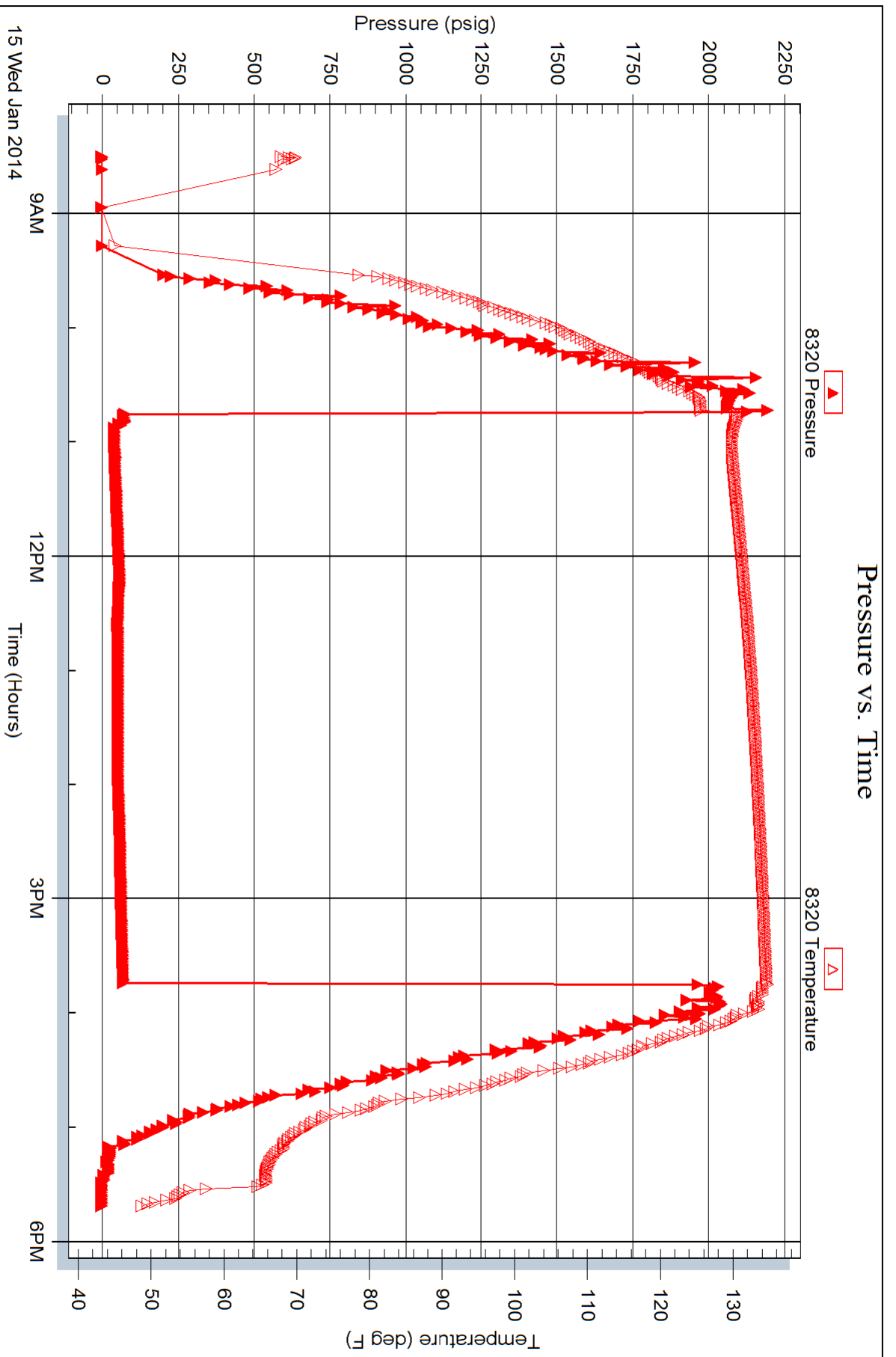
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56684

DST#: 6

ATTN: Pete Vollmer

Test Start: 2014.01.16 @ 08:22:00

GENERAL INFORMATION:

Formation: **KCL "D" & "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:40:00

Time Test Ended: 14:15:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 57

Interval: 4230.00 ft (KB) To 4360.00 ft (KB) (TVD)

Total Depth: 4360.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3182.00 ft (KB)

3169.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8671

Press@RunDepth: psig @ ft (KB)

Start Date: 2014.01.16

End Date: 2014.01.16

Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Start Time: 08:22:05

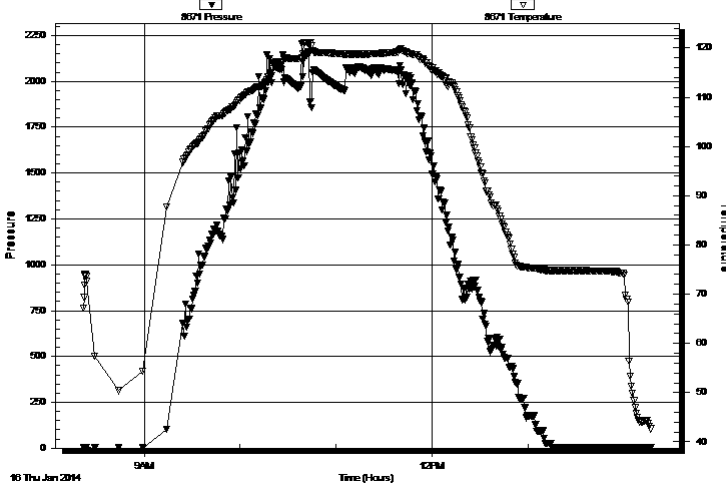
End Time: 14:16:44

Time On Btm:

Time Off Btm:

TEST COMMENT: I.F. - 30 - "PACKER FAILURE"

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56684

DST#: 6

ATTN: Pete Vollmer

Test Start: 2014.01.16 @ 08:22:00

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: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

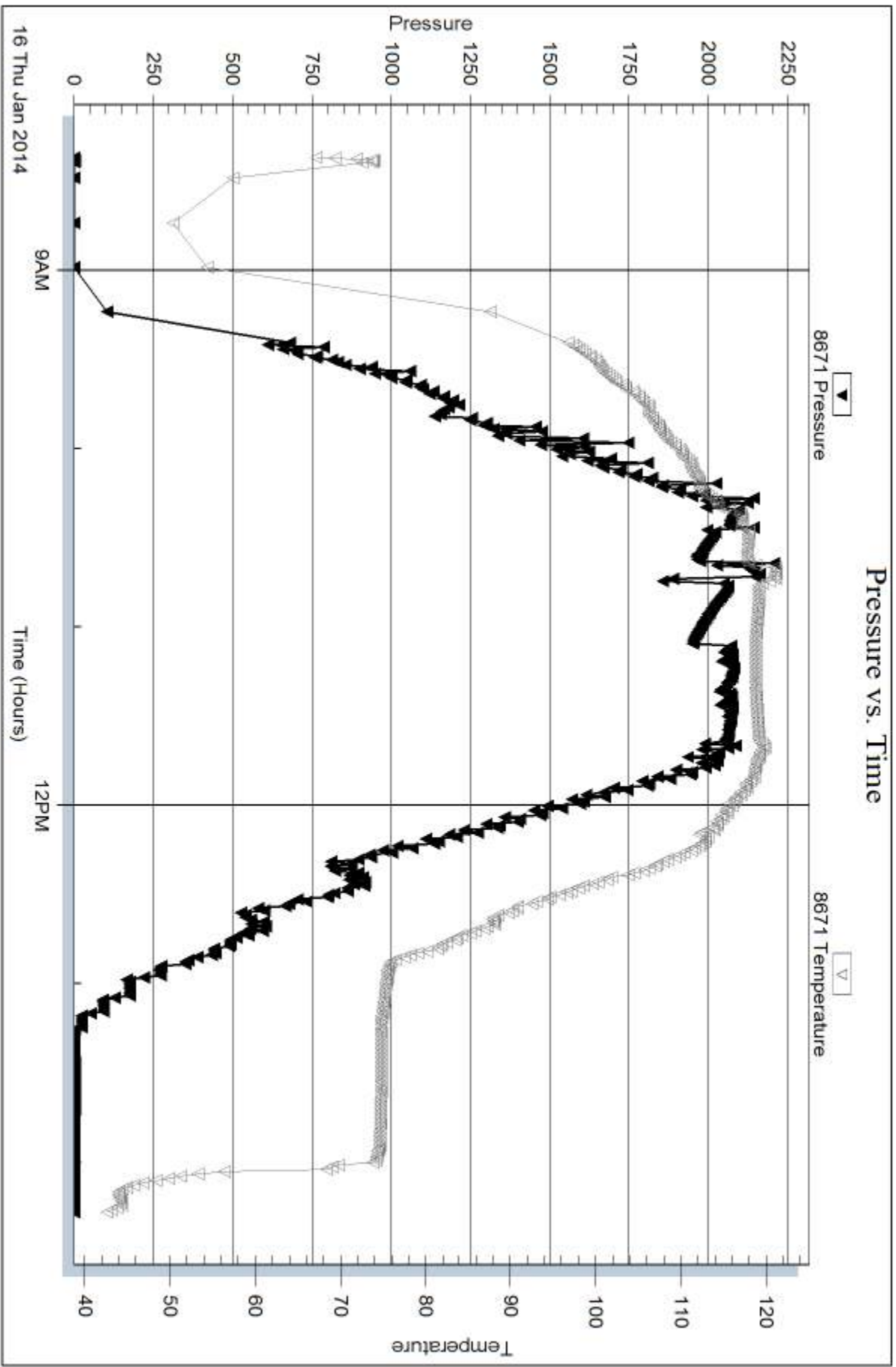
Length ft	Description	Volume bbbl

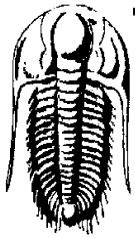
Total Length: ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56685

DST#: 7

ATTN: Pete Vollmer

Test Start: 2014.01.17 @ 08:00:00

GENERAL INFORMATION:

Formation: **KCL "D" & "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:30:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 57

Interval: 4240.00 ft (KB) To 4360.00 ft (KB) (TVD)

Reference Elevations: 3182.00 ft (KB)

Total Depth: 4360.00 ft (KB) (TVD)

3169.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8320

Outside

Press @ RunDepth: psig @ 4338.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.17

End Date: 2014.01.17

Last Calib.: 1899.12.30

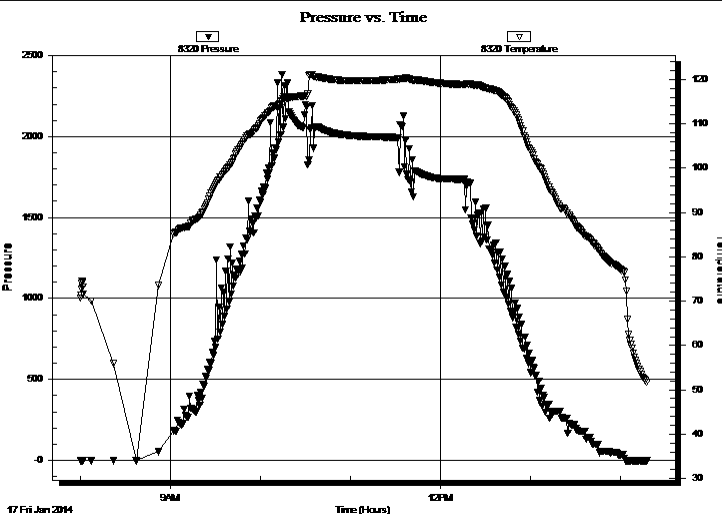
Start Time: 08:00:05

End Time: 14:17:44

Time On Btm:

Time Off Btm:

TEST COMMENT: PACKER FAILURE...



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	PACKER FAILURE	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56685

DST#: 7

ATTN: Pete Vollmer

Test Start: 2014.01.17 @ 08:00:00

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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	PACKER FAILURE	0.000

Total Length: ft Total Volume: bbl

Num Fluid Samples: 0

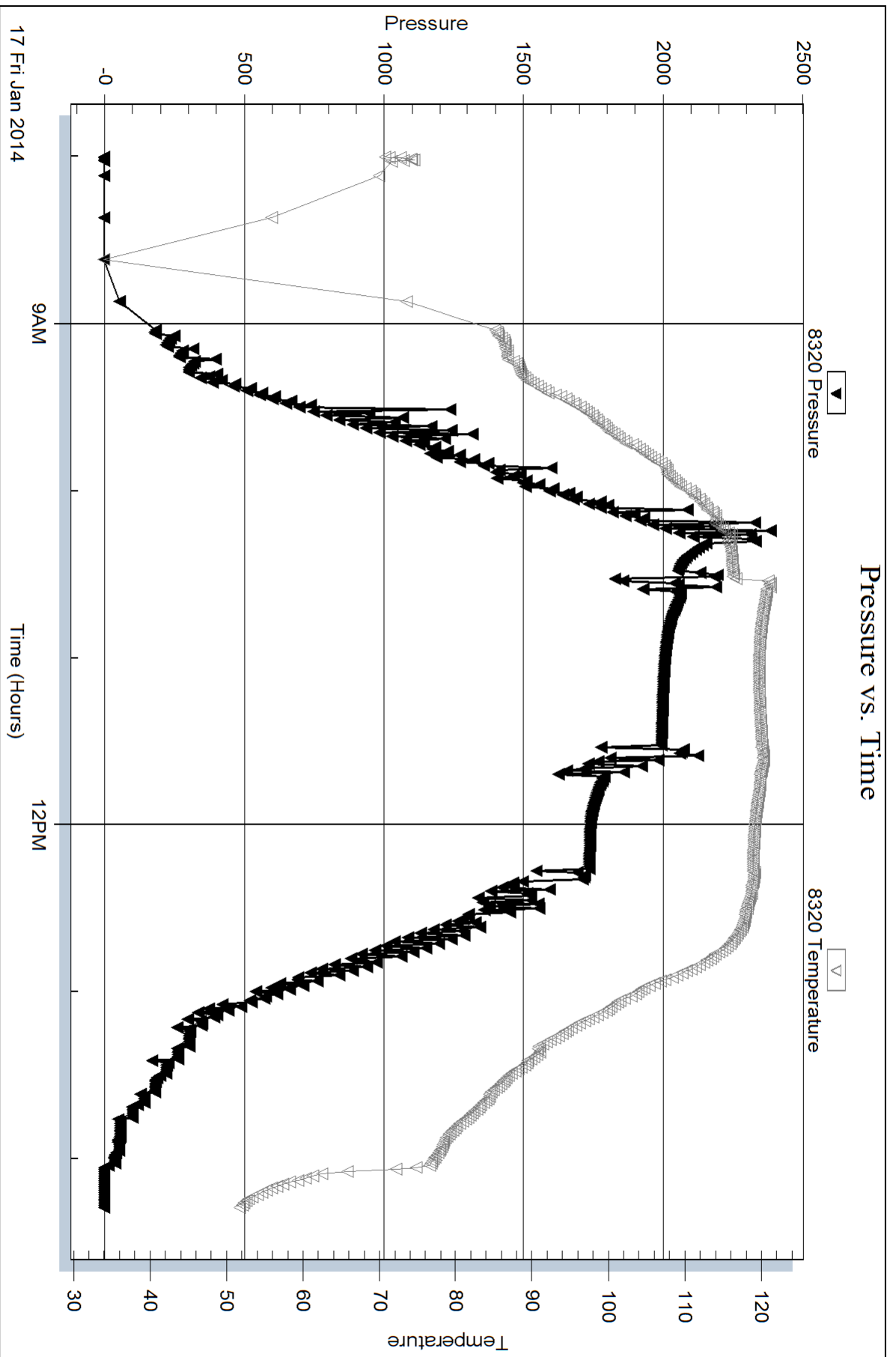
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: " PACKER FAILURE "





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56686

DST#: 8

ATTN: Pete Vollmer

Test Start: 2014.01.18 @ 12:20:00

GENERAL INFORMATION:

Formation: **PAWNEE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:47:15

Time Test Ended: 19:56:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 57

Interval: 4514.00 ft (KB) To 4550.00 ft (KB) (TVD)

Reference Elevations: 3182.00 ft (KB)

Total Depth: 4550.00 ft (KB) (TVD)

3169.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8320 Outside

Press @ Run Depth: 16.69 psig @ 4517.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.18 End Date: 2014.01.18

Last Calib.: 2014.01.18

Start Time: 12:20:05 End Time: 19:55:59

Time On Btm: 2014.01.18 @ 14:46:30

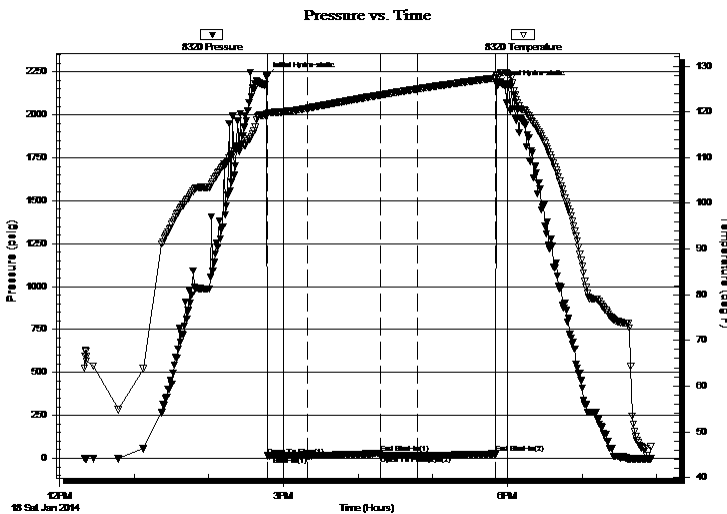
Time Off Btm: 2014.01.18 @ 17:52:00

TEST COMMENT: I.F. - 30 - W.S.B. (DIED IN 10 MIN.)

I.S.I - 60 - NO B.B

F.F. - 30 - NO BLOW

F.S.I. 60 - NO B.B.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2222.25	119.52	Initial Hydro-static
1	15.16	119.46	Open To Flow (1)
33	15.26	120.78	Shut-In(1)
92	29.79	123.68	End Shut-In(1)
92	15.80	123.68	Open To Flow (2)
121	16.69	124.99	Shut-In(2)
185	26.99	127.40	End Shut-In(2)
186	2174.07	127.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	MUD 100%	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 56686

DST#: 8

ATTN: Pete Vollmer

Test Start: 2014.01.18 @ 12:20:00

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: 87.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	MUD 100%	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

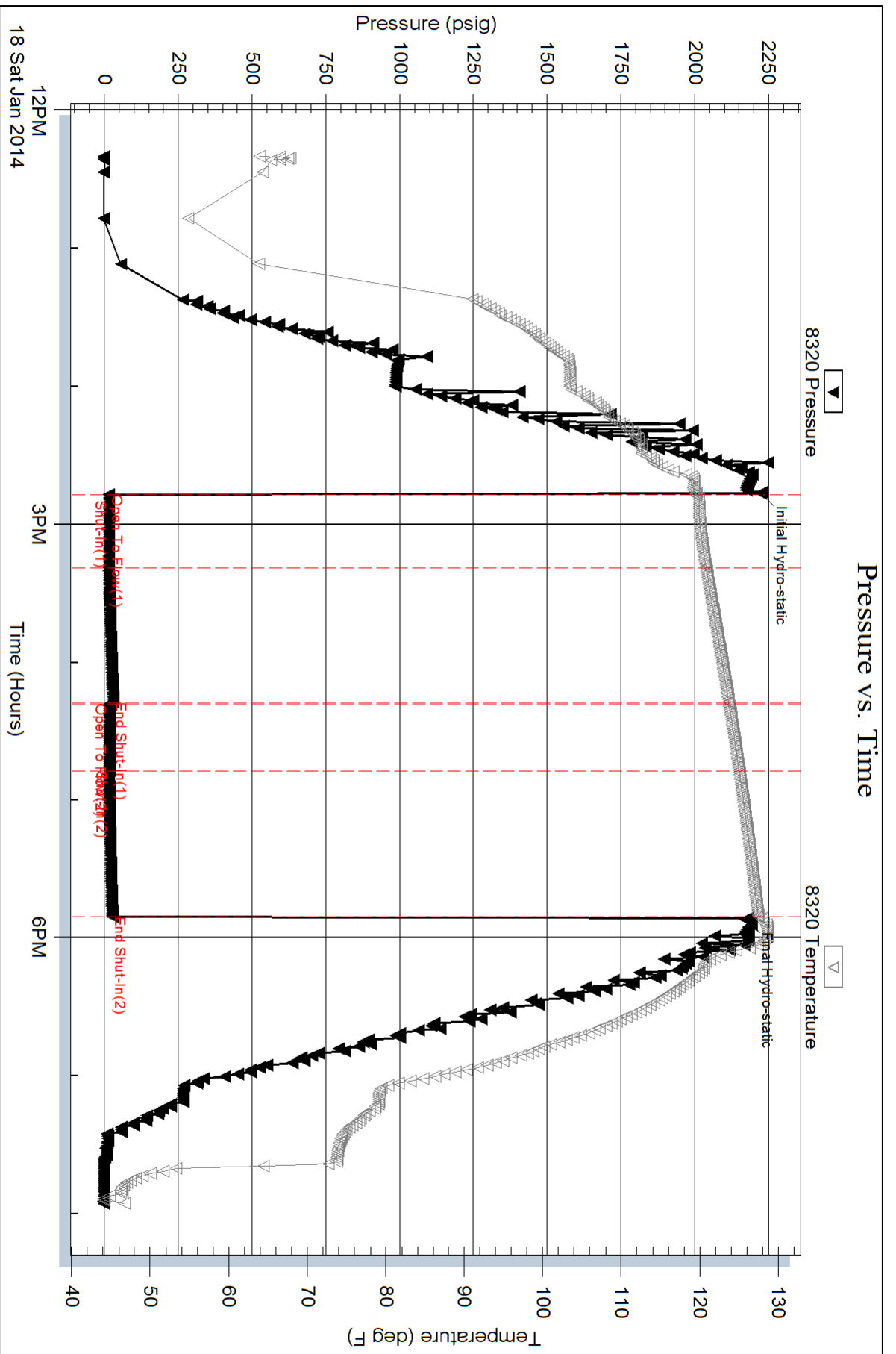
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 53476

DST#: 9

ATTN: Pete Vollmer

Test Start: 2014.01.19 @ 19:48:00

GENERAL INFORMATION:

Formation: **LKC "E - F"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 22:27:15
 Tester: James Winder
 Time Test Ended: 06:45:15
 Unit No: 57
Interval: 4252.00 ft (KB) To 4620.00 ft (KB) (TVD)
 Reference Elevations: 3182.00 ft (KB)
 Total Depth: 4620.00 ft (KB) (TVD) 3169.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

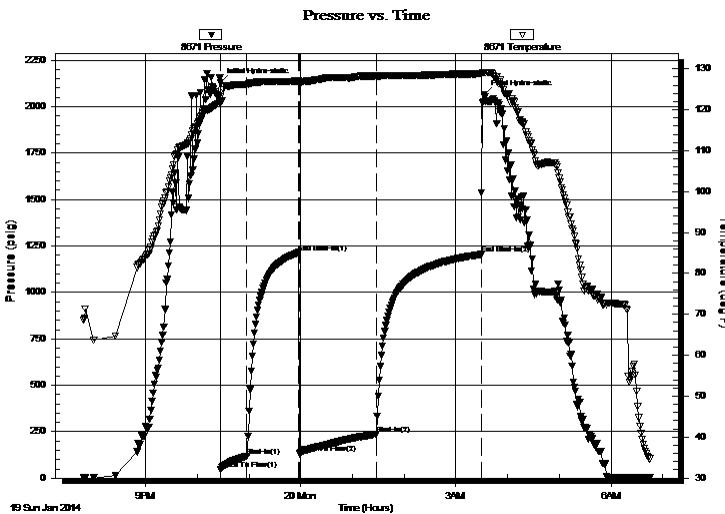
Serial #: 8671

Inside

Press @ Run Depth: 237.43 psig @ 4253.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.19 End Date: 2014.01.20 Last Calib.: 2014.01.20
 Start Time: 19:48:05 End Time: 06:45:15 Time On Btm: 2014.01.19 @ 22:27:00
 Time Off Btm: 2014.01.20 @ 03:33:15

TEST COMMENT: 30 - IF: 2" Blow at open, built to 9 1/2"
 60 - IS: No blow back
 90 - FF: Blow started at 2 min., built to 10 1/2"
 120 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2131.43	121.95	Initial Hydro-static
1	47.25	121.82	Open To Flow (1)
31	119.38	126.18	Shut-In(1)
91	1215.16	126.99	End Shut-In(1)
92	131.52	126.62	Open To Flow (2)
181	237.43	128.16	Shut-In(2)
303	1205.04	128.79	End Shut-In(2)
307	2063.54	129.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
92.00	SO/GWCM 63% <i>m</i> , 23% <i>w</i> , 11% <i>g</i> , 3% <i>o</i>	0.45
88.00	SO/GM 87% <i>m</i> , 10% <i>g</i> , 3% <i>o</i>	0.43
175.00	OCM 86% <i>m</i> , 10% <i>o</i> , 4% <i>g</i>	0.86
40.00	OM 55% <i>m</i> , 43% <i>o</i> , 2% <i>g</i>	0.20
75.00	MCO 84% <i>o</i> , 10% <i>m</i> , 6% <i>g</i>	0.37
0.00	GIP = 60'	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

2/1s/36w Rawlins KS

2020 Bramblewood
Wichita, KS 67206

Schwerdt #1-2

Job Ticket: 53476

DST#: 9

ATTN: Pete Vollmer

Test Start: 2014.01.19 @ 19:48:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 5.60 in³
Resistivity: ohm.m
Salinity: 800.00 ppm
Filter Cake: 2.00 inches

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

Oil API: 34 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
92.00	SO/GWCM 63% <i>m</i> , 23% <i>w</i> , 11% <i>g</i> , 3% <i>o</i>	0.452
88.00	SO/GM 87% <i>m</i> , 10% <i>g</i> , 3% <i>o</i>	0.433
175.00	OCM 86% <i>m</i> , 10% <i>o</i> , 4% <i>g</i>	0.861
40.00	OM 55% <i>m</i> , 43% <i>o</i> , 2% <i>g</i>	0.197
75.00	MCO 84% <i>o</i> , 10% <i>m</i> , 6% <i>g</i>	0.369
0.00	GIP = 60'	0.000

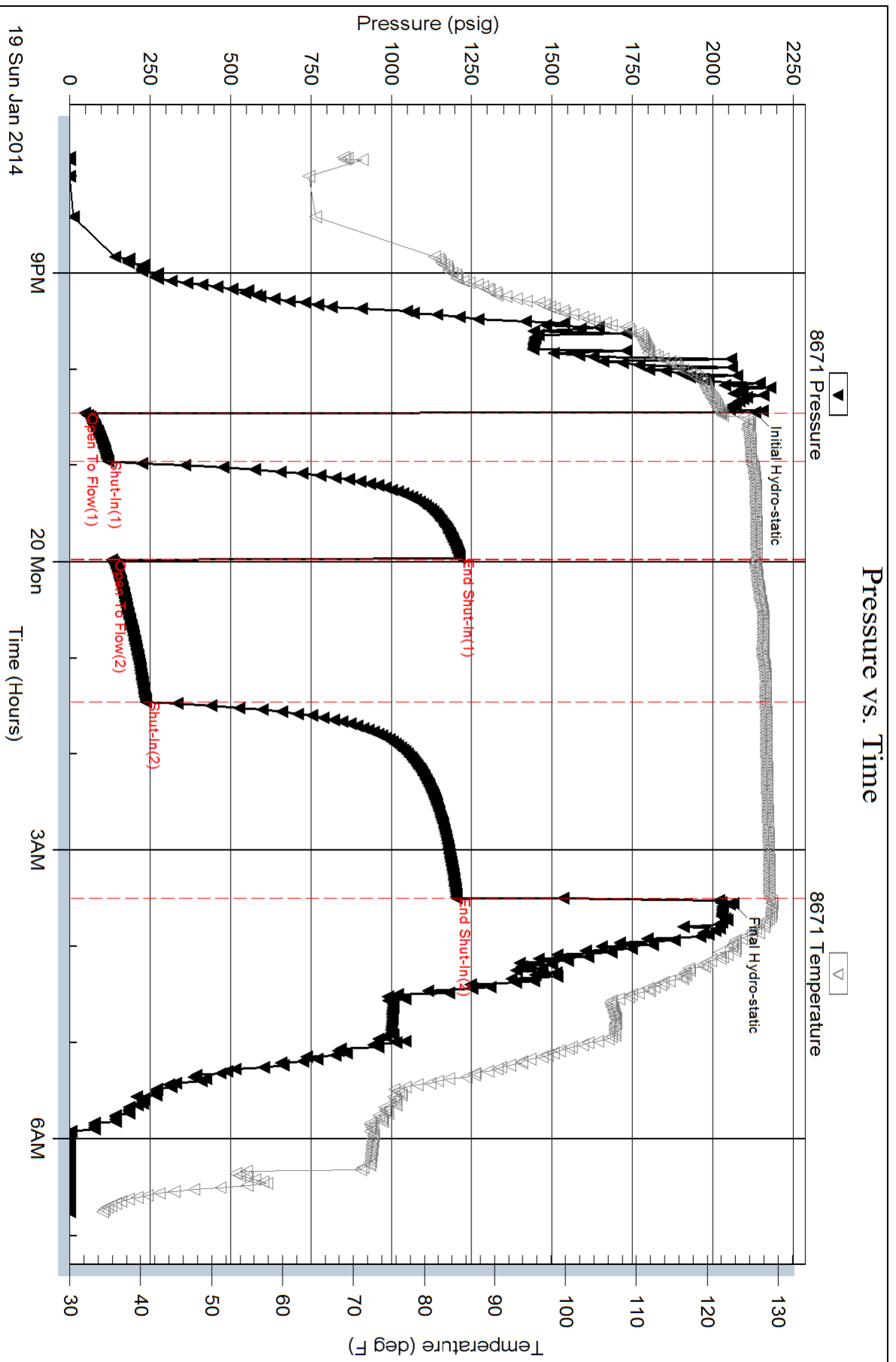
Total Length: 470.00 ft Total Volume: 2.312 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Gravity = 31.6 api @ 36 deg F
Corrected Gravity = 34 api

Pressure vs. Time



BEREXCO LLC

SCHWERDT 1-2

NW SE NE SE SEC 2 T1S R36W

RAWLINS COUNTY, KANSAS

SUMMARY	1
WELL DATA	2
FORMATION TOPS	3
LITHOLOGY & SHOWS	4
SERVICES	10
DRILL STEM TESTS	11
MUD REPORTS	29

SUMMARY

The Berexco LLC Schwerdt 1-2 in Rawlins County, Kansas spud January 7, 2014 and reached a total depth of 4625' on January 19, 2014. The test drilled into the Pennsylvanian Cherokee for logging. Wellsite geological supervision commenced at 3000'. The primary objective was the Pennsylvanian Missourian Lansing-Kansas City carbonate benches, which produce in the Scoda field. Secondary zones of interest were the Foraker, Oread, and Pawnee Limestones. The Schwerdt 1-2 was drilled using seismic and nearby well control.

Evaluation of the primary zones of interest was by drill stem testing after sample analysis. Nine DSTs were run.

Foraker, Oread, Lansing-Kansas City, and Pawnee

Samples of the Foraker were circulated out but sample examination revealed clean, nonporous limestone that did not warrant testing.

DST 1 in the Oread recovered 800 ft of muddy water. Samples were fossiliferous packstone with poor interparticle porosity, scattered oil stain, and good cuts.

DST 2 in the Lansing A recovered 1200 ft of watery mud and water. Samples showed poor interparticle porosity with spotty black oil stain.

DST 3 in the Lansing B recovered 152 ft of watery mud with oil spots. Poor flow pressures indicated a nonporous zone, confirmed by wireline logs.

DSTs 4 and 5 in the Lansing C were based on good sample shows of cut and fluorescence in a grainstone with fair to poor interparticle porosity. Spotty live black and dark brown oil stain were evident. DST 4 was a misrun due to packer failure after a minute open. The packers may have been set in a carbonaceous shale. The test interval was adjusted lower and DST 5 recovered 5 ft of mud with poor flow pressures.

DSTs 6 and 7 were misruns. The Lansing D was mudstone with black asphaltic staining that alone did not warrant a test. The decision was made to drill through the Lansing E and test the D and E zones together. The Lansing E exhibited a very poor show; only three cuttings had spotty oil stain with trace pin-point porosity. Successive packer failures and mud lost to the hole on the two DSTs resulted in drill stem testing efforts being terminated in the D & E zones.

The Lansing F was nonporous limestone with no sample shows.

DST 8 in the Pawnee recovered 1 ft of mud with very poor pressures. The test result was consistent with samples that had revealed very few scattered oil shows with fair cuts and fluorescence in nonporous limestone.

DST 9 was run after wireline log analysis indicated a possible 2-ft productive zone in the upper Lansing-Kansas City E zone. DST packers were set based on wireline logs at 4252' with anchor pipe run to TD. Recovery from the D and E interval was 470 ft of gassy oil and oil cut mud. The large volume of mud recovered was likely due to the long anchor. Most of the recovery was heavily emulsified.

Oil Well Completion

4 ½" production casing was run to complete the Schwerdt 1-2 as an oil producer.

Berexco LLC
Schwerdt 1-2

WELL DATA

OPERATOR: Berexco LLC
2020 North Bramblewood Drive
Wichita, Kansas 67206

WELL NAME: Schwerdt 1-2

SURFACE LOCATION: 1840' FSL & 380' FEL
NW SE NE SE Sec 2, T1S, R36W
Rawlins County, Kansas

LATITUDE & LONGITUDE: 39.9928638, - 101.3191997 (From State, calculated from footages)

BOTTOM HOLE LOCATION: Vertical Hole

ELEVATIONS: 3169' GL 3182' KB

API NUMBER: 15-153-20976

BASIN: Mid-Continental Arch

FIELD: Scoda

HOLE SIZE: 12 ¼" to 310'; 7 7/8" to 4525'

CASING: 8 5/8" J-55 24# STC set to 310' KB

SPUD DATE: January 7, 2014

TD DATE: January 19, 2014

TOTAL DEPTH: 4625' Rig TD 4620' Log TD

LAST FORMATION: Pennsylvanian Cherokee

WELL STATUS: Ran 4 ½" production casing for oil well completion

OPERATOR REPRESENTATIVE: Dana Wreath - Vice President

WELLSITE GEOLOGIST: Peter J. Vollmer

FORMATION TOPS

Formation	Sample Top	Log Top	Log TVD	Log Datum
KB				3182
Pierre Sh	Cased	Cased	N/A	N/A
Niobrara Fm	N/A	1162	1162	+2020
Fort Hays Ls Mbr	N/A	1622	1622	+1560
Carlile Sh	N/A	1666	1666	+1516
Dakota	N/A	2054	2054	+1128
Cheyenne	N/A	2602	2602	+580
Blaine	N/A	2952	2952	+230
Stone Corral Anhydrite	3113	3108	3108	+74
Base Anhydrite	3149	3148	3148	+34
Neva	3588	3592	3592	-410
Foraker	3704	3704	3704	-522
Wabaunsee	3860	3868	3868	-686
Topeka	3916	3916	3916	-734
Deer Creek Sand	3956	3952	3952	-770
Oread	4025	4025	4025	-843
Heebner Sh	4104	4098	4098	-916
Lansing-Kansas City				
"A"	4136	4132	4132	-950
"B"	4178	4186	4186	-1004
"C"	4221	4240	4240	-1058
"D"	4282	4290	4290	-1108
"E"	4327	4328	4328	-1146
"F"	4365	4378	4378	-1196
Pawnee	4529	4543	4543	-1361
Cherokee	4569	4578	4578	-1396
TD Driller	4625			
TD Logger		4620	4620	-1438

LITHOLOGY AND SHOWS

The following descriptions are interpretive. Rig crew members collected unlagged samples from 3500' to 4625' TD. Depths are rig depths except where noted as wireline.

3500' - 3588'	SHALE: reddish brown, firm to soft, fissile to blocky, very silty, sandy in part, non to slightly calcareous, trace light gray Limestone.
NEVA	SAMPLE TOP: 3588' LOG TOP: 3592' SUBSEA: -410'
3588' - 3598'	LIMESTONE: white to light gray, firm to hard, chalky, fossil fragment, tight, no shows.
3598' - 3648'	SHALE: reddish brown, soft to firm, sub blocky, n calcareous, occasional silty, well/interbedded LIMESTONE: white to light gray, firm to hard, cryptocrystalline, tight, no shows.
3648' - 3660'	LIMESTONE: white to light gray, firm to hard, mudstone, chalky, slightly argillaceous, tight, no shows.
3660' - 3704'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasionally silty.
FORAKER	SAMPLE TOP: 3704' LOG TOP: 3704' SUBSEA: -522'
3704' - 3714'	LIMESTONE: white to light gray, firm to hard, cryptocrystalline, chalky, fossil fragments, thin dark gray Shale partings, trace black algal stain, no visible porosity, no shows.
3714' - 3722'	SHALE: dark gray to gray to grayish green, firm, blocky, n to slightly calcareous, fossil fragments.
3722' - 3746'	LIMESTONE: white to light gray, firm to hard, cryptocrystalline, chalky, rare fossil fragment, abundant black algal stain (dead oil), tight, no fluorescence, no cut.
3746' - 3760'	SANDSTONE: white, friable, very fine grained, subangular, well sorted, calcareous cement, clay fill, tight to trace porosity, no shows.
3760' - 3804'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasionally silty.
3804' - 3824'	SHALE: reddish brown to red, soft to firm, blocky, slightly to moderately calcareous, interbedded with LIMESTONE: white to light gray, with occasional light reddish brown mottling and partings, firm to hard, cryptocrystalline, fossil fragments (Fusulinids), chalky, occasional black algal material, tight, no shows.

LITHOLOGY AND SHOWS

3824' - 3856'	SHALE: dark gray to gray, firm, fissile to blocky, non calcareous, fossil fragment (Brachiopod).
WABAUNSEE	SAMPLE TOP: 3860' LOG TOP: 3868' SUBSEA: -686'
3856' - 3916'	SHALE: reddish brown, soft to firm, blocky, n to slightly calcareous, with interbedded LIMESTONE: white to light gray, occasional light reddish brown mottled, hard to firm, cryptocrystalline, fossil fragments, tight, no shows.
TOPEKA	SAMPLE TOP: 3916' LOG TOP: 3916' SUBSEA: -734'
3916' - 3930'	LIMESTONE: light gray to white, hard to firm, cryptocrystalline, fossil fragment, sparry calcite, tight, no shows.
3930' - 3936'	SHALE: gray, firm, platy, non to slightly calcareous, dull.
3936' - 3950'	LIMESTONE: light gray to white, hard to firm, cryptocrystalline, fossil fragments, clear calcareous fill in vugs, opaque chert, tight, no shows.
3950' - 3956'	SHALE: gray, firm, platy, non to slightly calcareous, subwaxy, plant remains.
DEER CREEK SAND	SAMPLE TOP: 3956' LOG TOP: 3952' SUBSEA: -770'
3956' - 3976'	SANDSTONE: light gray to grayish brown, friable to soft, very fine grained, well rounded, well sorted, calcareous, clay filled, plant remains, predominantly loose grains, no visible porosity, no show.
3976' - 4025'	SHALE: reddish brown, brownish maroon, gray, mottled in part, firm, blocky, non to slightly calcareous, slightly to moderately silty in part.
OREAD	SAMPLE TOP: 4025' LOG TOP: 4025' SUBSEA: -843'
4025' - 4050'	LIMESTONE: cream to white, firm to hard, packstone, occasional oolites, fossil fragments, slightly chalky, fair to trace interparticle porosity, scattered to patchy live

LITHOLOGY AND SHOWS

	dark brown to black oil stain, bright yellish white fluorescence, blooming yellowish white cuts, good show.
4050' - 4056'	SHALE: grayish black to dark gray, firm, sub fissile, carbonaceous, non to very slightly calcareous.
4056' - 4066'	SHALE: gray, firm, platy, non to slightly calcareous, fossil fragments.
4066' - 4098'	LIMESTONE: very light gray to gray, firm to hard, mudstone, argillaceous in part, gray to dark gray Shale partings, trace Siltstone, tight.
4098' - 4104'	SHALE: gray, firm, platy, non to slightly calcareous, fossil fragments.
HEEBNER SH	SAMPLE TOP: 4104' LOG TOP: 4098' SUBSEA: -916'
4104' - 4112'	SHALE: dark gray to black, firm, subfissile, slightly carbonaceous, non calcareous.
4112' - 4136'	SHALE: reddish brown, gray, firm, blocky, non to slightly calcareous, silty.
LANSING- KANSAS CITY "A"	SAMPLE TOP: 4136' LOG TOP: 4132' SUBSEA: -950'
4136' - 4152'	LIMESTONE: white to cream, firm to hard, mudstone to packstone, fossil fragments, spotty black heavy oil stain, occasional free dark brown oil in vugs, trace to fair vuggy and intercrystalline porosity, dull yellowish white fluorescence, instant blooming yellowish white cuts, good show.
4152' - 4158'	SANDSTONE: white to very light gray, very friable, very fine grained, well rounded, well sorted, calcareous cement, clean, no visible porosity, no show.
4158' - 4178'	SHALE: gray to maroon to reddish brown, mottled, firm, blocky, non to slightly calcareous.
LANSING- KANSAS CITY "B"	SAMPLE TOP: 4178' LOG TOP: 4186' SUBSEA: -1004'
4178' - 4188'	LIMESTONE: white, firm, packstone, fossils(Crinoid, Fusulinid), spotty black oil stain, trace intergranular and poor to trace vuggy porosity, bright yellowish white fluorescence, good diffuse yellowish white cut, poor show.

LITHOLOGY AND SHOWS

4188' - 4202'	SHALE: gray to dark gray to reddish brown, firm, blocky, non to slightly calcareous.
4202' - 4210'	LIMESTONE: white to light gray, firm, cryptocrystalline, dark gray Shale partings, fossil fragments (Brachiopod, Crinoid), slightly argillaceous, tight, no show.
4210' - 4221'	SHALE: gray to reddish brown, mottled, firm to soft, blocky, non to slightly calcareous.
LANSING- KANSAS CITY "C"	SAMPLE TOP: 4221' LOG TOP: 4240' SUBSEA: -1058'
4221' - 4235'	LIMESTONE: white to cream, firm, bioclastic grainstone, very fossiliferous, poor to fair intergranular porosity, free oil, spotty live dark brown to black heavy oil, bright yellowish white fluorescence, instant blooming yellowish white cuts, good show.
4235' - 4243'	SHALE: gray to dark gray to black, firm, blocky, non to slightly calcareous, occasional carbonaceous.
4243' - 4254'	SHALE: dark reddish brown to maroon, firm, blocky, non calcareous, silty, with interbedded LIMESTONE: white, firm chalky, rounded brown shale partings, tight, no shows.
4254' - 4264'	LIMESTONE: white to light gray, firm to hard, wackestone, abundant smooth shell fragments, tight, no shows.
4264' - 4282'	SHALE: brownish red, firm, blocky, non calcareous.
LANSING- KANSAS CITY "D"	SAMPLE TOP: 4282' LOG TOP: 4290' SUBSEA: -1108'
4282' - 4306'	LIMESTONE: white to cream, hard, mudstone, chalky, trace black asphaltic (Algal) material, predominant tight, no shows.
4306' - 4327'	SHALE: brownish red, firm, blocky, non calcareous, trace Limestone stringers.

LITHOLOGY AND SHOWS

LANSING- KANSAS CITY "E"

SAMPLE TOP: 4327' LOG TOP: 4328' SUBSEA: -1146'

- 4327' - 4342' LIMESTONE white to cream, hard, packstone to mudstone, locally abundant fossil, chalky, occasional very patchy black oil stain, trace poor vuggy porosity, dull yellow fluorescence, weak diffuse cut, very poor show.
- 4342' - 4358' SHALE: gray to dark gray to black, soft to firm, blocky, non to slightly calcareous, occasionally very carbonaceous, plant remains, pyrite.
- 4358' - 4365' SHALE: brownish red, firm, blocky, non calcareous, with interbedded Limestone stringers.

LANSING- KANSAS CITY "F"

SAMPLE TOP: 4365' LOG TOP: 4378' SUBSEA: -1196'

- 4365' - 4373' LIMESTONE: white, hard, mudstone, dense, tight, no show.
- 4373' - 4404' SHALE: brownish red, firm, blocky, non calcareous, with interbedded Limestone stringers.
- 4404' - 4422' LIMESTONE: white to cream, mudstone, occasional red SHALE partings, trace dark gray SHALE, occasional embedded medium grained white to black Sand grains, tight, no shows.
- 4422' - 4454' SHALE: brownish red, firm, blocky, non calcareous, occasionally silty.
- 4454' - 4474' SHALE: light gray, firm, platy, non to slightly calcareous.
- 4474' - 4490' LIMESTONE: white to light gray, firm to hard, mudstone, occasional argillaceous, occasional dark gray to black SHALE, occasionally sandy, tight, no shows.
- 4490' - 4496' SHALE: brownish red, soft to firm, sub blocky, non calcareous, occasionally clayey.
- 4496' - 4520' LIMESTONE: white to cream, soft to firm, mudstone, chalky, occasional sandy, tight, no shows.
- 4520' - 4529' SHALE: brownish red, soft to firm, sub blocky, non calcareous, occasional clayey and gummy.

LITHOLOGY AND SHOWS

PAWNEE	SAMPLE TOP: 4529' LOG TOP: 4543' SUBSEA: -1361'
4529' - 4540'	LIMESTONE: white to cream, hard, cryptocrystalline, fossil fragments, rare black oil stain, trace vuggy porosity, occasional oil in vugs, dull yellowish white fluorescence, instant diffuse milky yellowish white cuts.
4540' - 4569'	LIMESTONE: white to very light gray, hard, predominantly mudstone, occasional wackestone, dense, locally abundant fossils, occasionally sandy, occasional black rounded Phosphatic concretions, tight, no shows.
CHEROKEE	SAMPLE TOP: 4569' LOG TOP: 4578' SUBSEA: -1396'
4569' - 4578'	SHALE: black to dark gray to gray, firm, blocky to fissile, occasionally carbonaceous, trace pyrite.
4578' - 4586'	LIMESTONE: white to light gray, firm to hard, mudstone, occasional fossil fragment, sandy in part, argillaceous, tight, no shows.
4586' - 4592'	SHALE: black to dark gray, firm, blocky to fissile, occasionally carbonaceous, plant remains.
4592' - 4602'	LIMESTONE: white to light gray, firm to hard, mudstone to wackestone, occasional fossil fragments, sandy in part, argillaceous, occasional bright orange chert, tight, no shows.
4602' - 4625' TD	LIMESTONE: light gray to gray, firm to hard, mudstone, argillaceous, sandy in part, occasional dark gray carbonaceous SHALE partings, tight, no shows.

Berexco LLC
Schwerdt 1-2

SERVICES

CONTRACTOR:	Beredco Drilling Inc., Rig 2	
Toolpusher:	Milo Salinas	
DRILLING FLUIDS:	Morgan Mud, Inc.	McCook, ND
Mud Type:	Freshwater Chemical	308-340-5946
Engineer:	Dave Lines, Chris Van Pelt	
MUD LOGGING:	None	
WELLSITE GEOLOGY:	T. M. McCoy & Co., Inc. Peter J. Vollmer	Wilson, WY 307-733-4332
DRILL STEM TESTING:	Trilobite Testing, Inc. James Winder & Bob Hamel DST 1: 3990' - 4044' Oread DST 2: 4090' - 4170' LKC "A" DST 3: 4150' - 4210' LKC "B" DST 4: 4188' - 4250' LKC "C" DST 5: 4200' - 4250' LKC "C" DST 6: 4230' - 4360' LKC "D & E" DST 7: 4240' - 4360' LKC "D & E" DST 8: 4514' - 4550' Pawnee DST 9: 4252' - 4620' LKC "D" to TD	Hays, KS
DIRECTIONAL DRILLING:	None	
WIRELINE LOGS:	Pioneer Wireline Services RAG: Surface casing - TD Micro: 3100' to TD Engineer: Don	Hays, KS 785-625-3858