



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1222580
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: _____

1222580

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> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 099

Date	7-30-14	Sec.	13	Twp.	20	Range	16	County	Pawnee	State	Ks	On Location		Finish	11:00 AM
------	---------	------	----	------	----	-------	----	--------	--------	-------	----	-------------	--	--------	----------

Location Great Bend, Ks + 10th Street 13 W to

Lease Mecmis Well No. 1 Owner 390 Ave, 35 to X Rd, 1/4 E, 9/16th

Contractor Royal 2 To Quality Oilwell Cementing, Inc.

Type Job Surface You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 12 1/4" T.D. 1118' Charge To Charter Energy

Csg. 8 5/8" Depth 1118' Street

Tbg. Size Depth City State

Tool Depth The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 27' Shoe Joint 27' Cement Amount Ordered 450 60/40 3%CC 2%G1

Meas Line Displace 69 1/2 BLS 1/2 # Flowseal

EQUIPMENT

Pumptrk 16 No. Cementer Billy Common

Bulktrk 21 No. Driver Doug Poz. Mix

Bulktrk p.u. No. Driver Rick Gel.

JOB SERVICES & REMARKS

Remarks: Cement did Circulate Hulls

Rat Hole Salt

Mouse Hole Flowseal

Centralizers Mud CLR 48

Baskets CFL-117 or CD110. CAF 38

D/V or Port Collar Sand

Handling

Mileage

FLOAT EQUIPMENT

Guide Shoe Baffle plate

Centralizer Rubber plug

Baskets

AFU Inserts

Float Shoe

Latch Down

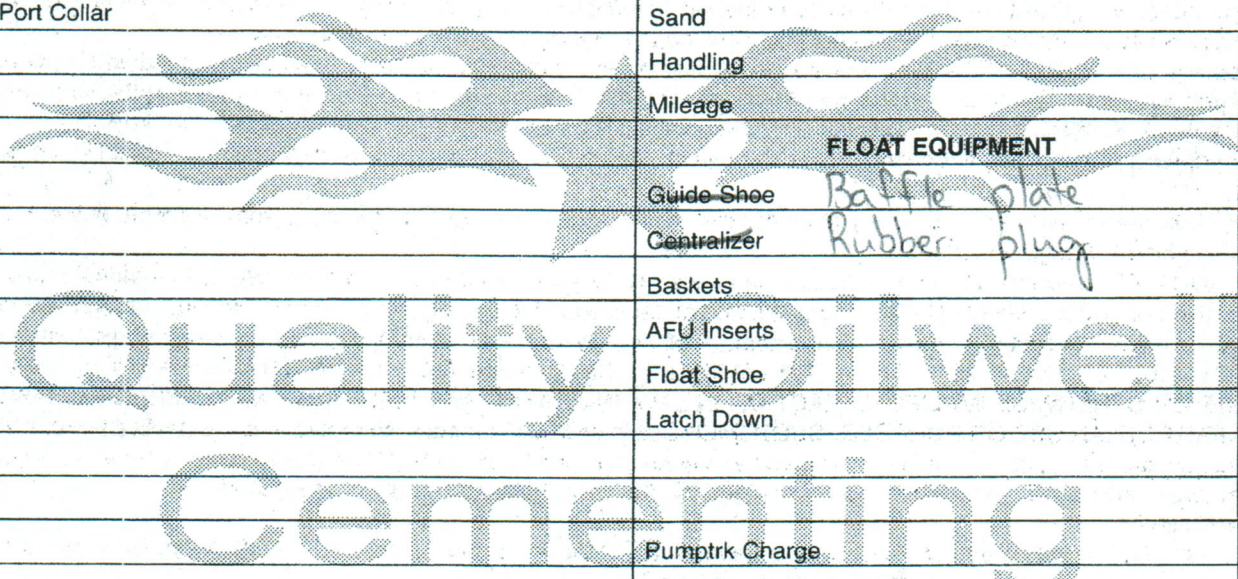
Pumptrk Charge

Mileage

Signature Tom Blake Tax

Discount

Total Charge



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 605

Date	8-5-14	Sec.	13	Twp.	20	Range	16	County	Pawnee	State	Ks	On Location		Finish	2:30PM
------	--------	------	----	------	----	-------	----	--------	--------	-------	----	-------------	--	--------	--------

Lease Mermis Location Great Bend, Ks # 10th Street - 13 W to

Well No. 1 Owner 396 Ave, 35 to X Rd, 1/4 E, Sinto

Contractor Royal 2 To Quality Oilwell Cementing, Inc.
Type Job Plug You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 7 7/8" T.D. 3835' Charge To Charter Energy

Csg. Depth Street

Tbg. Size 4 1/2" DIP Depth 3800' City State

Tool Depth The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. Shoe Joint Cement Amount Ordered 220 60/40 4 1/2 Gel 1/4 #16s

Meas Line Displace H2O/mud

EQUIPMENT

Pumptrk <u>20</u> No. Cementer <u>NICK</u>	Common
Helper <u>NICK</u>	Poz. Mix
Bulktrk <u>21</u> No. Driver <u>Chad</u>	Gel.
Driver <u>Chad</u>	Calcium
Bulktrk <u>plu</u> No. Driver <u>Rick</u>	Hulls
Driver <u>Rick</u>	Salt

Remarks: 3800' - 50 SX

Rat Hole 1170' - 50 SX

Mouse Hole 450' - 50 SX

Centralizers 60' - 20 SX

Baskets Rathole - 30 SX

D/V or Port Collar mousehole - 20 SX

Flowseal

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge

Mileage

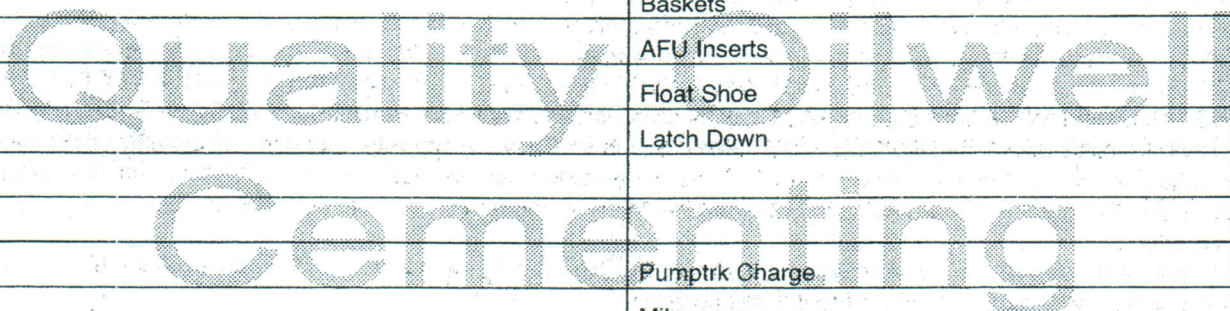
Tax

Discount

Total Charge

Signature [Signature]

X Signature





DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

P.O. Box 252
Great Bend KS 67530-0252

ATTN: Jake Eastes

Mermis #1

13-20s-16w Pawnee,KS

Start Date: 2014.08.03 @ 22:45:00

End Date: 2014.08.04 @ 06:49:30

Job Ticket #: 60326 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.07 @ 10:42:30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

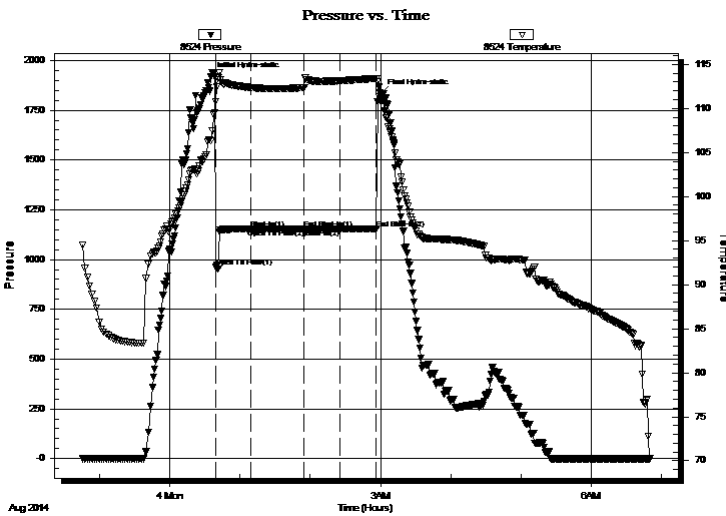
13-20s-16w Pawnee, KS
Mermis #1
Job Ticket: 60326 **DST#: 1**
Test Start: 2014.08.03 @ 22:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:39:30
Time Test Ended: 06:49:30
Interval: **3740.00 ft (KB) To 3810.00 ft (KB) (TVD)**
Total Depth: 3810.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3
Reference Elevations: 2100.00 ft (KB)
2093.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8524 Inside
Press@RunDepth: 1152.51 psig @ 3806.52 ft (KB) Capacity: 5000.00 psig
Start Date: 2014.08.03 End Date: 2014.08.04 Last Calib.: 2014.08.04
Start Time: 22:46:00 End Time: 06:49:30 Time On Btm: 2014.08.04 @ 00:35:30
Time Off Btm: 2014.08.04 @ 03:00:00

TEST COMMENT: 1st Open/ 30 Minutes. Good blow built to bottom of 5 gallon bucket in 1 minute and 30 seconds. At ten minutes allowed blow to rebuild. Blow rebuilt to total of 2 inches into bucket of water for remainder of time.
1st Shut In/ 45 Minutes. No blow back.
2nd Open/ 30 Minutes. Weak surface blow that died at 1 minute. Did not flush tool per Geo.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1919.34	106.34	Initial Hydro-static
4	961.38	110.77	Open To Flow (1)
34	1152.70	112.38	Shut-In(1)
79	1153.02	112.36	End Shut-In(1)
80	1151.60	112.36	Open To Flow (2)
110	1152.51	113.14	Shut-In(2)
141	1152.74	113.41	End Shut-In(2)
145	1831.11	110.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1809.00	100% Mud	25.38
0.00	Attempted to reverse fluid out.	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

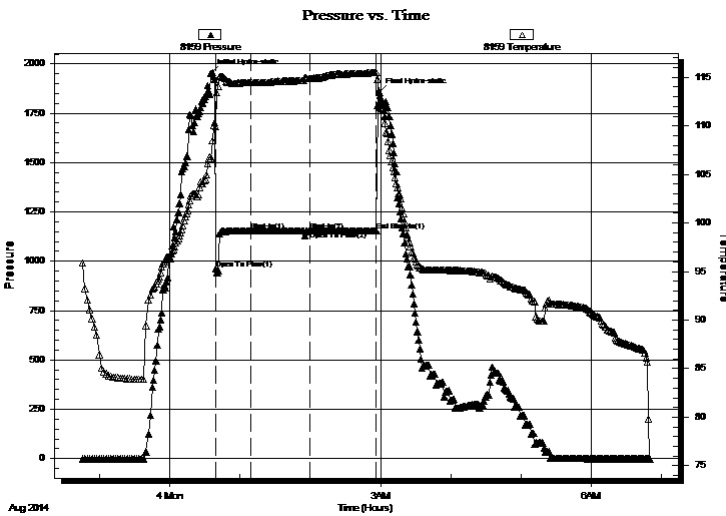
13-20s-16w Pawnee, KS
Mermis #1
Job Ticket: 60326 **DST#: 1**
Test Start: 2014.08.03 @ 22:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:39:30
Time Test Ended: 06:49:30
Interval: **3740.00 ft (KB) To 3810.00 ft (KB) (TVD)**
Total Depth: 3810.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3
Reference Elevations: 2100.00 ft (KB)
2093.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8159 Outside
Press@RunDepth: 1153.85 psig @ 3807.52 ft (KB) Capacity: 5000.00 psig
Start Date: 2014.08.03 End Date: 2014.08.04 Last Calib.: 2014.08.04
Start Time: 22:46:00 End Time: 06:50:00 Time On Btm: 2014.08.04 @ 00:35:30
Time Off Btm: 2014.08.04 @ 02:59:00

TEST COMMENT: 1st Open/ 30 Minutes. Good blow built to bottom of 5 gallon bucket in 1 minute and 30 seconds. At ten minutes allowed blow to rebuild. Blow rebuilt to total of 2 inches into bucket of water for remainder of time.
1st Shut In/ 45 Minutes. No blow back.
2nd Open/ 30 Minutes. Weak surface blow that died at 1 minute. Did not flush tool per Geo.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1950.62	106.67	Initial Hydro-static
4	959.91	109.91	Open To Flow (1)
34	1152.41	114.46	Shut-In(1)
84	1153.48	114.88	Shut-In(2)
85	1153.55	114.86	Open To Flow (2)
141	1153.85	115.52	End Shut-In(1)
144	1855.98	112.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1809.00	100% Mud	25.38
0.00	Attempted to reverse fluid out.	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

13-20s-16w Pawnee,KS
Mermis #1
Job Ticket: 60326 **DST#: 1**
Test Start: 2014.08.03 @ 22:45:00

Tool Information

Drill Pipe:	Length: 3727.00 ft	Diameter: 3.80 inches	Volume: 52.28 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 52.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3740.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.52 ft			
Tool Length:	90.52 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			3725.00	
Hydraulic tool	5.00			3730.00	
Packer	5.00			3735.00	20.00 Bottom Of Top Packer
Packer	5.00			3740.00	
Anchor	5.00			3745.00	
Change Over Sub	0.75			3745.75	
Drill Pipe	31.02			3776.77	
Change Over Sub	0.75			3777.52	
Anchor	28.00			3805.52	
Recorder	1.00	8524	Inside	3806.52	
Recorder	1.00	8159	Outside	3807.52	
Bull Plug	3.00			3810.52	70.52 Bottom Packers & Anchor

Total Tool Length: 90.52



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

13-20s-16w Pawnee,KS
Mermis #1
Job Ticket: 60326 **DST#: 1**
Test Start: 2014.08.03 @ 22:45:00

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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.75 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 11000.00 ppm			
Filter Cake: 1.00 inches			

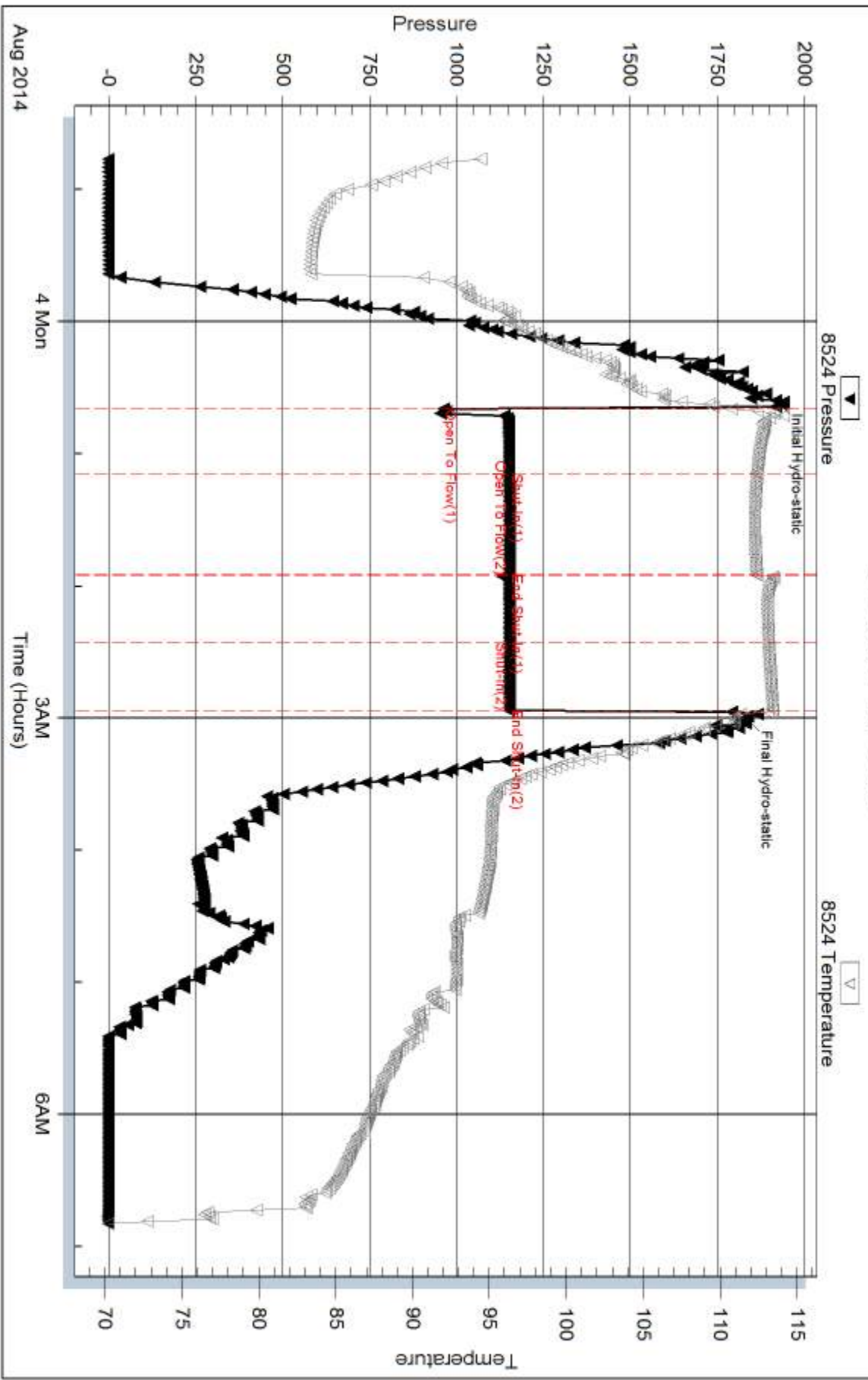
Recovery Information

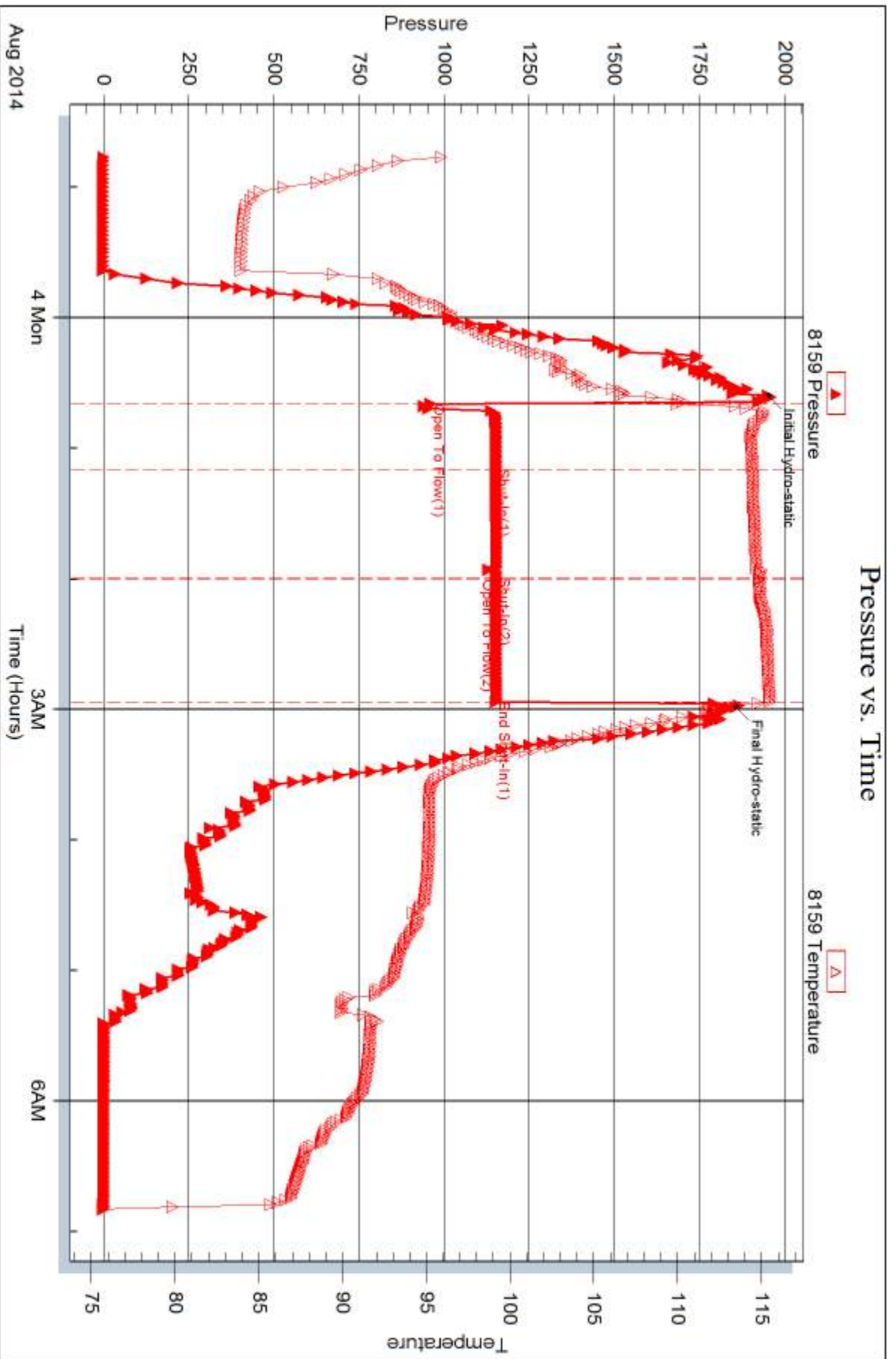
Recovery Table

Length ft	Description	Volume bbl
1809.00	100% Mud	25.376
0.00	Attempted to reverse fluid out.	0.000

Total Length: 1809.00 ft Total Volume: 25.376 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: Found hole in drill pipe

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

P.O. Box 252
Great Bend KS 67530-0252

ATTN: Jake Eastes

Mermis #1

13-20s-16w Pawnee,KS

Start Date: 2014.08.04 @ 10:45:00

End Date: 2014.08.04 @ 18:23:30

Job Ticket #: 60327 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.07 @ 10:42:10



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy, Inc.
 P.O. Box 252
 Great Bend KS 67530-0252
 ATTN: Jake Eastes

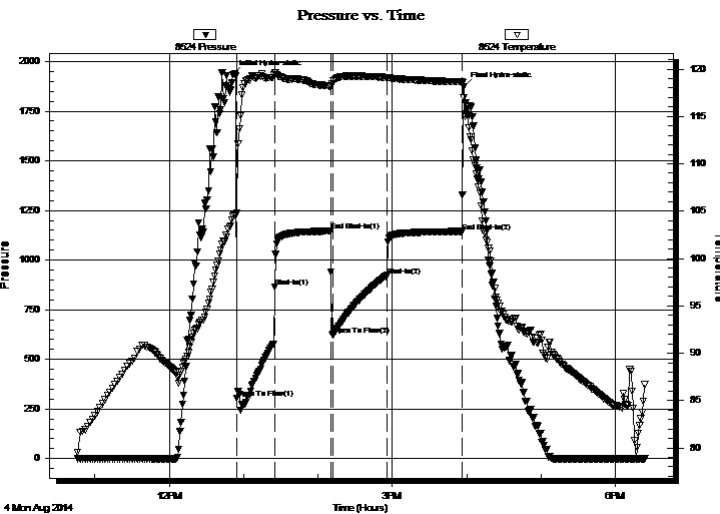
13-20s-16w Pawnee, KS
Mermis #1
 Job Ticket: 60327 **DST#: 2**
 Test Start: 2014.08.04 @ 10:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:54:30
 Time Test Ended: 18:23:30
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzem
 Unit No: S3
 Interval: **3740.00 ft (KB) To 3810.00 ft (KB) (TVD)**
 Reference Elevations: 2100.00 ft (KB)
 Total Depth: 3810.00 ft (KB) (TVD) 2093.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 7.00 ft

Serial #: 8524 Inside
 Press@RunDepth: 922.29 psig @ 3806.56 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.08.04 End Date: 2014.08.04 Last Calib.: 2014.08.04
 Start Time: 10:46:00 End Time: 18:23:30 Time On Btm: 2014.08.04 @ 12:51:30
 Time Off Btm: 2014.08.04 @ 15:57:30

TEST COMMENT: 1st Open/ 30 Minutes. Good blow built to bottom of 5 gallon bucket in 1 minute and 45 seconds.
 1st Shut In/ 45 Minutes. Blow back built to 2 inches into water.
 2nd Open/ 45 Minutes. Good blow built to bottom of 5 gallon bucket in 3 minutes.
 2nd Shut In/ 60 Minutes. No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1934.68	104.50	Initial Hydro-static
3	303.76	104.75	Open To Flow (1)
34	866.38	119.61	Shut-In(1)
79	1146.31	118.20	End Shut-In(1)
80	621.07	118.47	Open To Flow (2)
125	922.29	119.12	Shut-In(2)
185	1144.33	118.64	End Shut-In(2)
186	1873.76	116.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	100% Mud	1.77
378.00	50% mud, 50% Water	5.30
252.00	muddy water 35% Mud, 65% Water	3.53
315.00	muddy water 20% Mud, 80% Water	4.42
252.00	muddy water 10% Mud, 90% water	3.53
189.00	muddy water 5% water, 95% water	2.65

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

13-20s-16w Pawnee,KS
Mermis #1
Job Ticket: 60327 **DST#: 2**
Test Start: 2014.08.04 @ 10:45:00

Tool Information

Drill Pipe:	Length: 3727.00 ft	Diameter: 3.80 inches	Volume: 52.28 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 52.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3740.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.56 ft			
Tool Length:	90.56 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			3725.00	
Hydraulic tool	5.00			3730.00	
Packer	5.00			3735.00	20.00 Bottom Of Top Packer
Packer	5.00			3740.00	
Anchor	5.00			3745.00	
Change Over Sub	0.75			3745.75	
Drill Pipe	31.06			3776.81	
Change Over Sub	0.75			3777.56	
Anchor	28.00			3805.56	
Recorder	1.00	8524	Inside	3806.56	
Recorder	1.00	8159	Outside	3807.56	
Bull Plug	3.00			3810.56	70.56 Bottom Packers & Anchor

Total Tool Length: 90.56



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

13-20s-16w Pawnee,KS
Mermis #1
Job Ticket: 60327 **DST#: 2**
Test Start: 2014.08.04 @ 10:45:00

Mud and Cushion Information

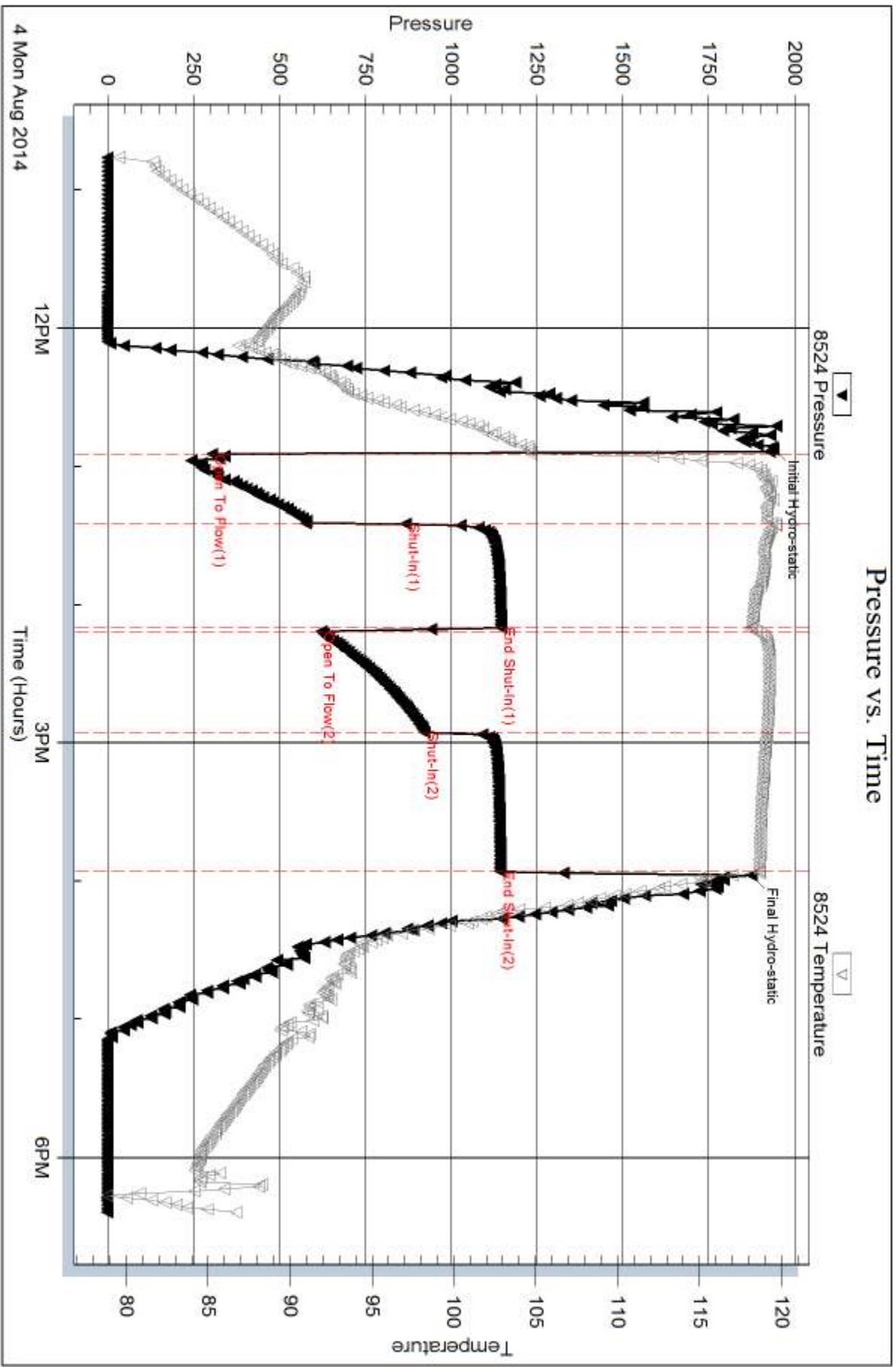
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	34000 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 11000.00 ppm			
Filter Cake: 1.00 inches			

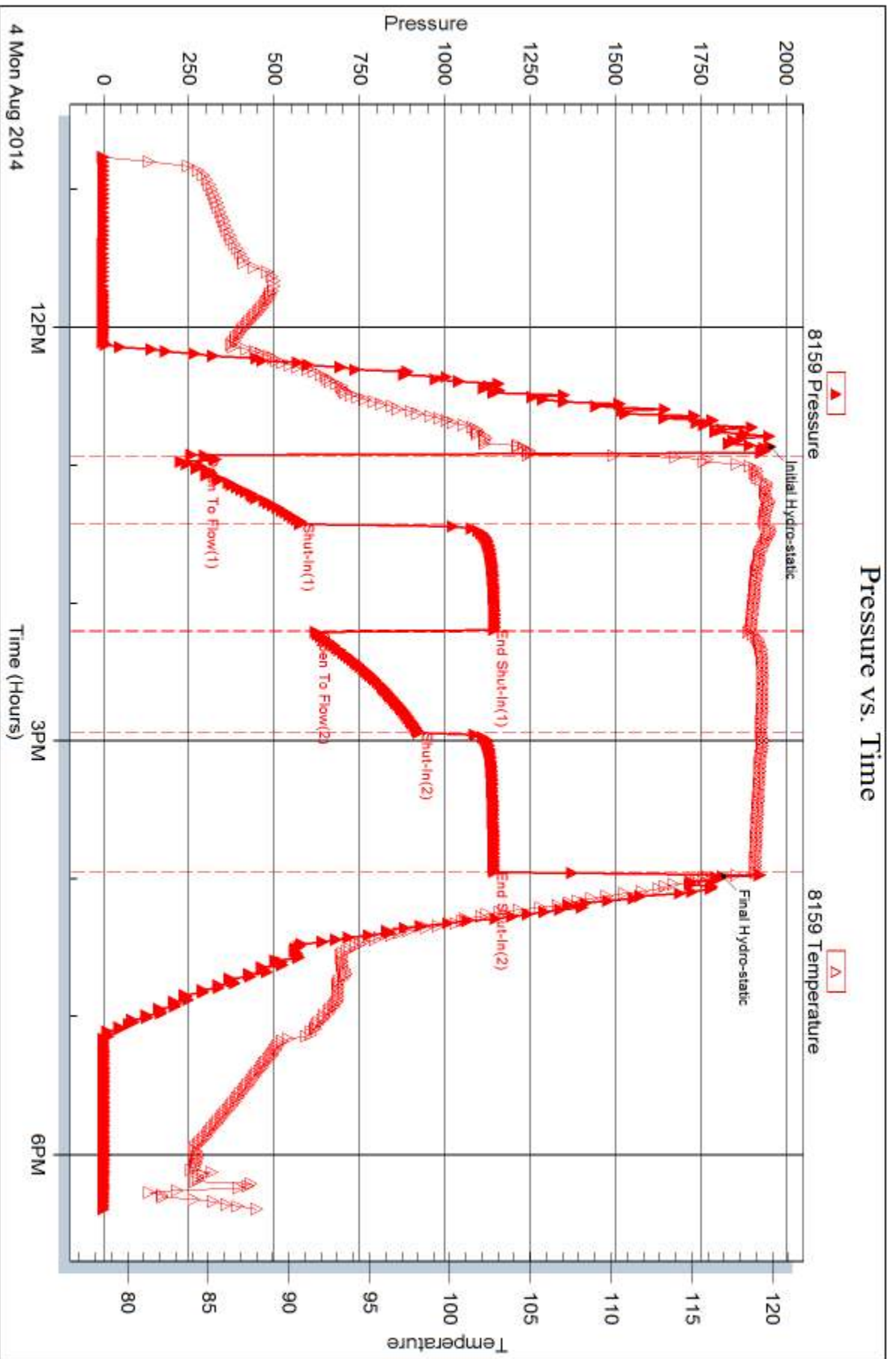
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	100% Mud	1.767
378.00	50% mud, 50% Water	5.302
252.00	muddy w ater 35% Mud, 65% Water	3.535
315.00	muddy w ater 20% Mud, 80% Water	4.419
252.00	muddy w ater 10% Mud, 90% w ater	3.535
189.00	muddy w ater 5% w ater, 95% w ater	2.651
348.00	100% w ater	4.882

Total Length: 1860.00 ft Total Volume: 26.091 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: resist recov, .22 ohms at 50 degrees







DRILL STEM TEST REPORT

Prepared For: **Charter Energy, Inc.**

P.O. Box 252
Great Bend KS 67530-0252

ATTN: Jake Eastes

Mermis #1

13-20s-16w Pawnee,KS

Start Date: 2014.08.05 @ 01:45:00

End Date: 2014.08.05 @ 09:14:30

Job Ticket #: 60328 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.07 @ 10:40:31



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

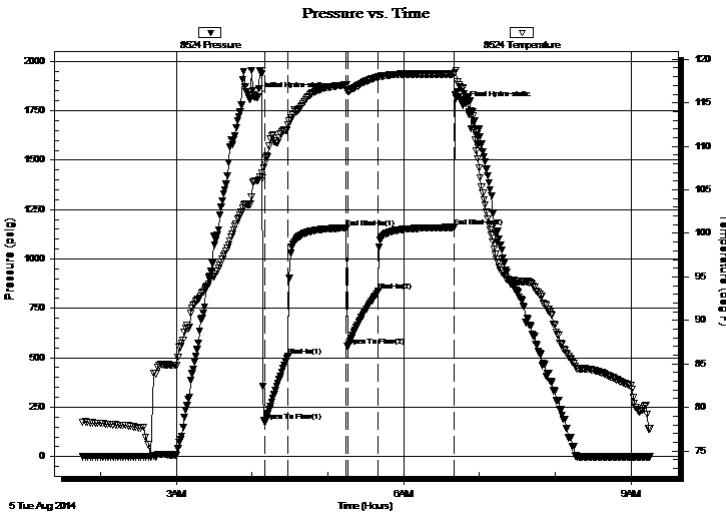
13-20s-16w Pawnee, KS
Mermis #1
Job Ticket: 60328 **DST#: 3**
Test Start: 2014.08.05 @ 01:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:10:00
Time Test Ended: 09:14:30
Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3/36/Great Bend
Interval: **3816.00 ft (KB) To 3835.00 ft (KB) (TVD)**
Reference Elevations: 2100.00 ft (KB)
Total Depth: 3835.00 ft (KB) (TVD) 2093.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 7.00 ft

Serial #: 8524 Inside
Press@RunDepth: 836.21 psig @ 3831.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.08.05 End Date: 2014.08.05 Last Calib.: 2014.08.05
Start Time: 01:46:00 End Time: 09:14:30 Time On Btm: 2014.08.05 @ 04:04:30
Time Off Btm: 2014.08.05 @ 06:47:00

TEST COMMENT: 1st Open/ 20 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds.
1st Shut In/ 45 Minutes. Blow back built to 6 inches into water.
2nd Open/ 25 Minutes. Good blow built to bottom of 5 gallon bucket in 1 minute and 50 seconds.
2nd Shut In/ 60 Minutes. Blow back built to 3 inches into water.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1819.52	106.07	Initial Hydro-static
6	179.31	108.05	Open To Flow (1)
24	510.08	112.51	Shut-In(1)
70	1157.57	117.04	End Shut-In(1)
71	557.06	116.27	Open To Flow (2)
96	836.21	117.95	Shut-In(2)
155	1159.90	118.28	End Shut-In(2)
163	1777.15	116.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	Watery mud 35% Water, 65% Mud	0.88
126.00	muddy w ater 50% w ater, 50% Mud	1.77
252.00	Muddy w ater 40% mud, 60% w ater	3.53
378.00	muddy w ater 25% mud, 75% w ater	5.30
1076.00	100% w ater	15.09

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

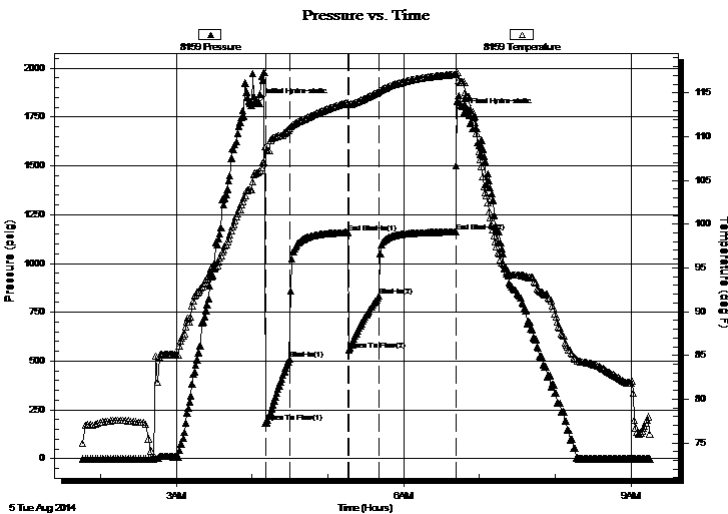
13-20s-16w Pawnee, KS
Mermis #1
Job Ticket: 60328 **DST#: 3**
Test Start: 2014.08.05 @ 01:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:10:00
Time Test Ended: 09:14:30
Interval: **3816.00 ft (KB) To 3835.00 ft (KB) (TVD)**
Total Depth: 3835.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3/36/Great Bend
Reference Elevations: 2100.00 ft (KB)
2093.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8159 Outside
Press@RunDepth: 1161.15 psig @ 3832.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.08.05 End Date: 2014.08.05 Last Calib.: 2014.08.05
Start Time: 01:46:00 End Time: 09:15:00 Time On Btm: 2014.08.05 @ 04:05:30
Time Off Btm: 2014.08.05 @ 06:48:00

TEST COMMENT: 1st Open/ 20 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds.
1st Shut In/ 45 Minutes. Blow back built to 6 inches into water.
2nd Open/ 25 Minutes. Good blow built to bottom of 5 gallon bucket in 1 minute and 50 seconds.
2nd Shut In/ 60 Minutes. Blow back built to 3 inches into water.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1821.55	105.95	Initial Hydro-static
5	184.07	108.84	Open To Flow (1)
24	509.88	110.89	Shut-In(1)
70	1158.75	113.88	End Shut-In(1)
71	558.00	113.70	Open To Flow (2)
95	832.24	115.12	Shut-In(2)
156	1161.15	117.11	End Shut-In(2)
163	1770.96	116.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	Watery mud 35% Water, 65% Mud	0.88
126.00	muddy water 50% water, 50% Mud	1.77
252.00	Muddy water 40% mud, 60% water	3.53
378.00	muddy water 25% mud, 75% water	5.30
1076.00	100% water	15.09

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

13-20s-16w Pawnee,KS
Mermis #1
Job Ticket: 60328 **DST#: 3**
Test Start: 2014.08.05 @ 01:45:00

Tool Information

Drill Pipe:	Length: 3822.00 ft	Diameter: 3.80 inches	Volume: 53.61 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 53.61 bbl</u>	Tool Chased	1.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3816.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	19.00 ft				
Tool Length:	39.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			3801.00	
Hydraulic tool	5.00			3806.00	
Top Packer	5.00			3811.00	
Packer	5.00			3816.00	20.00 Bottom Of Top Packer
Anchor	14.00			3830.00	
Recorder	1.00	8524	Inside	3831.00	
Recorder	1.00	8159	Outside	3832.00	
Bull Plug	3.00			3835.00	19.00 Anchor Tool

Total Tool Length: 39.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy, Inc.
P.O. Box 252
Great Bend KS 67530-0252
ATTN: Jake Eastes

13-20s-16w Pawnee,KS
Mermis #1
Job Ticket: 60328 **DST#: 3**
Test Start: 2014.08.05 @ 01:45:00

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:	28000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 14000.00 ppm			
Filter Cake: 2.00 inches			

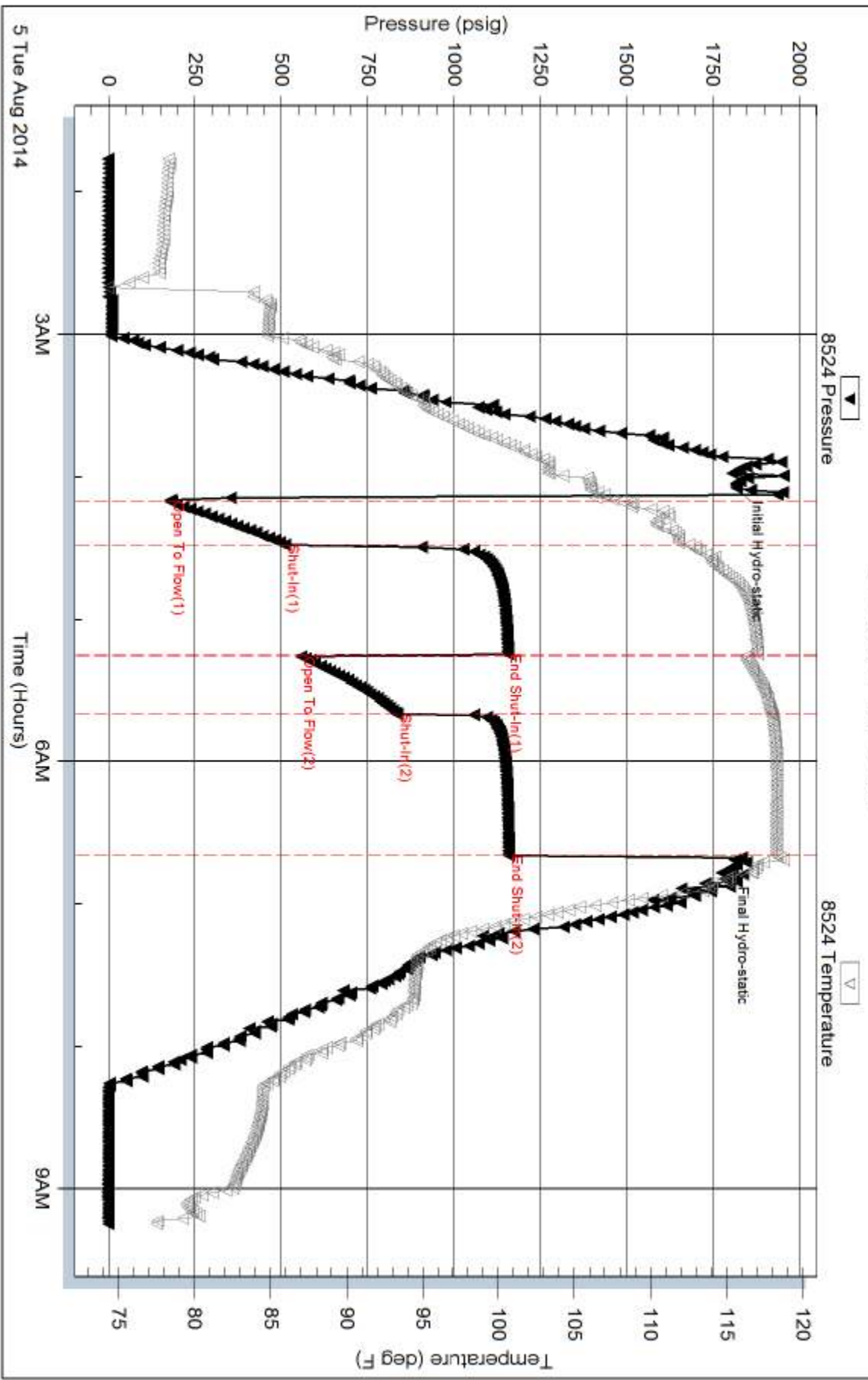
Recovery Information

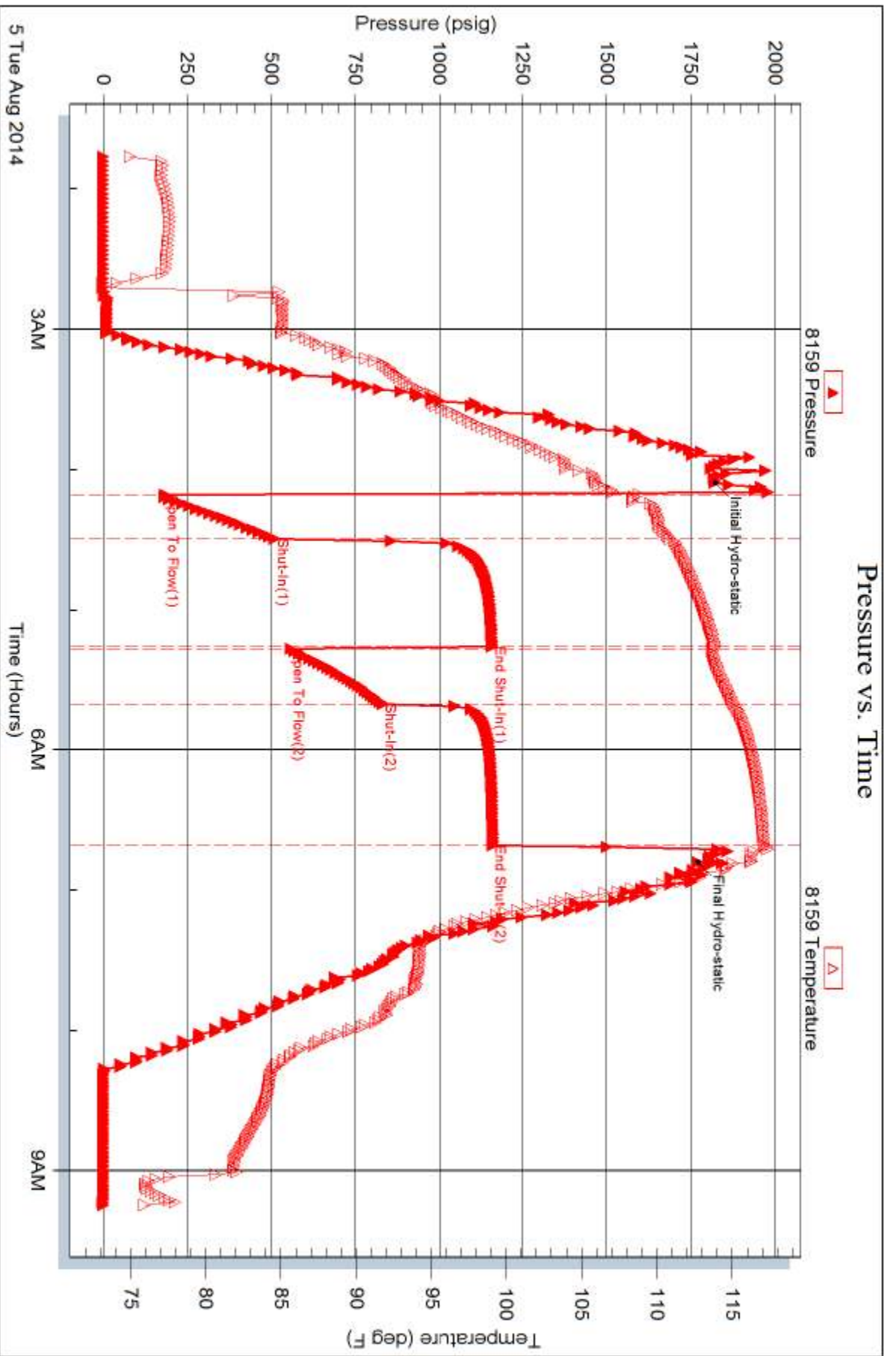
Recovery Table

Length ft	Description	Volume bbl
63.00	Watery mud 35% Water, 65% Mud	0.884
126.00	muddy w ater 50% w ater, 50% Mud	1.767
252.00	Muddy w ater 40% mud, 60% w ater	3.535
378.00	muddy w ater 25% mud, 75% w ater	5.302
1076.00	100% w ater	15.093

Total Length: 1895.00 ft Total Volume: 26.581 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: resist recov .22 at 50 degrees

Pressure vs. Time







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **60326**

4/10

Well Name & No. Mermis #1 Test No. 1 Date 8-3-14
 Company Charter Energy, Inc. Elevation 2093 KB 2100 GL
 Address P.O. Box 252 Great Bend KS 67530-0252
 Co. Rep / Geo. Jake Eastes Rig Royal #2
 Location: Sec. 13 Twp. 20 S Rge. 16 W Co. Pawnee State KS

Interval Tested 3740-3810 Zone Tested Arbuckle
 Anchor Length 70 Drill Pipe Run 3727 Mud Wt. 9.3
 Top Packer Depth 3735 Drill Collars Run 0 Vis 52
 Bottom Packer Depth 3740 Wt. Pipe Run 0 WL 10.8
 Total Depth 3810 Chlorides 11,000 ppm System LCM 1/2#

Blow Description 1st Open 30 min - Blow built to B.O.B in 1m 30s. AT 10m Blow rebuilt to 2 inches and stayed at 2 in for remained of time. 1st SI - 45 min. No blow back. ^{weak blow at surface}
2nd Open - 30 min - ~~blow~~ did not flow blow died at 1 min. 2nd SI - 30 min. No blow back.

Rec	Feet of	%gas	%oil	%water	%mud
<u>1809</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1809 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1919 Test Bottom Hole 1150 T-On Location 22:00
 (B) First Initial Flow 961 Jars _____ T-Started 22:45
 (C) First Final Flow 1152 Safety Joint _____ T-Open 00:45
 (D) Initial Shut-In 1153 Circ Sub Not used 50 T-Pulled 03:00
 (E) Second Initial Flow 1151 Hourly Standby _____ T-Out 06:30
 (F) Second Final Flow 1152 Mileage 36 miles Great Bend Comments _____
 (G) Final Shut-In 1152 Sampler _____
 (H) Final Hydrostatic 1831 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open _____ Extra Packer _____ Extra Copies _____
 Initial Shut-In _____ Extra Recorder _____ Sub Total 0
 Final Flow _____ Day Standby _____ Total 1255.80
 Final Shut-In _____ Accessibility _____ MP/DST Disc't _____
 Sub Total 1255.80

Approved By _____ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **60327**

4/10

Well Name & No. Mermis #1 Test No. 2 Date 8-4-14
 Company Charter Energy, Inc. Elevation 2093 KB 2100 GL
 Address P.O. Box 252 Great Bend KS 67530-0252
 Co. Rep / Geo. Jake Easter Rig Royal #2
 Location: Sec. 13 Twp. 20 S Rge. 16 W Co. Pawnee State KS

Interval Tested 3740 - 3810 Zone Tested Arbuckle
 Anchor Length 70 Drill Pipe Run 3727 Mud Wt. 9.3
 Top Packer Depth 3735 Drill Collars Run Ø Vis 52
 Bottom Packer Depth 3740 Wt. Pipe Run Ø WL 10.8
 Total Depth 3810 Chlorides 11000 ppm System LCM 1/2

Blow Description 1st Open - 30 min. Good blow built to bottom of 5 gallon bucket in 1m. 45s. 1st shut in - 45 min. Blow back built to 2 inches into water. 2nd Open - 45 min. Good blow built to bottom of 5 gallon bucket in in 3 min. 2nd shut in - 60 min.

Rec	Feet of	%gas	%oil	%water	%mud
126	mud			100	
378	muddy water		50	50	
252	muddy water		65	35 35	
315	muddy water		80	20	
252	muddy water		90	10	
189	muddy water		95	5	
Rec Total <u>1860</u>	BHT <u>water</u>	Gravity	API RW <u>.22 @ 50</u>	°F Chlorides <u>34000</u>	ppm

(A) Initial Hydrostatic 1934 Test Bottom Hole 1150 T-On Location 10:00
 (B) First Initial Flow 303 Jars _____ T-Started 11:00
 (C) First Final Flow 866 Safety Joint _____ T-Open 12:55
 (D) Initial Shut-In 1146 Circ Sub No T-Pulled 15:55
 (E) Second Initial Flow 621 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 922 Mileage 36 stand Great Bend Comments _____
 (G) Final Shut-In 1144 Sampler 55.80 _____
 (H) Final Hydrostatic 1873 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open _____ Extra Recorder _____ Sub Total 0
 Initial Shut-In _____ Day Standby _____ Total 1205.80
 Final Flow _____ Accessibility _____ MP/DST Disc't _____
 Final Shut-In _____ Sub Total 1205.80

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60328

Well Name & No. Mermis #1 Test No. 3 Date 8-5-14
 Company Charter Energy, Inc Elevation 2093 KB 2100 GL
 Address P.O. Box 252 Great Bend KS 67530
 Co. Rep / Geo. Jake Easter Rig Royal #2
 Location: Sec. 13 Twp. 20S Rge. 16W Co. Pawnee State KS

Interval Tested 3816 - 3835 Zone Tested Arbuckle
 Anchor Length 19 Drill Pipe Run 3822 Mud Wt. 9.4
 Top Packer Depth 3811 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3816 Wt. Pipe Run 0 WL 10.8
 Total Depth 3835 Chlorides 14000 ppm System LCM trc

Blow Description 1st open - Strong blow built to bottom of 5 gallon bucket in 40 sec. 1st shut In built to 6 inches into water. 2nd open built to bottom of 5 gallon bucket in 1 min. 50 sec. 2nd shut In Blow back built to 3 inches.

Rec	Feet of	%gas	%oil	%water	%mud
<u>63</u>	<u>watery mud</u>		<u>35</u>	<u>65</u>	
<u>126</u>	<u>muddy water</u>		<u>50</u>	<u>50</u>	
<u>252</u>	<u>muddy water</u>		<u>60</u>	<u>40</u>	
<u>328</u>	<u>muddy water</u>		<u>75</u>	<u>25</u>	
<u>1076</u>	<u>water</u>		<u>100</u>		

Rec Total 1895 BHT _____ Gravity _____ API RW .22 @ 50 ° F Chlorides 28000 ppm

(A) Initial Hydrostatic 1819 Test Bottom Hole 1150 T-On Location 0130
 (B) First Initial Flow 179 Jars _____ T-Started 0300
 (C) First Final Flow 510 Safety Joint _____ T-Open 0415
 (D) Initial Shut-In 1157 Circ Sub no used T-Pulled 0645
 (E) Second Initial Flow 557 Hourly Standby _____ T-Out 0910
 (F) Second Final Flow 836 Mileage 36 Great Bend Comments _____
 (G) Final Shut-In 1159 Sampler 55.80 _____
 (H) Final Hydrostatic 1777 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 20 min. Extra Packer _____ Extra Copies _____
 Initial Shut-In 45 min. Extra Recorder _____ Sub Total 0
 Final Flow 25 min. Day Standby _____ Total 1205.80
 Final Shut-In 60 min. Accessibility _____ MP/DST Disc't _____
 Sub Total 1205.80

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.