

Confidentiality Requested:

### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1203224

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 #	API No. 15
Name:	Spot Description:
Address 1:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
	Elevation: Ground: Kelly Bushing:
☐ OG ☐ GSW ☐ Temp. Abd.	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #:	
SWD         Permit #.           ENHR         Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East _ West
Recompletion Date Reached TD Recompletion Date of Recompletion Date	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:

	Page Two	1203224
Operator Name:	Lease Name:	Well #:
Sec TwpS. R □ East □ West	County:	
INCTRUCTIONS. Charge important tang of formations paratrated Da	tail all aaraa Danart all f	inal agniag of dvill atoms toots giving interval tootad, time tool

**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 (Attach Additional She	voto)	Yes No		.og Formatic	on (Top), Depth and	d Datum	Sample
Samples Sent to Geolog	·	Yes No	Nam	е		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING Report all strings set-c			on, 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 / SQL	JEEZE RECORD			
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Pe	ercent Additives	
Protect Casing Plug Back TD							
Plug Off Zone							
Did you perform a hydraulic	fracturing treatment of	on this well?		Yes	No (If No. skip	o questions 2 an	d 3)
	0	raulic fracturing treatment ex	ceed 350,000 gallons			question 3)	/

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?

Shots Per Foot		PERFORATION Specify Fo	I RECOF	RD - Bridge Pl Each Interval P	lugs Set/Typ Perforated	e			ement Squeeze Record d of Material Used)	Depth
TUBING RECORD:	Si	ze:	Set At:		Packe	r At:	Liner F	Run:	No	
Date of First, Resumed	l Product	ion, SWD or ENH	۶.	Producing M	ethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
									I	
DISPOSIT	ION OF (	GAS:			METHOD	OF COMPLE	TION:		PRODUCTION INT	ERVAL:
Vented Sol		Used on Lease		Open Hole	Perf.	Dually (Submit /	Comp. A <i>CO-5)</i>	Commingled (Submit ACO-4)		
(If vented, Su	ıbmit ACC	D-18.)		Other (Specify)						

Yes

No

(If No, fill out Page Three of the ACO-1)

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Castle Resources, Inc.
Well Name	Harms 1
Doc ID	1203224

All Electric Logs Run

Dual Receiver Cement Bond
Microresistivity
Dual Compensated Porosity
Dual Induction



# DRILL STEM TEST REPORT

Prepared For:

Castle Resources

PO Box 87 Schoenchen KS. 67667

ATTN: Chris Bean / JerryGr

Harms #1

## 10-20s-19w Pawnee,KS

 Start Date:
 2014.02.23 @ 09:23:00

 End Date:
 2014.02.23 @ 16:07:30

 Job Ticket #:
 56152

 DST #:
 1

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

Printed: 2014.02.26 @ 14:48:29

RILOBITE TESTING, INC	Castle Resources		10				
ESTING, NC			10	-20s-19w	Pawnee	,KS	· · · · · · · · · · · · · · · · · · ·
	PO Box 87 Schoenchen KS. 67667	."		rms #1		DST#	4
	ATTN: Chris Bean / JerryGr			st Start: 20'			
GENERAL INFORMATION:							
Formation: Cherokee							
Deviated: No Whipstock: Time Tool Opened: 11:51:00 Time Test Ended: 16:07:30	ft (KB)		Tes	it Type: C iter: B t No: 6	ob Hamel	al Bottom H	ole (Initial)
Interval:         4147.00 ft (KB) To         416           Total Depth:         4160.00 ft (KB) (TV	D)		Ref	erence Eev		2240.00	) ft(KB) ) ft(CF)
Hole Diameter: 7.88 inchesHole	Condition: Fair			KB to	GR/CF:	5.00	D ft
Serial #: 8679 Inside Press@RunDepth: psig @ Start Date: 2014.02.23	2 4148.00 ft (KB) End Date:	2014.02.23	Capacity Last Cali			8000.00 2014.02.23	
Start Time: 09:23:01	End Time:	16:07:30	Time On Time Off				
TEST COMMENT: " PACKER FAILUF	Æ"						
Pressure vs. Tir		1				A D)/	
	BC 	Time	Pressure	RESSURE Temp	Annotatio		
		(Min.)	(psig)	(deg F)			
Recovery				Cas	Rates	1	
Length (ft) Description	Volume (bbl)			Choke (inc		re (psig)	eas Rate (Mct/d)
800.00 MUD 100%	11.22				• •		I
Trilobite Testing, Inc							

RILOBITE	DRILL STEM TE	ST REP	ORT				
			÷ · · ·				
	Castle Resources		10-20s-19\	w Pawnee,KS			
TESTING, INC			Harms #1				
	Schoenchen KS. 67667		Job Ticket: 5	56152 <b>D</b> \$	ST#: 1		
	ATTN: Chris Bean / JerryGr		Test Start: 2	2014.02.23 @ 09:23	<b>:00</b>		
GENERAL INFORMATION:			· · · · · · · · · · · · · · · · · · ·				
Formation:     Cherokee       Deviated:     No     Whipstock:       Time Tool Opened:     11:51:00       Time Test Ended:     16:07:30	ft (KB)	 ;	Tester:	Conventional Bottor Bob Hamel 67	n Hole (Initial)		
Interval: 4147.00 ft (KB) To 4 Total Depth: 4160.00 ft (KB) (T Hole Diameter: 7.88 inchesHol	160.00 ft (KB) (TVD) VD) 9 Condition: Fair		Reference B	evations: 224	5.00 ft (KB) 0.00 ft (CF)		
Serial #: 6625 Outside		. <u> </u>			5.00 ft		
Press@RunDepth: psig Start Date: 2014.02.23 Start Time: 09:23:01	End Date: End Time:	2014.02.23 16:08:30	Capacity: Last Calib.: Time On Btm: Time Off Btm:	8000 1899.12	0.00 psig 2.30		
Pressure vs. T	inic Lia 303 Tempenine			E SUMMARY			
	Timpenkor	Time (Min.)	Pressure Temp (psig) (deg F)	Annotation			
Recovery		<u>_</u>	Gas	Rates			
Length (ft) Description	Volume (bbl)		Choke (inc		Gas Rate (Mcf/d)		

ACIN-	<b>T</b> RILOI	RITE	DRIL	L STEM TEST	REPOR	T	TOOL DIAGRAM
			Castle Re	esources		10-20s-19w Pawnee	,KS
	ES	TING , M	PO Box 8	7		Harms #1	
			Schoenci	hen KS. 67667		Job Ticket: 56152	DST#:1
			ATTN: C	Chris Bean / JerryGr		Test Start: 2014.02.23 @	9 09:23:00
Tool Informati	on		_				
Drill Pipe:	Length:	4154.00 ft	Diameter:	3.80 inches Volume:	58.27 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches Volume:	0.00 bbl	Weight to Pull Loose:	50000.00 lb
Drill Pipe Above	KB:	27.00 ft		Total Volume:	58.27 bbl	Tool Chased	0.00 ft
Depth to Top Pac	ker:	4147.00 ft				String Weight: Initial	
Depth to Bottom	Packer:	ft				Final	47000.00 lb
Interval between	Packers:	13.00 ft			6		
Tool Length:		33.00 ft			ť		
Number of Packe	ers:	2	Diameter:	6.75 inches			
Tool Comments:							

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4128.00		
Shut in Tool	5.00			4133.00		
Hydraulic tool	5.00			4138.00		
Packer .	4.00			4142.00	20.00	Bottom Of Top Packer
Packer	5.00			4147.00		
Stubb	1.00			4148.00		
Recorder	0.00	6625	Outside	4148.00		
Recorder	0.00	8679	Inside	4148.00		
Perforations	8.00			4156.00		
Bulinose	4.00			4160.00	13.00	Bottom Packers & Anchor
Total Tool Lengt	h: 33.00					

Trilobite Testing, Inc

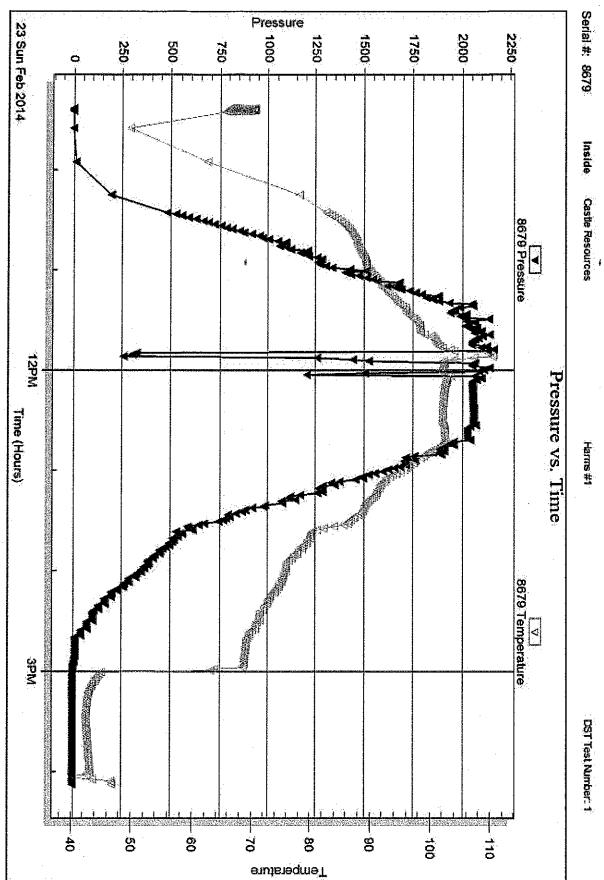
Printed: 2014.02.26 @ 14:48:31

RILOBITE		L STEM TEST REPO	ORT	FLU	ID SUMMAR			
	Castle Re	SOUTCES	10-20s-1	10-20s-19w Pawnee,KS				
ESTING , INC		7 nen KS. 67667		Harms #1 Job Ticket: 56152 DST#:1				
	ATTN: C	hris Bean / JerryGr		2014.02.23 @ 09:23:0				
Iud and Cushion Information								
/ud Type: Gel Chem /ud Weight: 10.00 lb/gal		Cushion Type: Cushion Length:	ft	Oil API:	deg API			
/iscosity: 46.00 sec/qt /ater Loss: 10.19 in³		Cushion Volume: Gas Cushion Type:	bbl	Water Salinity:	ppm			
esistivity: 0.00 ohm.m alinity: 7000.00 ppm ilter Cake: 1.00 inches		Gas Cushion Pressure:	psig		• .			
ecovery Information								
		Recovery Table						
Lengtt ft	n	Description	Volume bbl					
8	800.00 M	JD 100%	11.2	22				
Total Length:	800.00	ft Total Volume: 11.222	bbl					
Num Fluid Sample Laboratory Name Recovery Comm	э:	Num Gas Bombs: 0 Laboratory Location: KER FAILURE "	Serial	<b>#:</b>				
				`				
		. ·						
		,			ŧ			
			·					

Printed: 2014.02.26 @ 14:48:32

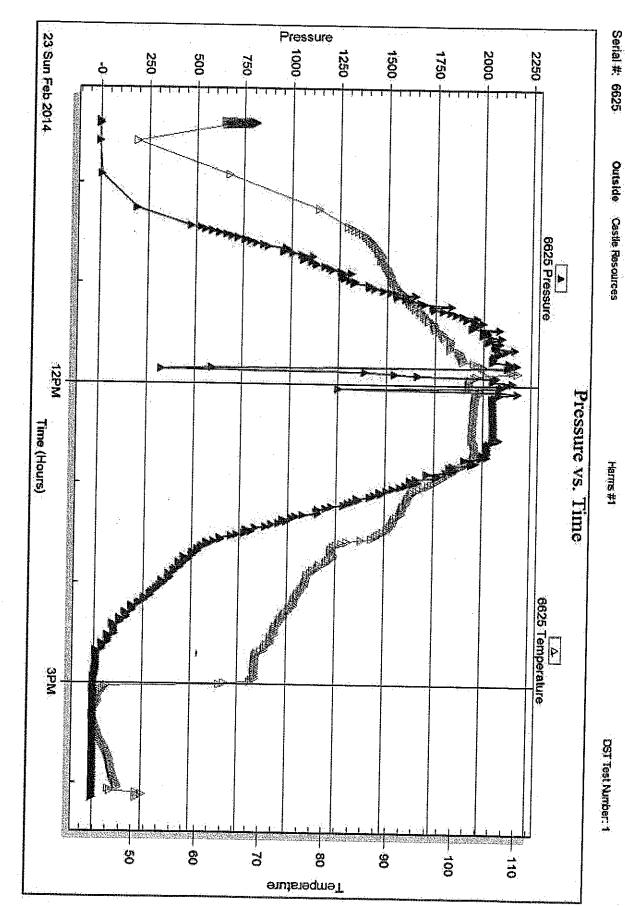
Ref. No: 56152







Ref. No: 56152



Triobile Testing, Inc.



# DRILL STEM TEST REPORT

Prepared For;

Castle Resources

PO Box 87 Schoenchen KS. 67667

ATTN: Chris Bean / JerryGr

### Harms #1

### 10-20s-19w Pawnee,KS

Start Date:	2014.02.23 @	13:33:00	
End Date:	2014.02.23 @	20:53:15	
Job Ticket #:	56152	DST #:	2

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

Printed: 2014.02.26 @ 14:47:37

**Castle Resources** 

10-20s-19w Pawnee,KS Harms #1

DST # 2

Cherokee

2014.02.23

( TRILOBITE	DRILL STEM TE	STREF	<b>ORI</b>			
	Castle Resources		10-20s	s-19w Pa	wnee,KS	
ESTING, INC	1 O DOX OF		Harm	s#1		
	Schoenchen KS. 67667		Job Ticł	ket: 56152	D	ST#:2
	ATTN: Chris Bean / JerryGr				02.23 @ 13:33	
GENERAL INFORMATION:						
Formation: Cherokee Deviated: No Whipstock: Time Tool Opened: 17:17:45 Time Test Ended: 20:53:15	ft (KB)		Test Ty Tester: Unit No:	Bob	ventional Botto Hamel	m Hole (Reset)
nterval: 4126.00 ft (KB) To 4 Total Depth: 4160.00 ft (KB) (T	/D)			nce Bevatio		5.00 ft (KB) 0.00 ft (CF)
-lole Diameter: 7.88 inches Hole	Condition: Fair			KB to GF	VCF:	5.00 ft
Serial #: 8166 Outside			••••••••••••••••••••••••••••••••••••••			
ress@RunDepth: psig start Date: 2014.02.23 start Time: 13:33:02	@ 4127.00 ft (KB) End Date: End Time:	2014.02.23 20:53:15	Capacity: Last Calib.: Time On Btm: Time Off Btm:		800 2014.0 .02.23 @ 17:1 .02.23 @ 18:1	5:45
Pressure vs. T	ise			_	UMMARY	
Pressure vs. T		Time (Min.)	Pressure Te	emp Ar	UMMARY	
	ise	(Min.) 0	Pressure Te (psig) (de 2144.71 10	emp Ar eg F) 17.36 Initia	notation Il Hydro-static	
Pressure vs. T	ise	(Min.)	Pressure         Te           (psig)         (de           2144.71         10           34.43         10	emp Ar eg F) 07.36 Initia 06.80 Ope	notation Il Hydro-static In To Flow (1)	
	ise	(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11	emp Ar eg F) 17.36 Initia 16.80 Ope 9.30 Shu	notation Il Hydro-static	
		(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11	emp Ar eg F) 17.36 Initia 16.80 Ope 9.30 Shu	nnotation Il Hydro-static In To Flow (1) t-in(1)	
		(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11           2028.16         11	emp Ar eg F) 17.36 Initia 66.80 Ope 9.30 Shu 7.04 Fina	Inotation II Hydro-static In To Flow (1) t-In(1) I Hydro-static	
Pressure vs. T	Tropolaria Transformation of the second seco	(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11           2028.16         11	Gas Rat	Inotation II Hydro-static In To Flow (1) t-In(1) I Hydro-static	Gas Rate (Mcf/d)
Pressure vs. T	Volume (bb/)	(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11           2028.16         11	Gas Rat	Inotation I Hydro-static In To Flow (1) t-In(1) I Hydro-static	
Pressure vs. T	Image: Section of the sectio	(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11           2028.16         11	Gas Rat	Inotation I Hydro-static In To Flow (1) t-In(1) I Hydro-static	
Presente vs. T	Image: Second	(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11           2028.16         11	Gas Rat	Inotation I Hydro-static In To Flow (1) t-In(1) I Hydro-static	
Pressure vs. T	Image: Second	(Min.) 0 2 50 56	Pressure (psig)         Te (de 2144.71           2144.71         10           34.43         10           183.46         11           2028.16         11	Gas Rat	Inotation I Hydro-static In To Flow (1) t-In(1) I Hydro-static	

Printed: 2014.02.26 @ 14:47:38

Tool Information Drill Pipe: Leng	STING , IN		87			10-20s-19w Pa		
Tool Information Drill Ripe: Leng						Harms #1		
Drill Pipe: Leng			chen KS. 67	7667		Job Ticket: 56152	DOT# 0	
Drill Pipe: Leng		ATTN:	Chris Bean	/ JerryGr		Test Start: 2014.0	DST#: 2 2.23 @ 13:33:00	
• •		_					_	
•	1th: 4122.00 ft	t Diameter:	3.80 in	ches Volume:	57.82 bbl	Tool Weight:	2500.00 lb	
Heavy Wt. Pipe: Leng		Diameter:		ches Volume:		-	2500.00 lb Packer: 25000.00 lb	
Drill Collar: Leng		Diameter:		ches Volume:	+++	-	oose: 48000.00 lb	
				Total Volume:		Tool Chased	4.00 ft	
Drill Pipe Above KB:	16.00 ft					String Weight: I		
Depth to Top Packer:	4126.00 ft						Final 46500.00 lb	
Depth to Bottom Packet Interval betw een Packet								
Tool Length:	ers: 34.00 ft 54.00 ft						ŧ	
Number of Packers:	54.00 ft 2	Diameter:	6.75 in	-h				
Tool Comments:	2		0.70 m					
·	Le	ength (ft)			Depth (ft) A	ccum. Lengths		
Tool Description	Le	ength (ft) 1			Depth (ft) A 4107.00	ccum. Lengths		
Tool Description	Le					.ccum. Lengths		
<b>Tool Description</b> Change Over Sub Shut In Tool	Le	1.00			4107.00 4112.00	ccum. Lengths		
<b>Tool Description</b> Change Over Sub Shut In Tool Hydraulic tool	Le	1.00 5.00			4107.00	ccum. Lengths	Bottom Of Top P	acker
<b>Tool Description</b> Change Over Sub Shut In Tool Hydraulic tool Packer	Le	1.00 5.00 5.00			4107.00 4112.00 4117.00		Bottom Of Top P	acker
<b>Tool Description</b> Change Over Sub Shut In Tool Hydraulic tool Packer Packer	Le	1.00 5.00 5.00 4.00			4107.00 4112.00 4117.00 4121.00		Bottom Of Top P	acker
Tool Description Change Over Sub Shut In Tool Hydraulic tool Packer Packer Stubb	Le	1.00 5.00 5.00 4.00 5.00			4107.00 4112.00 4117.00 4121.00 4126.00		Bottom Of Top P	acker
Tool Description Change Over Sub Shut In Tool Hydraulic tool Packer Packer Stubb Recorder	Le	1.00 5.00 5.00 4.00 5.00 1.00	Serial No.	Position	4107.00 4112.00 4117.00 4121.00 4126.00 4127.00		Bottom Of Top P	acker
Tool Description Change Over Sub Shut In Tool Hydraulic tool Packer Packer Stubb Recorder Perforations Bullnose	Le	1.00 5.00 5.00 4.00 5.00 1.00 0.00	Serial No.	Position	4107.00 4112.00 4117.00 4121.00 4126.00 4127.00 4127.00		Bottom Of Top P Bottom Packers & An	-

Trilobite Testing, Inc

Printed: 2014.02.26 @ 14:47:38

(I) TRILOBITE	DRILL STEM TEST RE	DRILL STEM TEST REPORT			
	Castle Resources	10-20s-19w Pawne	e,KS		
ESTING,		Harms #1			
	Schoenchen KS. 67667	Job Ticket: 56152	DST#: 2		
	ATTN: Chris Bean / JerryGr	Test Start: 2014.02.23	@ 13:33:00		
Mud and Cushion Informati	on				
Mud Type: Gel Chem Mud Weight: 10.00 lb/gal	Cushion Type:	Oil API:	deg API		

wua Type: G	el Chem	Cushion Type:		Oil API:	dea API
Mud Weight:	10.00 lb/gal	Oushion Length:	ft	Water Salinity:	14000 ppm
Viscosity:	46.00 sec/qt	Cushion Volume:	bbl	trator buinty.	14000 ppm
Water Loss:	10,18 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7000.00 ppm		Poi8		
Filter Cake:	1.00 inches				

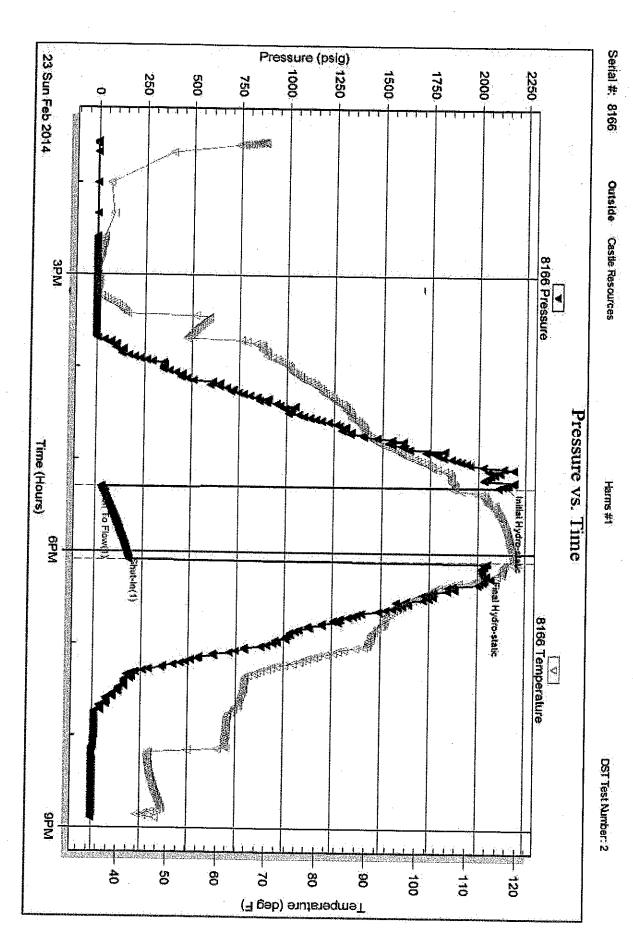
### **Recovery Information**

			Recovery Table		
Leng	gth		Description		Volume bbi
· · · · · · · · ·	60.00	S,O,S,	W,M OIL SPECS, MU	D 10% WTR. 90%	0.842
	120.00	<u>s,o,c,</u>	M,W, OIL 10% MUD 2	0% WTR.70%	1.683
	60.00	O,C,W	,M, OIL 10% WTR.209	% MUD 70%	0.842
	240.00	0,C,M	W, OIL 20% MUD 209	6 WTR. 60%	3.367
<b>I</b>	1.00	CLEAN	OIL 100%		0.014
Total Length:	481	.00 ft	Total Volume:	6.748 bbl	
Num Fluid Sam	ples: 0		Num Gas Bombs:	0	Serial #:

Laboratory Name: Laboratory Location: Recovery Comments: R.W. = .885 OHMS @ 38 DEG.

Printed: 2014.02.26 @ 14:47:40

Ref. No: 56152



no No

Tribble Testing, Inc.

目	RILOBITE			Tes	t Ticket	
	ESTING 1515 Commerce Pi	INC. arkway • Hays, Kansas 67601		NO.	56152	
Well Name & No	Narms #1		Test No.	1	Date 2/2	3/14
Company CO		es	Elevation	2245	кв 224	0GL
Address <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>		senchen K3 676				
Co. Rep / Geo.	Chris Bean	(a) A substantial of a first of the second s		Je Knig.	ht	<mark>1994 (</mark> alisae di sena. Agina di sena di sena di
Location; Sec.	the second grades and the second state of the second second second second second second second second second s	· 전문 문화 영화 영화 영화 전문 것 같은 문화 문제 가격이 있는 것 같아요.	. Paw	V	State	15.
	147 - 4160	1 A 1	ec			
	<u>     =    00</u>  3		54	<u>Xentro y antono ang pag</u>	Mud Wt. 2.5	
Anchor Length Top Packer Depth		Drill Pipe Run	<u> </u>	<u></u>	111	
(i) A second s second second s second second se		Drill Collars Run			Vis <u>40</u>	
Bottom Packer De	ptn <u>7777</u> //60	Wt. Pipe Run		e e su de 🚣 de l'ante de	w. 10,2	
		$\frac{1}{2} \frac{1}{2} \frac{1}$	1	opm System	LCM	<u></u>
Blow Description		- FOCKe to IU	(0			<u></u>
ES I-						<u></u>
			••••••••••••••••••••••••••••••••••••••	470-041-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		
E, S, <u>T</u> -			<u></u>			
Rec	Feet of 1	the failing	%gas	%oil	%water	%m
Rec 800		<u>. 10.101</u>	%gas	%oil	%water	%m
Rec		<u>147 A. E. M. Arabita, and an ann an Santairean an A</u> An an Arabita ann an Anna Anna Anna Anna Anna An an Anna	%gas	%oil	%water	/UD%m
			14 2 3 sec. 21	5 m ž 12 m		- x*****
a la la companya da serie da s Notación da serie da s	Feet of		%gas	%0il	%water	
Rec	Feet of		%gas	%oil	%water	%m
Rec Rec Total	 Feet of 8 (3 ?) ВНТ	Gravily API	%gas RW	%oil 	%water	%m
Rec Rec Total (A) Initial Hydrosta	Feet of BHT tic	Test1050	%gas RW	%oil  T-On L	%water F Chlorides .ocation	%m pr 2, <sup>1</sup> U7)
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow	Feet of <u> </u>	1050 Jars 250	%qas RW	%oil  T-On L T-Start	%water F Chlorides .ocation <u>08.'00</u> ied <u>(79.'23.'</u> 0	%mi pr 2, <sup>1</sup> (17) 10
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow	Feet of <u> </u>	1050 Jars 250 Satety Joint75	%qas RW	%oil T-On L T-Start T-Oper T-oper	%water F Chlorides .ocation <u><i>D</i></u> 8.' <i>U 0</i> .ed <u>()</u> 9.'23.'0 n <u>//.'5/.'0</u> 0	%m pt 2,' 1 2 )
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In	Feet of	□ Test 1050 □ Jars 250 □ Safety Joint 75 □ Circ Sub	%qas RW	%oil T-On L T-Start T-Oper T-Pulle	%water F Chlorides .ocation <u>08.'00</u> ied <u>(79.'23.'</u> 0	%mi pt 2,'UD 10 ) 0
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F	Feet of	☐ Test 1050     ☐ Jars 250     ☐ Jars 250     ☐ Safety Joint 75     ☐ Circ Sub     ☐ Hourly Standby	%gas	%oil 	$\frac{\% water}{F \ Chlorides} \\ ocation \ \underline{D8.'01} \\ \underline{100} \ \underline{100} \ \underline{100} \ \underline{100} \ \underline{100} \ \underline{100} \ \underline{1000} \ $	%mi pt 2,'UD 10 ) 0
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F (F) Second Final F	Feet of	□ Test 1050 □ Jars 250 □ Safety Joint 75 □ Circ Sub □ Hourly Standby □ Mileage 102 / 1	%gas RW ?	%oil @* T-On L T-Start T-Ope T-Pulle T-Out	%water F Chlorides location $D_{1,2,0,0}^{0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,$	%m p( D D D D D Q <i>F@llv.c.</i> (
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F (F) Second Final F (G) Final Shut-In	Feet of	☐ Test 1050     ☐ Jars 250     ☐ Jars 250     ☐ Safety Joint 75     ☐ Circ Sub     ☐ Hourly Standby     ☐ Hourly Standby     ☐ Mileage 102 / 1     ☐ Sampler	%gas RW ?	%oil T-On L T-Start T-Oper T-Pulle T-Out 58.10	%water F Chlorides .ocation $08.'00$ ted $09.'23.'00$ ied $09.'23.'00$ ied $09.'23.'00$ ied $09.'20.'00$ ied $09.'20.'00$ ied $08.'00$ ients $200.467$	%mi P(UD UD ) ) ? <i>Fijllur</i> ( KanH-y)
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F (F) Second Final F (G) Final Shut-In	Feet of	Image: 1050	%gas RW ?.7,18	%oil T-On L T-Start T-Oper T-Pulle T-Pulle 58.10 Comm 58.10	%water         F Chlorides         .ocation $D 8.' 0.0$ .ded $0.7,' 2.3,' 0.0$ .ded $0.7,' 2.0,' 0.0$ .ded $0.2,' 2.0,' 0.0$ .ded $0.2,' 2.0,' 0.0$ .ded $0.2,' 2.0,' 0.0$ .envs $DC.He/$	%m 
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F (F) Second Final F (G) Final Shut-In (H) Final Hydrostat	Feet of	☐ Test 1050     ☐ Jars 250     ☐ Jars 250     ☐ Safety Joint 75     ☐ Circ Sub     ☐ Hourly Standby     ☐ Hourly Standby     ☐ Mileage 102 / 1     ☐ Sampler     ☐ Straddle     ④ Shale Packer 250	%gas RW ?	%oil T-On L T-Start T-Oper T-Out T-Out 58.10 Comm 58.10	%water F Chlorides .ocation $08.'00$ ted $09.'23.'00$ ied $09.'23.'00$ ied $09.'23.'00$ ied $09.'20.'00$ ied $09.'20.'00$ ied $08.'00$ ients $200.467$	%m 
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F (F) Second Final F (G) Final Shut-In (H) Final Hydrostat Initial Open	Feet of	☐ Test 1050     ☐ Jars 250     ☐ Jars 250     ☐ Safety Joint 75     ☐ Circ Sub     ☐ Hourly Standby     ☐ Hourly Standby     ☐ Mileage 102 / 1     ☐ Sampler     ☐ Straddle     ☐ Shale Packer 250     ☐ Extra Packer	%gas RW ?	%oil T-On L T-Start T-Oper T-Out T-Out 58.10 Comm 58.10 Comm Ru Ru Ru Ru	%water           F Chlorides           .ocation <u>D8.'00</u> .ied <u>09/23.'00</u> ied <u>19/23.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ined <u>10.'08.'00</u> ined         Shale Packer           ined         Packer	%mi PK D D D D D C <u>Fâllu c (</u> thanH -y)t
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (D) Initial Shut-In (E) Second Initial F (F) Second Final F (G) Final Shut-In (H) Final Hydrostat Initial Open Initial Shut-In	Feet of	Image: Test	%gas RW 7.71	%oil 	%water           F Chlorides           .ocation <u>DR.'00</u> .ded <u>D9'23'0</u> .ded <u>D9'20'0</u> .ded <u>D0'00</u> .ded <u>D0'00</u>	%m P{UD D D D D D D D D D D D D D D D D D D
Rec Rec Total (A) Initial Hydrosta (B) First Initial Flow (C) First Final Flow (Q) Initial Shut-In (E) Second Initial F (G) Final Shut-In (H) Final Hydrostat Initial Open Final Flow	Feet of	Image: Test 1050         Image: Job	%gas RW ?, 15	%oil T-On L T-Start T-Oper T-Oper T-Pulle T-Out 58.10 Comm 58.10 COM 58.10	%water           F Chlorides           .ocation <u>D8.'00</u> .ied <u>09/23.'00</u> ied <u>19/23.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ind <u>123.'00</u> ined <u>10.'08.'00</u> ined         Shale Packer           ined         Packer	ið S P Han H-yv

RILOBITE		Test Ticket
4/10 ESTING	INC. arkway • Hays, Kansas 67601	NO. 56153
Well Name & No. Norm 5 # 1	Test No.	2 Date 2-23-14
company Castle Resour	CeS Elevation 2	
	nchen KS. 67667	
	Jerny Green Rig Whit	e Knight
Location; Sec. 10 Twp. 20	S. Rge. 19 W. Co. Privner	
Interval Tested 4126 - 4166	Zone Tested Cherokee	an a
Anchor Length 34'	Drill Pipe Run <u>4122</u>	Mud WL 9.5
Top Packer Depth <u>4121</u>	Drill Collars Run	
Bottom Packer Depth <u>4126</u>	Wt. Pipe Run	
Total Depth <u>4/60</u>	Chlorides 71000 ppn	
Blow Description I.F 45 - 12	INF. Blow Built to (B. (	D.G. in 7 min.)
"Pulled tes	st after I.F. as Reques	ited By Jerrygreen"
Rec Feet of Clean	0. / %gas /	U) %oil %water %mud
Rec. 240 Feet of 0 C. M.		
Rec $(j_i)$ Feet of $3, \mathcal{O}, (j_i)$		A 5
Rec 12 () Feet of 5, 0, ("M	A CONTRACTOR OF	15 40
Rec 60 Feet of 505 M	(W), %gas // (Scymofoi)%gas sc	
Rec Total /8/ BHT //	▲ / 整合 가 나는 것 같은 것은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같이 나는 것 같이 있다. 이렇게 말 못 했다. 것 같이 나는 것 같이 나요? ?? ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	38°F Chlorides <u>14,000</u> ppm
(A) Initial Hydrostatic 2 145	Gravity APT NW 7.0.0 3 (	T-On Location <u>08:00</u> ppm
(B) First Initial Flow <u>34</u>	Qars250	T-Started <u>13, 33, 80</u>
(C) First Final Flow 183	U Safety Joint75	T-Open /7:23:00
(D) Initial Shut-In		TO. 4. 19108160
(E) Second Initial Flow		TOM 70.37 MM
(F) Second Final Flow		
(G) Final Shut-In		TI SUUSIALUTTS FIDIPUS
(H) Final Hydrostatic 2, 0.2.8	O Sampler	Louis June 19
y if that if you ballio	D Straddle	
Initial Open 45	Shale Packer 250	
Initial Shut-In		a child copies
Final Flow		
Final Shut-In		MP/DST Disc't
	Sub Total <u>1983.10</u>	61 Marit
Approved By	Our Representative	111 TIME

ſ

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 lost, tools tost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

1

#### SCHIPPER'S OIL FIELD SERVICES, L.I

208

S. 5.

IF PAID IN 30 DAYS

@

@

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT

TOTAL

.

18048 170RD RUSSELL, KS 67665

REMIT TO	18048 170RD		SEI	RVICE POINT:		
	RUSSELL, KS 67665		and the second second	Russel	145	and the second second
	1.0000000000000000000000000000000000000				/	
	, SEC. TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
DATE -/8-1	4 10 20	19		un boominon,	8:45am	9:15cm
						STATE
LEASE Harms	WELL #.	LOCATION	• .	× .	COUNTY	45
OLD OR NEW (	CIRCLE ONE)					
				· · · ·		· 문문 · 이미· · · · · · · · · · · · · · · · · ·
CONTRACTOR (	phite Knight		ONAIED			a de la companya de l A companya de la comp
TYPE OF JOB	where	and the second second second	OWNER			
	1/4 T.I	) 535			· ·	an a
		PTH	CEMENT	DERED 3005×	and Dela	1 10/ 1
TUBING SIZE		РТН	AMOUNTOR	DERED SOUSK	(0171 310C	- a 10481
DRILL PIPE		PTH				
TOOL	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	PTH				A sector and an
PRES. MAX 30		NIMUM 100	COMMON		<u> </u>	
MEAS. LINE		OE JOINT	POZMIX	· · · · · · · · · · · · · · · · · · ·	. @	
CEMENT LEFT IN O		· · · · · · · · · · · · · · · · · · ·	GEL		@	
PERFS				<u> </u>	@	· · · · · · · · · · · · · · · · · · ·
DISPLACEMENT			ASC		@	
	EQUIPMENT				@	
					@	
PUMP TRUCK	CEMENTER Lkoth				@	
<u># Pl</u>	HELPER Cody				@	
BULK TRUCK	0				@	· · · · · · · · · · · · · · · · · · ·
<u># 134</u>	DRIVER Flic - M	nork			@	
BULK TRUCK			-		@	· · · ·
<u>#</u>	DRIVER				@	· · · · · · · · · · · · · · · · · · ·
the second second			HANDLING		@	
Revenue a la companya de la company La companya de la comp	•		MILEAGE			
	<b>REMARKS</b> :				TOTAL	
Abn 13 HS	A 856 Casing	and landing	pp and a set			
DOT CITCURH	an with mud au	mo		677		(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
Mired 3005	rand disp 3/2.	561 H20 - Shut	/ 	SER	<b>VICE</b>	
in @ 30005			DEPTHORIOR	:	······	
			DEPTH OF JOB PUMP TRUCK (		· · · ·	
			EXTRA FOOTA		@	
cement Did	Grankate to Su	race	MILEAGE			
			MANIFOLD	,	@	······
and the second					@	1
~	<u>au</u> 0.0 1				@	
CHARGE TO:	Stle <u>Resource's</u>					<u>_</u>
STREET	· .				TOTAL	
e la sur su					IONE	
CITY	STATE ZIP				TOTIN ON	-
97 - F				PLUG & FLOA	AI EQUIPMEN	Ľ
Sahinnara Oil Ei-	1d Compions T. T. C.	· ·				
Vou are horeby	ld Services, L.L.C.,				@	
furnish comenter	requested to rent cement	ing equipment and			@	
do work as is list	and helper(s) to assist ow	dono to aptiafaction	· · · · · · · · · · · · · · · · · · ·		@	

furnish c do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME SIGNATURE

				<u> </u>		SWIFT	<u>Seru</u>	<u>vices, Inc.</u>	DATE 2-24-14 PAGEN
Â	Resou	rces	WELL NO.	#1		1	MS	JOB TYPE Langstring	TICKET NO. 25336
-HART. NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUM	IPS C	PRESSU	RE (PSI) CASING		
	1930							01/00 W/FE	
		<u> </u>							
	ļ							RTD 4275'	
	<u> </u>	<u> </u>			 			55"×15 C# Y 4256' Y	15
	 							Cent 1, 3, 5, 7, 9, 11, 6 Bask 10, 70 P.C. 70@ 1387'	<del>7</del>
			-				ļ	Bask 10,70	·····
	[	-						P.C. 70@ 1389'	· · · · · · · · · · · · · · · · · · ·
	2000	<u> </u>					 		
·····	2045							Start FE Break circ	×
	2230						<u> </u>	Break circ	
	2315	2,5	7					DI DI DAI	
	<u>a 777.</u>							Plug RH 30sks	EA-2
	2320	5	6				200	et ton IN IN	
		5-	12/0				200	Start 20 661 KCL flu	<u>45h</u>
		5	2010				200	Start 120 sks EA-	<i>317</i>
	2330		32					EndCement	<u></u>
		·						Wash Py-L	
		<u> </u>			·			Drop L.D. Plug Start Displacement Catch Coment Land Plug Release Pressure Float Hold	
	2335	.6	0				200	Start Displacement	4
		5	74				250	Catch Coment	······································
<u> </u>	2355		101			7	1400	Land Plug	
								Release Pressure	
								Float Held	· · · · · · · · · · · · · · · · · · ·
					-+				
	[.				-				<u> </u>
					_				
				<del> </del> _					
-+					+				
-+-				_	╋		<u> </u>	TI	
			·		-			Thank you	· · · · · · · · · · · · · · · · · · ·
								Nick David E. 9	
								rick David L. T	1106
					+-				