

1210464

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
-------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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: _____ _____
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 7143

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-2-14	18	20	15	Barton	KS		11:15 AM

Location *Pownee Rock N to church, W to 130 Rd*

Lease <i>Wells</i>	Well No. <i>1</i>	Owner
Contractor <i>Royal #2</i>		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Type Job <i>Surface</i>		
Hole Size <i>12 1/4</i>	T.D. <i>1087</i>	Charge To <i>Charter Energy Inc.</i>
Csg. <i>8 5/8</i>	Depth <i>1090</i>	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.	Shoe Joint <i>86.52</i>	Cement Amount Ordered <i>450 sx 60/40, 3% cc, 2% gel, 1/4# Flow</i>
Meas Line	Displace <i>63661</i>	

EQUIPMENT

Pumptrk <i>17</i>	No.	Cementor	Common <i>270</i>
		Helper <i>Nick</i>	Poz. Mix <i>180</i>
Bulktrk <i>4</i>	No.	Driver	Gel. <i>9</i>
		Driver <i>Lonnie M.</i>	Calcium <i>16</i>
Bulktrk <i>PU</i>	No.	Driver	
		Driver <i>Travis</i>	

JOB SERVICES & REMARKS

Remarks: <i>Cement did circulate</i>	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal <i>112#</i>
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling <i>475</i>
	Mileage

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	<i>1 Rubber Plug</i>
	<i>1 baffal Plate</i>
	Pumptrk Charge <i>Long Surface</i>
	Mileage <i>21</i>

X Signature <i>[Signature]</i>	Tax
	Discount
	Total Charge



CHARGE TO: Charger
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET 25444

PAGE 1 OF 2

1. SERVICE LOCATIONS	Hwy 85	WELL/PROJECT NO.	1	LEASE	Wells	COUNTY/PARISH	Bertron	STATE	KS	CITY	Delivered to	DATE	4-9-11	OWNER
2.	Ness City, KS	TICKET TYPE	CONTRACTOR	RIG NAME/NO.	2	WELL CATEGORY	Development	SHIPPED VIA	CT	Delivered to	WELL PERMIT NO.	ORDER NO.		
3.		SALES	ROYAL OIL	JOB PURPOSE	5 1/2 longstrms									
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS												

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF		QTY.	UM	QTY.		
575					MILEAGE #112	60	mi		6.00	360.00
578					Pump Charge Longstrng	1	ea		1500.00	1500.00
221					Liquid KCL	2	gal		25.00	50.00
281					Mud Flush	500	gal		1.25	625.00
290					D Air	2	gal		42.00	84.00
402					Leantainers	6	ea	5 1/2	70.00	420.00
403					Leant Basket	1	ea		300.00	300.00
406					Latex Down Plug + Be Plug	1	ea		275.00	275.00
407					Insert First Shoe w/ Auto Fill	1	ea		375.00	375.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS
 DATE SIGNED 4-9-11 TIME SIGNED 8:00 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY	OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	WE UNDERSTOOD AND MET YOUR NEEDS?	OUR SERVICE WAS PERFORMED WITHOUT DELAY?	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	ARE YOU SATISFIED WITH OUR SERVICE?
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 APPROVAL LSB

PAGE TOTAL	92	3989.00
SUBTOTAL	11,543.00	
Bertron TAX 7.15%	627.34	
TOTAL	12,170.34	

Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 25444

CUSTOMER *Charles*

WELL *Wells #1*

DATE 4-4-14

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				UNIT PRICE	AMOUNT				
		LOC	ACCT	DF			QTY	UM	QTY	UM						
325		2				Standard cement EA-2	175	SKS			14	50	2537	50		
276		2				Flocele	50	lbs			2	50	125	00		
283		2				Salt	900	lbs				20	180	00		
284		2				Calsel	8	SKS				35	00	280	00	
286		2				Mald 1	85	lbs				8	50	722	50	
287		2				Gas Stop	350	lbs				8	00	2800	00	
581		2				SERVICE CHARGE						2	00	350	00	
583		2				MILEAGE CHARGE						1	00	559	00	
							TOTAL WEIGHT	18635								
							LOADED MILES	60								
							CUBIC FEET	125								
							TON MILES	559								

CONTINUATION TOTAL 7554 00

JOB LOG

SWIFT Services, Inc.

DATE 4-9-14 PAGE NO.

CUSTOMER Charter	WELL NO. 1	LEASE wells	JOB TYPE 5 1/2 long string	TICKET NO. 25444
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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0100							on location
								TO 3890 55 20
								TP 3886 Insert 3886
								5 1/2 x 14 #
								centralizers 1,2,3,5,7,9
								Basket 6
	0200							Start Pipe
	0315							Drop Ball Break Circulation
	0405		7/5					Plug Bit 30 sks .mlt 75 sks
	0415	5	12				300	Start mud flush
		5	20				300	start KCL flush
		5	32				200	Start cement 30 sks EA-2
	0430							Drop Plug wash out Pump + Lines
		6.5						Start Displacement
	0455		94.3				800 1500	Land Plug
								Release Dry Hold
								Wash up Rock Up
	0530							Job Complete Thank You Josh, Brian, John



DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252
Great Bend KS 67530

ATTN: Kurt Talbott

Wells #1

18-20s-15w Barton,KS

Start Date: 2014.04.06 @ 20:00:00

End Date: 2014.04.07 @ 05:06:30

Job Ticket #: 57601 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.04.10 @ 11:43:37



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy
 PO Box 252
 Great Bend KS 67530
 ATTN: Kurt Talbott

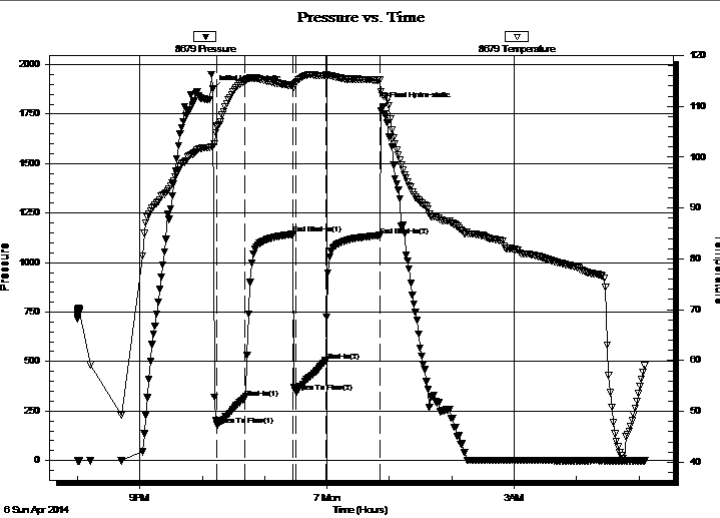
18-20s-15w Barton,KS
Wells #1
 Job Ticket: 57601 **DST#: 1**
 Test Start: 2014.04.06 @ 20:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:14:00
 Time Test Ended: 05:06:30
 Interval: **3714.00 ft (KB) To 3776.00 ft (KB) (TVD)**
 Total Depth: 3776.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Bob Hamel
 Unit No: 67
 Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8679 Inside
 Press@RunDepth: 504.72 psig @ 3750.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.06 End Date: 2014.04.07 Last Calib.: 2014.04.06
 Start Time: 20:00:01 End Time: 05:06:30 Time On Btm: 2014.04.06 @ 22:10:00
 Time Off Btm: 2014.04.07 @ 00:54:00

TEST COMMENT: I.F. - 30 - BOB in 15 secs GTS in 6 min
 I.S.I. - 45 - BOB in 3 min
 F.F. - 30 - BOB immediately - gauged gas
 F.S.I. - 45 - Weak surface blow back died in 27 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1876.18	102.13	Initial Hydro-static
4	180.33	105.89	Open To Flow (1)
31	315.84	115.10	Shut-In(1)
77	1142.84	114.21	End Shut-In(1)
80	347.46	114.59	Open To Flow (2)
109	504.72	116.13	Shut-In(2)
161	1136.70	115.15	End Shut-In(2)
164	1786.88	112.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	S,O,S,M,W, 40% MUD 60%WTR. FEW OIL 1.77CS	
329.00	S,W,C,H,M,C,G,O, 5% W.30%M.30%G.354.62	
615.00	S,M,C,G,O 5%MUD 20%GAS 75%OIL	8.63
323.00	CLEAN OIL 100%	4.53
0.00	2,331' G.I.P.	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	8.00	35.06
Last Gas Rate	0.13	9.00	8.65
Max. Gas Rate	0.13	9.00	8.65



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57601

DST#: 1

ATTN: Kurt Talbott

Test Start: 2014.04.06 @ 20:00:00

Tool Information

Drill Pipe:	Length: 3730.00 ft	Diameter: 3.80 inches	Volume: 52.32 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:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	58000.00 lb
			<u>Total Volume: 52.32 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	36.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3714.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	62.00 ft				
Tool Length:	82.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3695.00	
Shut In Tool	5.00			3700.00	
Hydraulic tool	5.00			3705.00	
Packer	4.00			3709.00	20.00 Bottom Of Top Packer
Packer	5.00			3714.00	
Stubb	1.00			3715.00	
Perforations	2.00			3717.00	
Change Over Sub	1.00			3718.00	
Drill Pipe	31.00			3749.00	
Change Over Sub	1.00			3750.00	
Recorder	0.00	6625	Outside	3750.00	
Recorder	0.00	8679	Inside	3750.00	
Perforations	22.00			3772.00	
Bullnose	4.00			3776.00	62.00 Bottom Packers & Anchor

Total Tool Length: 82.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57601

DST#: 1

ATTN: Kurt Talbott

Test Start: 2014.04.06 @ 20:00:00

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:

65000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.37 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	S,O,S,M,W, 40% MUD 60%WTR. FEW OIL SPI	1.767
329.00	S,W,C,H,M,C,G,O, 5% W.30%M.30%G.35%O	4.615
615.00	S,M,C,G,O 5%MUD 20%GAS 75%OIL	8.627
323.00	CLEAN OIL 100%	4.531
0.00	2,331' G.I.P.	0.000

Total Length: 1393.00 ft Total Volume: 19.540 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 37.8 @ 60 DEG. R.W. = .20 OHMS @ 42 DEG.

Serial #: 8679

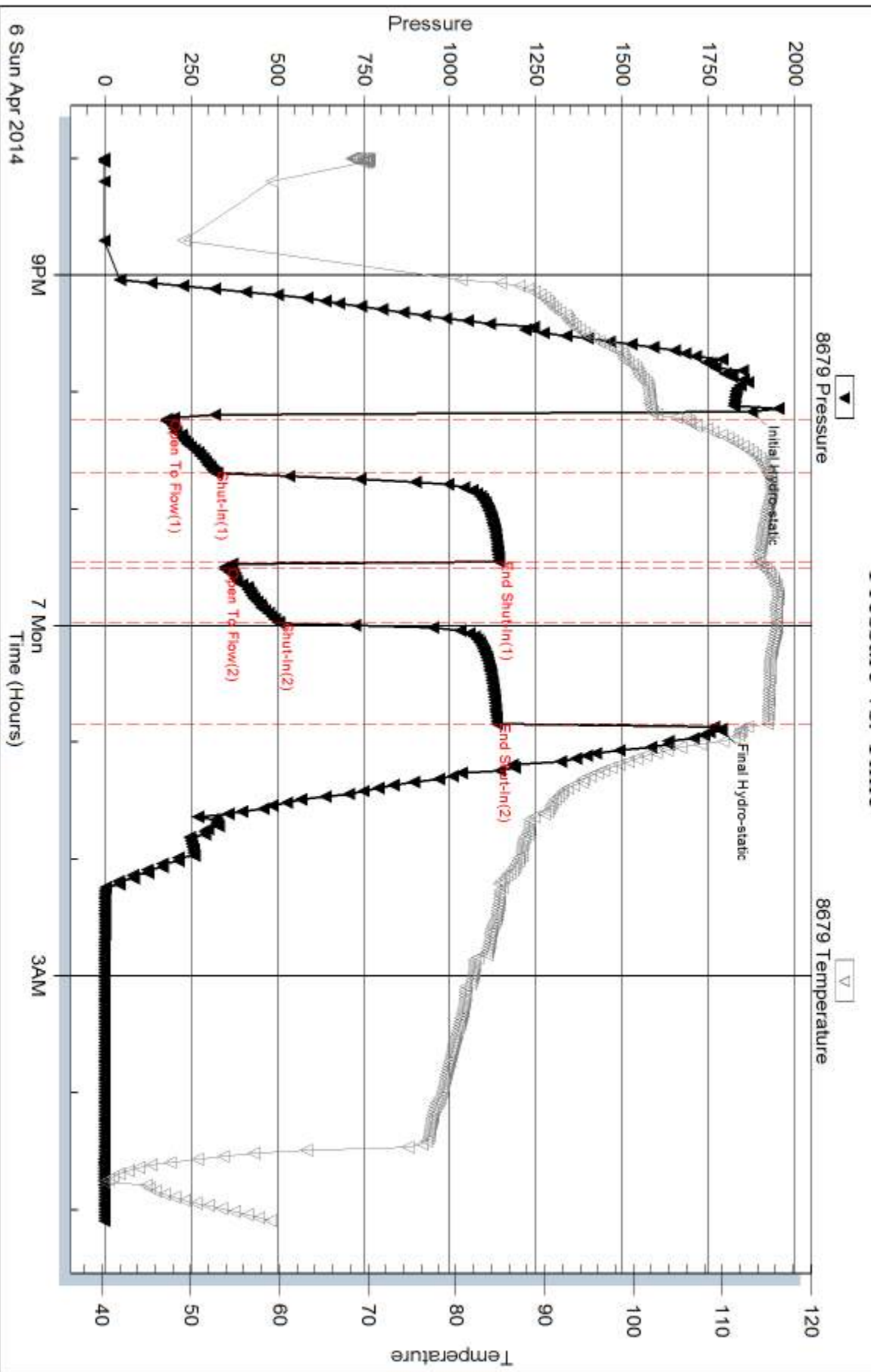
Inside

Charter Energy

Wells #1

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 57601

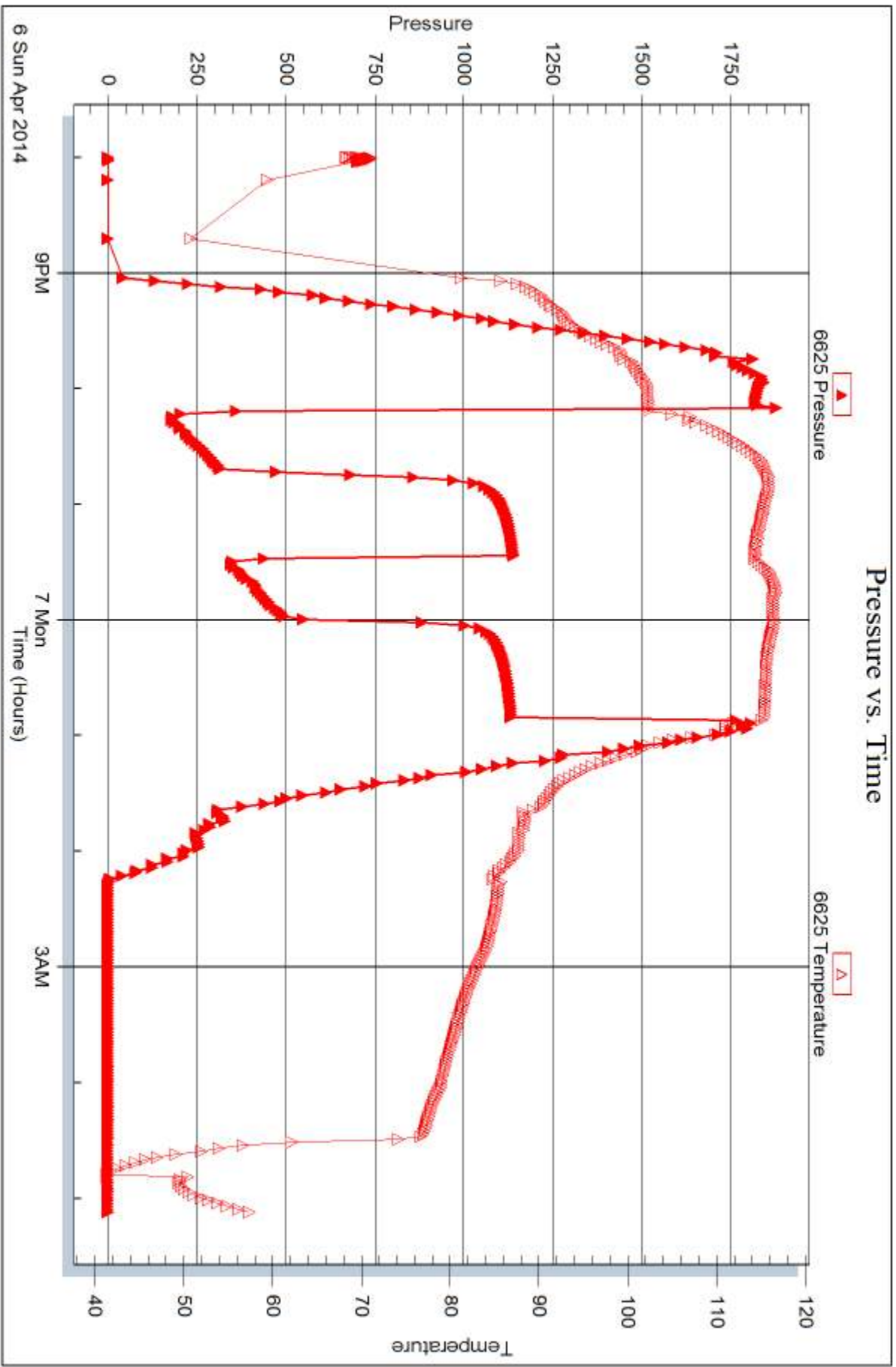
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Serial #: 6625

Outside Charter Energy

Wells #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252
Great Bend KS 67530

ATTN: Kurt Talbott

Wells #1

18-20s-15w Barton,KS

Start Date: 2014.04.07 @ 11:20:00

End Date: 2014.04.07 @ 18:10:57

Job Ticket #: 57602 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.04.10 @ 11:43:13



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy
 PO Box 252
 Great Bend KS 67530
 ATTN: Kurt Talbott

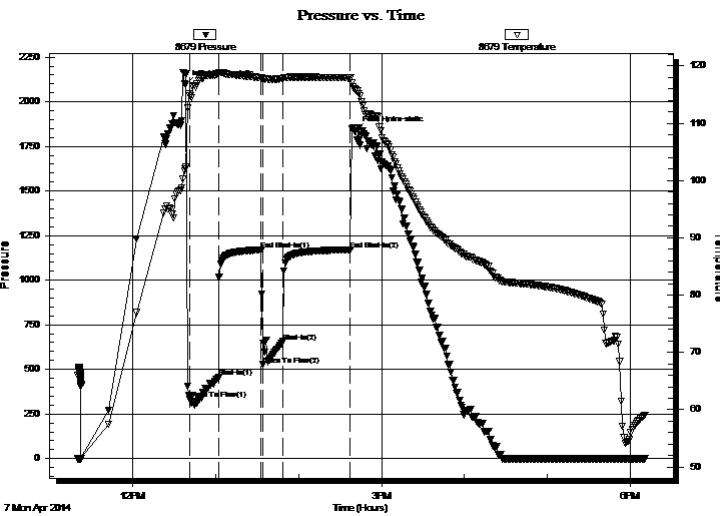
18-20s-15w Barton,KS
Wells #1
 Job Ticket: 57602 **DST#: 2**
 Test Start: 2014.04.07 @ 11:20:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:41:27
 Time Test Ended: 18:10:57
 Interval: **3783.00 ft (KB) To 3792.00 ft (KB) (TVD)**
 Total Depth: 3792.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bob Hamel
 Unit No: 67
 Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8679 Inside
 Press@RunDepth: 655.29 psig @ 3788.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.07 End Date: 2014.04.07 Last Calib.: 2014.04.07
 Start Time: 11:20:01 End Time: 18:10:56 Time On Btm: 2014.04.07 @ 12:37:57
 Time Off Btm: 2014.04.07 @ 14:41:27

TEST COMMENT: I.F. - 20 - BOB in 10 sec GTS in 1 min
 I.S.I. - 30 - BOB in 7 min
 F.F. - 15 - BOB instantly - gauged gas
 F.S.I. - 45 - BOB in 5 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2096.08	102.04	Initial Hydro-static
4	334.50	114.82	Open To Flow (1)
24	454.54	118.63	Shut-In(1)
55	1171.00	117.95	End Shut-In(1)
56	526.59	117.53	Open To Flow (2)
71	655.29	117.81	Shut-In(2)
120	1171.27	117.91	End Shut-In(2)
124	1837.01	115.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
441.00	WATER	6.19
252.00	S,M,C,W, 5% MUD 95% WATER	3.53
126.00	S,W,C,M,C,G,O, 5%WTR 10%MD 30%GS	1.77
756.00	CLEAN OIL 100%	10.60
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	12.00	41.41
Last Gas Rate	0.13	8.00	8.27
Max. Gas Rate	0.25	12.00	41.41



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57602

DST#: 2

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 11:20:00

Tool Information

Drill Pipe:	Length: 3794.00 ft	Diameter: 3.80 inches	Volume: 53.22 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: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 53.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3783.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	29.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3764.00	
Shut In Tool	5.00			3769.00	
Hydraulic tool	5.00			3774.00	
Packer	4.00			3778.00	20.00 Bottom Of Top Packer
Packer	5.00			3783.00	
Stubb	1.00			3784.00	
Perforations	4.00			3788.00	
Recorder	0.00	6625	Outside	3788.00	
Recorder	0.00	8679	Inside	3788.00	
Bullnose	4.00			3792.00	9.00 Bottom Packers & Anchor
Total Tool Length:	29.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57602

DST#: 2

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 11:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36.8 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
441.00	WATER	6.186
252.00	S,M,C,W, 5% MUD 95% WATER	3.535
126.00	S,W,C,M,C,G,O, 5%WTR 10%MD 30%GS 55%	1.767
756.00	CLEAN OIL 100%	10.605
0.00	GTS	0.000

Total Length: 1575.00 ft Total Volume: 22.093 bbl

Num Fluid Samples: 0

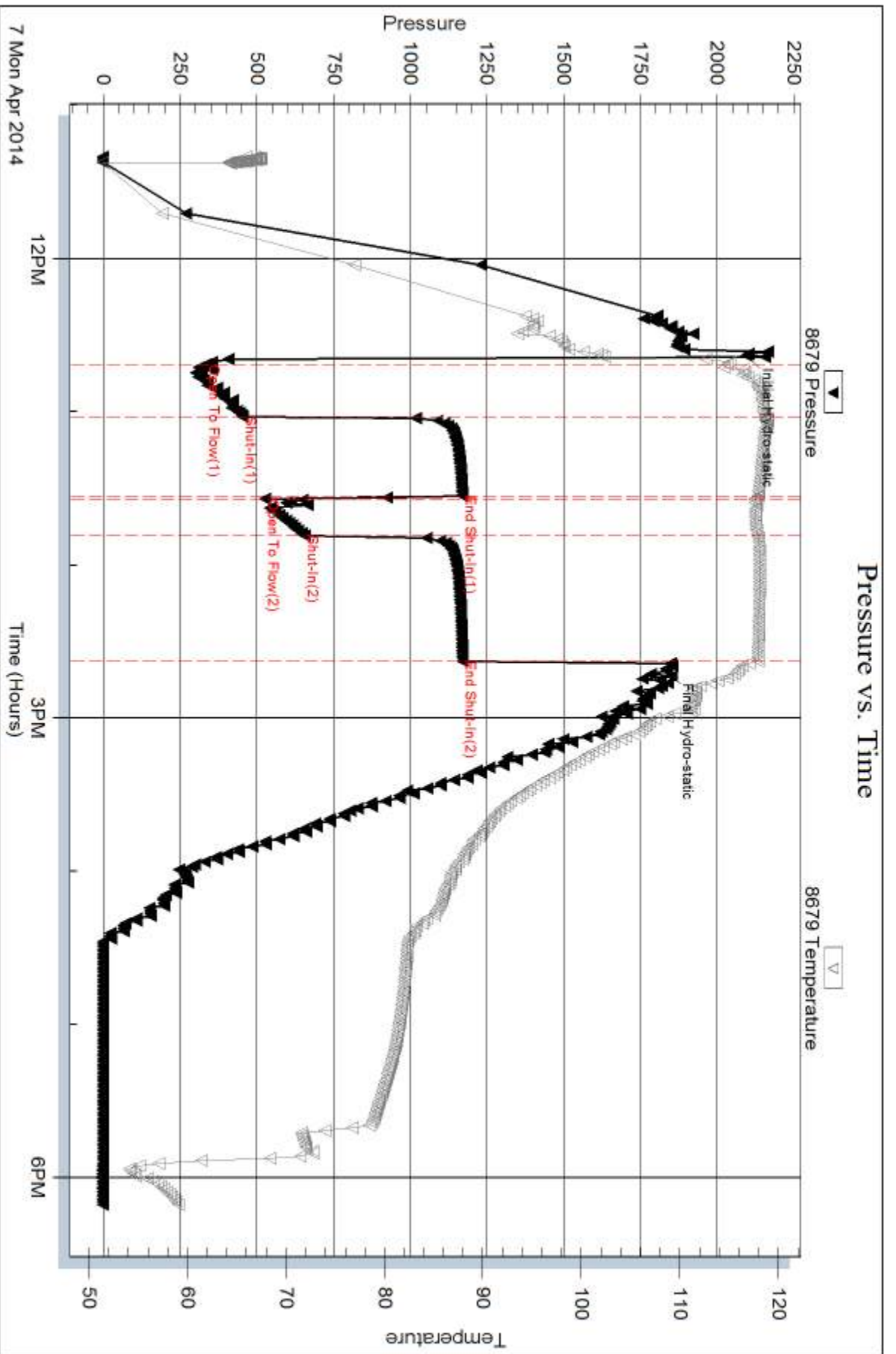
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: OIL GRAVITY = 36.8 @ 60 DEG. R.W. = .17 OHMS @ 59.8 DEG.

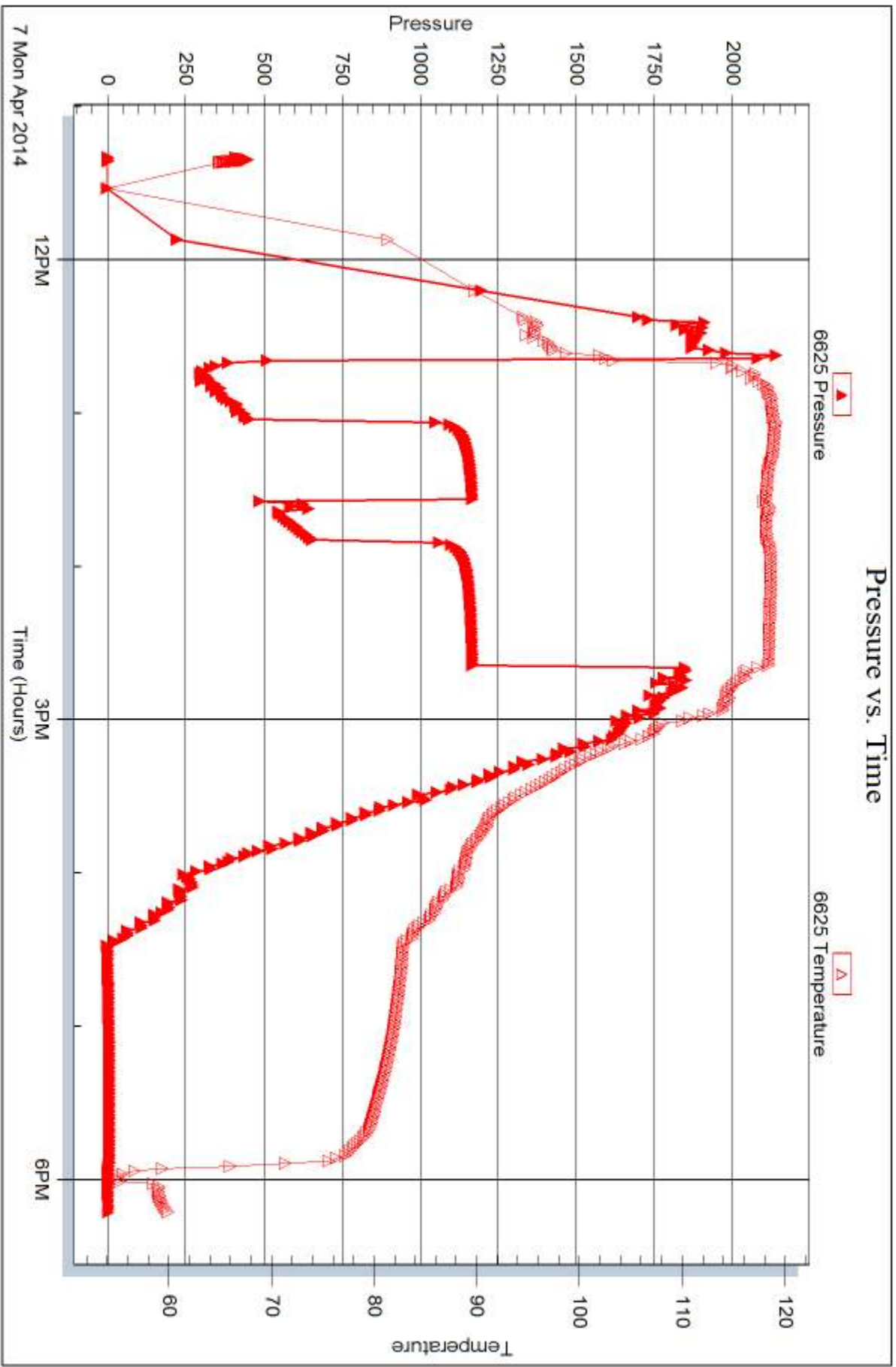


Serial #: 6625

Outside Charter Energy

Wells #1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 57602

Printed: 2014.04.10 @ 11:43:16



DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252
Great Bend KS 67530

ATTN: Kurt Talbott

Wells #1

18-20s-15w Barton,KS

Start Date: 2014.04.07 @ 00:19:00

End Date: 2014.04.08 @ 08:04:30

Job Ticket #: 57603 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.04.10 @ 11:42:41



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Charter Energy
 PO Box 252
 Great Bend KS 67530
 ATTN: Kurt Talbott

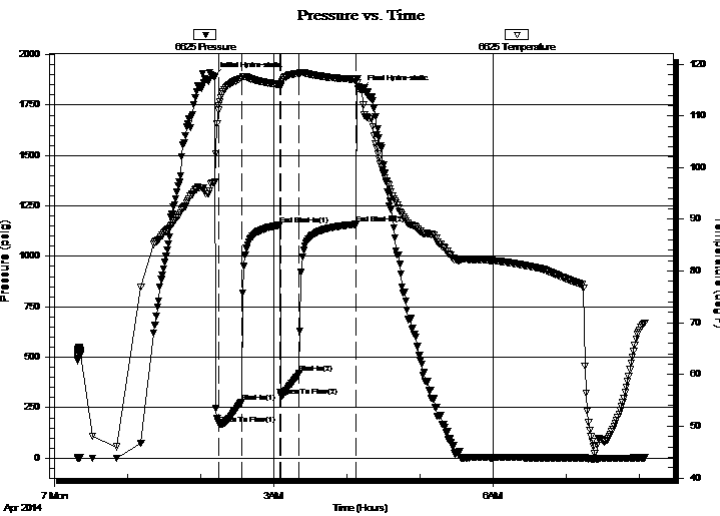
18-20s-15w Barton,KS
Wells #1
 Job Ticket: 57603 **DST#: 3**
 Test Start: 2014.04.07 @ 00:19:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:15:00
 Time Test Ended: 08:04:30
 Interval: **3791.00 ft (KB) To 3810.00 ft (KB) (TVD)**
 Total Depth: 3810.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bob Hamel
 Unit No: 67
 Reference Elevations: 2077.00 ft (KB)
 2070.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 6625 Outside
 Press@RunDepth: 420.05 psig @ 3793.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.07 End Date: 2014.04.07 Last Calib.: 2014.04.07
 Start Time: 00:19:01 End Time: 08:04:30 Time On Btm: 2014.04.07 @ 02:11:00
 Time Off Btm: 2014.04.07 @ 04:11:30

TEST COMMENT: I.F. - 20 - BOB immediately GTS in 30 sec
 I.S.I. - 30 - BOB in 1 min
 F.F. - 15 - BOB in 45 sec
 F.S.I. - 45 - BOB in 1 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1890.04	97.11	Initial Hydro-static
4	170.09	112.00	Open To Flow (1)
23	277.94	117.21	Shut-In(1)
54	1155.14	116.04	End Shut-In(1)
55	308.61	116.14	Open To Flow (2)
70	420.05	118.19	Shut-In(2)
117	1158.71	117.05	End Shut-In(2)
121	1828.16	115.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	WATER 100%	2.65
126.00	S,M,C,H,W,C,G,O 5%MD 20%WTR 25%OIL	1.77
630.00	CLEAN OIL 100%	8.84
0.00	2583' G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	4.00	122.10
Last Gas Rate	0.25	10.00	38.23
Max. Gas Rate	0.25	10.00	38.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57603

DST#: 3

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 00:19:00

Tool Information

Drill Pipe:	Length: 3792.00 ft	Diameter: 3.80 inches	Volume: 53.19 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:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	58000.00 lb
			<u>Total Volume: 53.19 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3791.00 ft			Final	52000.00 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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3776.00	
Change Over Sub	1.00			3777.00	
Hydraulic tool	5.00			3782.00	
Packer	4.00			3786.00	20.00 Bottom Of Top Packer
Packer	5.00			3791.00	
Stubb	1.00			3792.00	
Perforations	1.00			3793.00	
Recorder	0.00	6625	Outside	3793.00	
Recorder	0.00	8679	Inside	3793.00	
Perforations	13.00			3806.00	
Bullnose	4.00			3810.00	19.00 Bottom Packers & Anchor

Total Tool Length: 39.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charter Energy

18-20s-15w Barton,KS

PO Box 252
Great Bend KS 67530

Wells #1

Job Ticket: 57603

DST#: 3

ATTN: Kurt Talbott

Test Start: 2014.04.07 @ 00:19:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

41 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
189.00	WATER 100%	2.651
126.00	S,M,C,H,W,C,G,O 5%MD 20%WTR 25%G 50'	1.767
630.00	CLEAN OIL 100%	8.837
0.00	2583' G.I.P.	0.000

Total Length: 945.00 ft Total Volume: 13.255 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

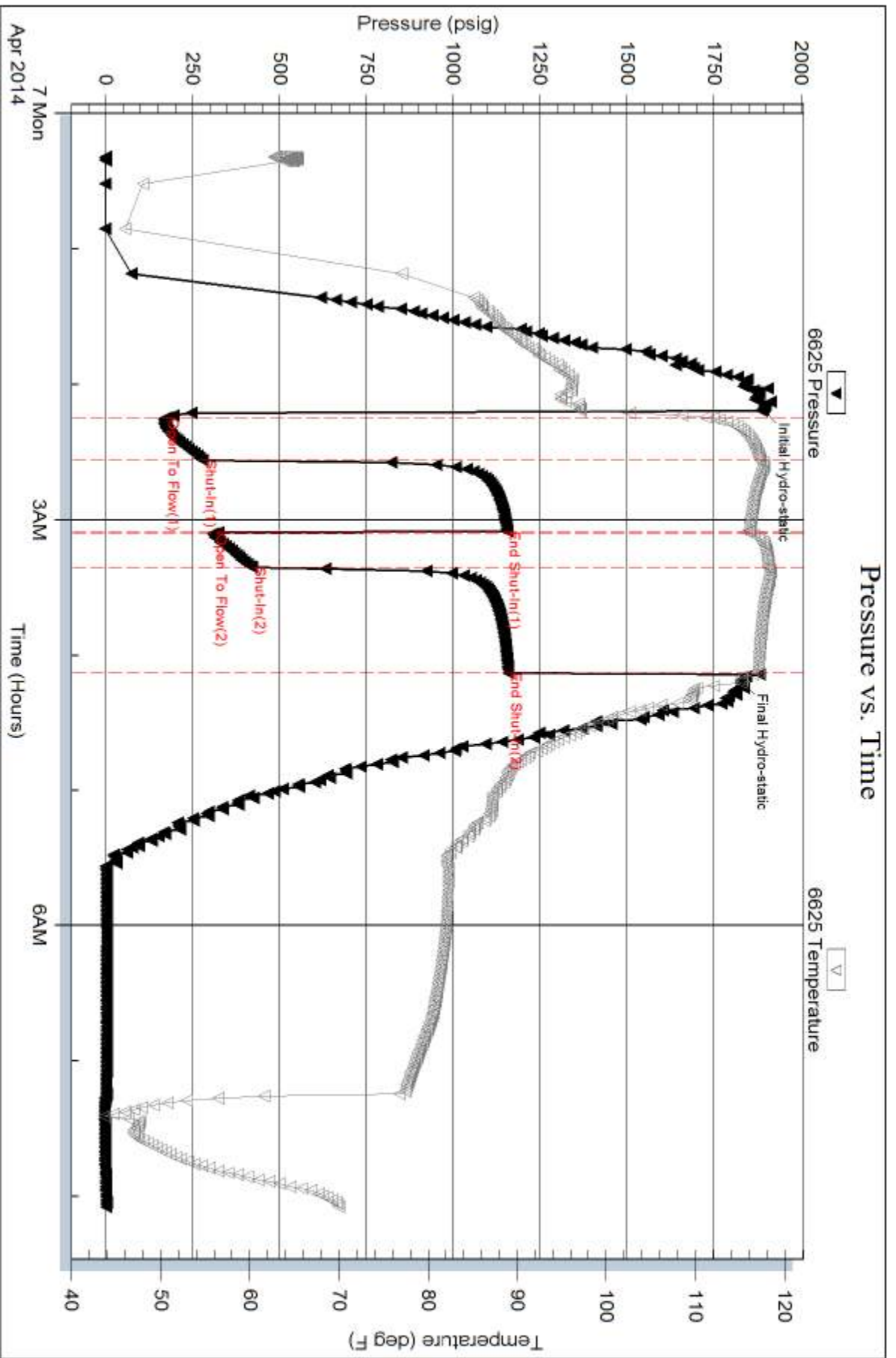
Recovery Comments: OIL GRAVITY = 41 @ 60 DEG. R.W. = .22 OHMS @ 45.2 DEG.

Serial #: 6625

Outside Charter Energy

Wells #1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 57603

Printed: 2014.04.10 @ 11:42:44

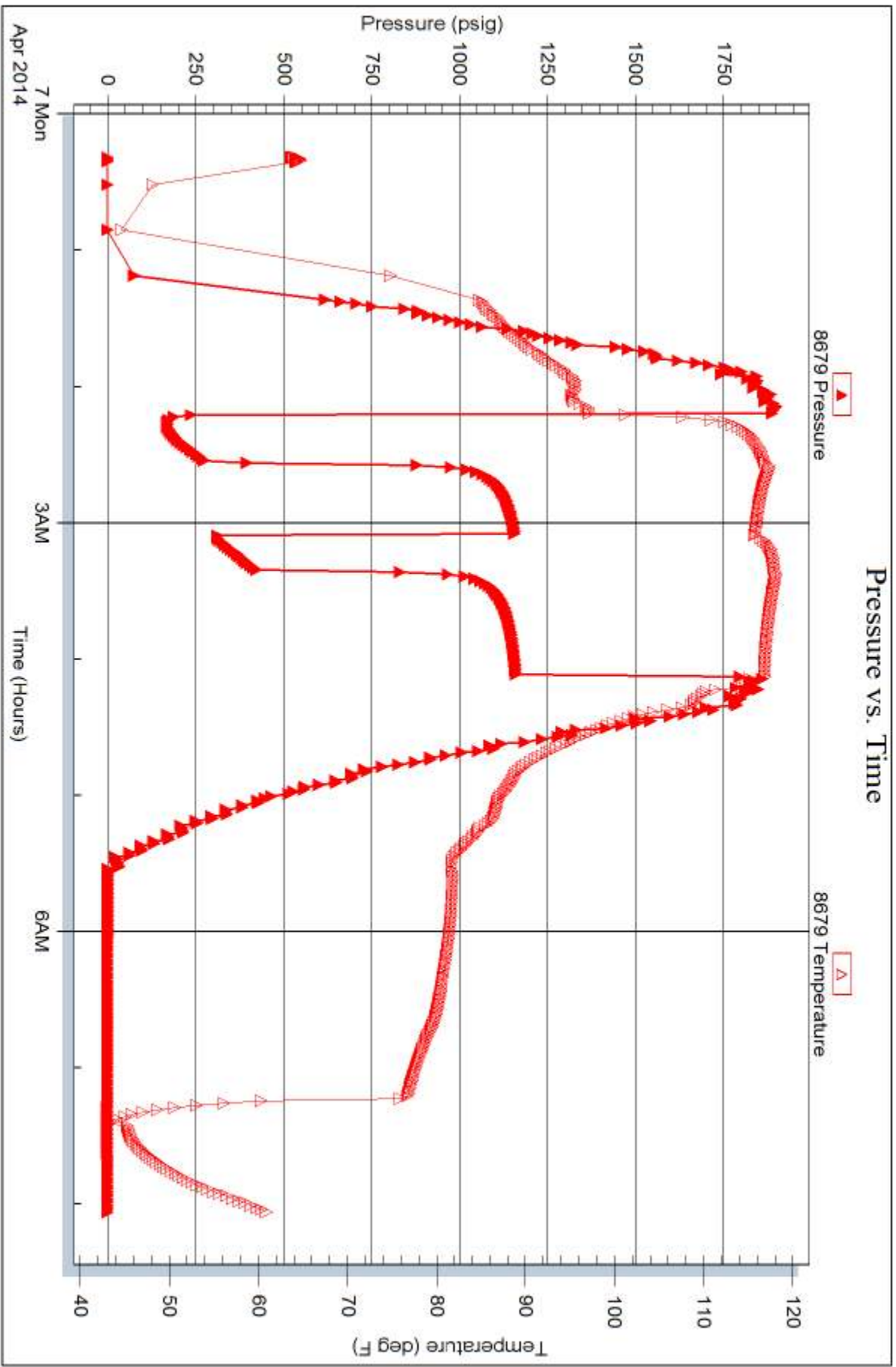
Serial #: 8679

Inside

Charter Energy

Wells #1

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57601

Well Name & No. Wells #1 Test No. 1 Date 4-6-14
 Company Charter Energy Elevation 2077 KB 2070 GL
 Address P.O. Box 252 Great Bend KS 67530
 Co. Rep / Geo. Kurt Talbott Rig Royal Rig #2
 Location: Sec. 18 Twp. 20 S. Rge. 15 W. Co. Barton State KS

Interval Tested 3714-3776 Zone Tested Arbuckle
 Anchor Length 62 Drill Pipe Run 3730 Mud Wt. 9.3
 Top Packer Depth 3709 Drill Collars Run _____ Vis 51
 Bottom Packer Depth 3714 Wt. Pipe Run _____ WL 8.9
 Total Depth 3776 Chlorides 7.000 ppm System LCM 0

Blow Description I.F.-30-1" INT Blow Built to (B.O.B. in 15 sec) (6+5.6 min)
I.S.I.-45-B.O.B. 3 min. (Died in 20 min)
FF-30-B.O.B. start (after ten min was able to gauge gas)
FSI-45-W.S.B.B. (Died in 27 min)

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>2331 G.I.P.</u>				
<u>323</u>	<u>clean oil</u>		<u>100</u>		
<u>615</u>	<u>S.M.C.G.O</u>	<u>20</u>	<u>75</u>		<u>5</u>
<u>329</u>	<u>S.W.C.H.M.C.G.O</u>	<u>30</u>	<u>35</u>	<u>5</u>	<u>30</u>
<u>126</u>	<u>S.O.S.M.W (Pewo, 15 sec)</u>			<u>60</u>	<u>40</u>

Rec Total 1393 BHT 112 Gravity 378 API RW .20 @ 42 °F Chlorides 65,000 ppm

(A) Initial Hydrostatic 1,876 Test 1150 T-On Location 7:30:00
 (B) First Initial Flow 180 Jars _____ T-Started 20:00:00
 (C) First Final Flow 316 Safety Joint _____ T-Open 22:19:00
 (D) Initial Shut-In 1,143 Circ Sub _____ T-Pulled 00:49:00
 (E) Second Initial Flow 347 Hourly Standby _____ T-Out 05:11:00
 (F) Second Final Flow 504 Mileage 120 RT 186 Comments (H's Reached 8.0 P.P.M)
 (G) Final Shut-In 1,137 Sampler _____ Thank-you
 (H) Final Hydrostatic 1,787 Straddle _____ Ruined Shale Packer _____

Initial Open 30 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 45 Extra Packer _____ Extra Copies _____
 Final Flow 30 Extra Recorder _____ Sub Total 0
 Final Shut-In 45 Day Standby _____ Total 1336
 Sub Total 1336 Accessibility _____ MP/DST Disc't _____

Approved By _____ Our Representative Butt

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. 57602

4/10

Well Name & No. Wells #1 Test No. 2 Date 4-7-14
 Company Charter energy Elevation 2077 KB 2076 GL
 Address P.O. Box 252 Great Bend KS. 67530
 Co. Rep / Geo. Kurt talbott Rig Royal Rig #2
 Location: Sec. 18 Twp. 20 S. Rge. 15 W. Co. Barton State KS.

Interval Tested 3783 - 3792 Zone Tested Arbuckle
 Anchor Length 9' Drill Pipe Run 3794 Mud Wt. 9.0
 Top Packer Depth 3778 Drill Collars Run — Vis 49
 Bottom Packer Depth 3783 Wt. Pipe Run — WL 8.0
 Total Depth 3792 Chlorides 7,500 ppm System LCM 0

Blow Description I.F.-20-B.O.B in 10 sec (GAS to surface in 1min.)
J.S.F-30-B.O.B B.B. in 7min (GAS to surface in 1min.)
F.F-15-B.O.B instant (gaged gas @ 5min)
F.S.I-45-B.O.B B.B. (GAS to surface in 1min.)

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>2,331 G.I.P</u>	<u>2,331</u>			
<u>756</u>	<u>Clean oil</u>		<u>100</u>		
<u>126</u>	<u>S.W.C, m, o, g, o</u>	<u>30</u>	<u>55</u>	<u>5</u>	<u>10</u>
<u>252</u>	<u>S.M.C, W.</u>			<u>95</u>	<u>5</u>
<u>441</u>	<u>W.</u>		<u>100</u>		

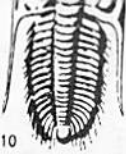
Rec Total 1,575 BHT 115° Gravity 36.8 API RW .17 @ 59.8° F Chlorides 55,000 ppm

(A) Initial Hydrostatic 2,096 Test 1150 T-On Location 10:50:00
 (B) First Initial Flow 335 Jars _____ T-Started 11:20:00
 (C) First Final Flow 455 Safety Joint _____ T-Open 12:34:00
 (D) Initial Shut-In 1,171 Circ Sub _____ T-Pulled 14:24:00
 (E) Second Initial Flow 527 Hourly Standby _____ T-Out 18:07:00
 (F) Second Final Flow 655 Mileage 120/R.+ 186 Comments _____
 (G) Final Shut-In 1,171 Sampler _____
 (H) Final Hydrostatic 1,837 Straddle _____

Initial Open 20 Shale Packer _____
 Initial Shut-In 30 Shale Packer _____
 Final Flow 15 Extra Packer _____
 Final Shut-In 45 Extra Recorder _____
 Sub Total 0 Total 1336
 Day Standby _____
 Accessibility _____
 Sub Total 1336 MP/DST Disc't _____

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. 57603

Well Name & No. Wells #1 Test No. 3 Date 4-7-14
 Company Charter energy Elevation 2077 KB 2070 GL
 Address P.O. Box 252 Great Bend KS. 67530
 Co. Rep / Geo. Hunt talbott Rig Royal Rig #2
 Location: Sec. 18 Twp. 20 S. Rge. 15 W. Co. Barton State KS.

Interval Tested 3791 - 3,810 Zone Tested Arbuckle
 Anchor Length 19 Drill Pipe Run 3792 Mud Wt. 9.0
 Top Packer Depth 3786 Drill Collars Run — Vis 49
 Bottom Packer Depth 3791 Wt. Pipe Run — WL 8.0
 Total Depth 3810 Chlorides 7,500 ppm System LCM 0

Flow Description IF-20 - B.O.B. INSTANT. (Gas to surface 30 sec.)
S.I-30 - B.O.B. B.B. in 1 min
IF-15 - B.O.B. in 45 sec. (started gauging gas @ 10 min.)
S.I-45 - B.O.B. B.B. in 1 min.

Sec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>2583 G.I.P</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>630'</u>	<u>Clean oil</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>126</u>	<u>2583 s,m,c,h,w,c,g,d</u>	<u>25</u>	<u>50</u>	<u>20</u>	<u>5</u>
<u>189</u>	<u>W.</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>

Rec Total 1,071 BHT 115 Gravity 41 API RW 22 @ 45.2°F Chlorides 55,000 ppm

- A) Initial Hydrostatic 1,890
- B) First Initial Flow 170
- C) First Final Flow 278
- D) Initial Shut-In 1,155
- E) Second Initial Flow 309
- F) Second Final Flow 420
- G) Final Shut-In 1,159
- H) Final Hydrostatic 1,828

- Test 1150
- Jars
- Safety Joint
- Circ Sub
- Hourly Standby
- Mileage 120/Rt. 372
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1522

- T-On Location 23:40:00
- T-Started 00:19:00
- T-Open 02:13:00
- T-Pulled 09:03:00
- T-Out 08:04

Comments loaded tools 4/8 13:15
"Thank-you"

- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 0
- Total 1522
- MP/DST Disc't

Initial Open 20
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 45

Approved By _____ Our Representative Bob Hunt
 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.