Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

1215387

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 Dorth / 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.xxxx) (e.gxxx.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD ☐ SIOW □ Gas □ D&A □ ENHR □ SIGW	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:
ENHR Permit #: GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec Twp S. 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	
Operator Name:	Lease Name:	Well #:
Sec TwpS. 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 (Attach Additional She	eets)	Yes No		.og Formatic	on (Top), Depth ar		Sample
Samples Sent to Geolog	ical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING Report all strings set-o	RECORD Ne		ion, 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 / SQU	JEEZE RECORD			
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and P	ercent Additives	
Protect Casing							
Plug Off Zone							

Did you perform a hydraulic fracturing treatment on this well?	Yes
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes

(If No, skip questions 2 and 3) (If No, skip question 3)

No

🗌 No

No

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

Shots Per Foot		PERFORATION Specify For	RECOF	RD - Bridge Plugs Set/ Each Interval Perforated	Туре		Acid, Fracture, Shot, Ce (Amount and Kind	ement Squeeze Record I of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:	Pao	ker At:	Liner F	Run:	No	
Date of First, Resumed	l Producti	on, SWD or ENHF	}.	Producing Method:	umping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas Mcf	Wa	ter	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI		246.				ETION		PRODUCTION INT	
		Jsed on Lease		Open Hole	Duall	y Comp.	Commingled		
(If vented, Su	bmit ACO	-18.)		Other (Specify)	(Submit	,	(Submit ACO-4)		

Form	ACO1 - Well Completion
Operator	Castle Resources, Inc.
Well Name	Dolecheck 1
Doc ID	1215387

All Electric Logs Run

Compensated Density Neutron
Dual Induction
Cement Bond
Neutron

GLOBAL CEMENTING, L.L.C.

1368

REMIT TO 18048 170RD RUSSELL, KS 67665						SERVICE POINT Russell UI					
DATE 6-21-	14	SEC.	TWP.	RANGE	CALLEI	OUT	ON LOCATION	JOB START	JOB FINISH 2. Coan		
LEASE Poleche	eck_	WELL #.	1	LOCATION		-	_	COUNTY	STATE		
OLD OR NEW	(CIRC	LE ONE)				: :					
CONTRACTOR	5Eu	ton 1	Irilling			OWNER		ب ب			
TYPE OF JOB	ona.	string					et et alle de la companya de la comp				
HOLE SIZE 7	7/8	5	- 17 A. 7	F.D. 340	··· (EMENT	the setting of the set		and the second second		
CASING SIZE	1/2]	DEPTH 3392	C	MOUNT ORI	DERED 1505	YCOM A	19% Solt		
TUBING SIZE]	DEPTH	F	2%000	1 _20/00/10	etc.	2000		
DRILL PIPE]	DEPTH	5		- co ropia				
TOOL	-]	DEPTH		i de sere					
PRES. MAX	600	25,]	MINIMUM 10005!		OMMON			the second		
MEAS. LINE				SHOE JOINT							
CEMENT LEFT IN	CSG.	1544						+			
PERFS		/						@			
DISPLACEMENT	82	3/4 661	/					@	· · · · · · · · · · · · · · · · · · ·		
		EQUIPME			A	SC		@	• <u> </u>		
· • •		DQUL III	2114		_		· · · · · · · · · · · · · · · · · · ·	@	•		
PUMP TRUCK	CEM	ENTER	lonu	-lody				@	- ;		
# P1	HEL		17CUTA	<u>oag</u>				@			
BULK TRUCK	111.4.7	100	<u>uq</u>								
# 10U	nen	VER ET	· /-			<u> </u>		•			
BULK TRUCK	DIC		<u> </u>			······		~			
#	DRIV				-			•			
<u></u>	DIG	1.SIX	· · · · · ·					@	_ <u>.</u>		
:				· · · · · · · · · · · · · · · · · · ·		ANDLING ILEAGE		@			
ASt Circula muel Plush 12051 com 10	+101 -4 -4	512 CC 6 FOR 611000000	thra.	nd landing nd mix 500 g obbl water g oplester - plug	ner -	PTH OF JOB		TOTAL			
<u>RH = 305 ar</u>	1 1 1 1	elease	plug -	J.S. 077661-0	<u>É</u> рі	MP TRUCK (CHARGE				
H20 with		ing pr	essure	a goos, -pl	·	TRA FOOTA		@			
and as a 10	<u>,000</u>	51-17	<u>c l'éastal i</u>	and float -	∠ м	LEAGE	-1/1/ 1/ //	@			
ncia			<u></u>			and the second					
					<u></u>			@			
CHARGE TO:	aSt	le Re	Sure	ſ	_						
	-			······································	_			TOTAL			
CITY	8	STATE	Z	P					T		
					·		PLUG & FLOA				
Global Cementin	g, L.I	L.C.,			·	I- Ari					
You are hereby	reque	sted to 1	rent ceme	nting equipment an	id $\frac{1}{7}$	TOOL	- Ant		<u></u>		
furnish cementer	and l	nelper(s)	to assist o	wner or contractor i	to	wao					
				s done to satisfactio		-(247			_		
				ctor. I have read an		Tral mar & a					
				ND CONDITIONS		<u>Dyar n</u>	Ma fasa	@			
listed on the reve	rse sid	ie. 77	KINK	You	,			TOTAL			
PRINTED NAME	x				Q.4	T 20 TA V /10 -	(
2	\mathcal{U}	18	\sim				\ny)				
SIGNATURE	C S	l and a second		· · · · · · · · · · · · · · · · · · ·			ES				
		-			DIS	COUNT		IF	PAID IN 30 DAYS		

LTO P.O. BOX 31 RUSSELL, KANSAS 67665	x I.D.# 20-5975804 SERVICE POINT: Kussell 165
ATE 6-15-14 SEC. TWP. RANGE	CALLED OUT ON LOCATION JOB START JOB FINISH 300 Am 330 Am
CASE WELL# LOCATION BOAVE	Or LS BE 1/2 N Eich Barton KS
LD OR NEW (Circle one)	
ONTRACTOR Sky top	OWNER
DLE SIZE 12 14 T.D. 356	
$\frac{\text{DLESIZE} 12.74}{\text{ASING SIZE} 8\% 20^{27} \text{ DEPTH} 357$	AMOUNT ORDERED 250 com 3 Sacc 250 se
JBING SIZE DEPTH	
RILL PIPE DEPTH DOL DEPTH	
ES. MAX MINIMUM	COMMON 250 @ 17.90 4475.00
EAS. LINE SHOE JOINT 1.5	_ POZMIX@
RFS.	$\begin{array}{c c} & \text{GEL} & \underline{470}^{\text{aff}} & \underline{9}, \underline{24} & \underline{112.90} \\ \text{CHLORIDE} & \underline{70.5} & \underline{9}, \underline{80} & \underline{564.90} \\ \end{array}$
SPLACEMENT 7.2.14 661	CHLORIDE_ <u>76.5</u> @_, <u>80564.60</u> ASC@
EQUIPMENT	
MPTRUCK CEMENTER Robert 9 4/7 HELPER Regin R	- Alex @ 1287.96
ILK TRUCK	@
410 DRIVER Tracy J	- @
JLK TRUCK DRIVER	@
DATEN	- HANDLING 270,33 fr @ 2.48 670.42
REMARKS:	MILEAGE 579.86 +1+ 2.60 [507.4]
	TOTAL 7329.85
ce log	- SERVICE
· · · · · · · · · · · · · · · · · · ·	DEPTH OF JOB <u>35 /</u> PUMP TRUCK CHARGE <u>15 /2 , 25 .</u>
ment did circulate to surface	
Thankyou!!!	- MANIFOLD @ 275.00 2.75.00 94 HV.M.L @ 7.70 723,80
	@@
ARGE TO: Castle Resources	4895.90
REET	Llese 1223.97 TOTAL 2-247-85
TYSTATEZIP	
	PLUG & FLOAT EQUIPMENT
	05/11/10/11/10/11/10/11/10
-	85/4 Wood- plug @ 110.00 110.00
Allied Oil & Gas Services, LLC.	`@`
are hereby requested to rent cementing equipment	@
furnish cementer and helper(s) to assist owner or tractor to do work as is listed. The above work was	
to satisfaction and supervision of owner agent or	Au 27.50 TOTAL 110.00
tractor. I have read and understand the "GENERAL	
RMS AND CONDITIONS" listed on the reverse side.	
The K I	TOTAL CHARGES 10157.70
NTED NAME Thomas Engel	DISCOUNT 25.39.43 256 IE PAID IN 30 DAYS
Thomas I the	not 7618.27
NATURE Mont Fride	net 1610.01



DRILL STEM TEST REPORT

Prepared For:

Castle Resources, Inc.

PO Box 87 Schoenchen, KS 67667

ATTN: Jerry Green

Dolecheck #1

13-16s-12w Barton,KS

 Start Date:
 2014.06.20 @ 03:11:15

 End Date:
 2014.06.20 @ 14:22:15

 Job Ticket #:
 59426
 DST #: 1

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

Castle Resources, Inc. 13-16s-12w Barton,KS Dolecheck #1 DST # 1 Reagan Sand 2014.06.20

Printed: 2014.06.24 @ 10:24:00

RILOBITE	DRILL STEM T						
ESTING, INC			13-16s-12	w Barton,	KS		
	PO Box 87 Schoenchen, KS 67667		Doleche Job Ticket:				
	ATTN: Jerry Green			59426 2014.06.20 (DST#:1 ୩		
GENERAL INFORMATION:							
Formation: Reagan Sand Deviated: No Whipstock: Time Tool Opened: 09:12:45 Time Test Ended: 14:22:15	ft (KB)		Test Type: Tester: Unit No:	Convention Brannan Lo 48	al Straddle (Initial) nsdale		
Interval: 3302.00 ft (KB) To 334 Total Depth: 3400.00 ft (KB) (TVI Hole Diameter: 7.88 inchesHole	D)		Reference E	evations:	1892.00 ft (KB) 1885.00 ft (CF)		
Serial #: 8321 Inside					7.00 ft		
Press@RunDepth: psig @	3336.00 ft (KB)		Can. *				
Start Date: 2014.06.20	End Date:	2014.06.20	Capacity: Last Calib.:		8000.00 psig		
Start Time: 03:11:16	End Time:	2014:00:20 14:22:15	Time On Btm:		2014.06.20		
			Time Off Btm:				
		Torreastan (deg F)					
Arr284 orde Recovery ength (ft) Description	Volume (bbl)			Rates			
00.00 OCM, 20%O 80%M	0.61	L	Choke (in	ches) Pressure	(psig) Gas Rate (Mcf/d)		
00 10' GIP	0.00						

RILOE		Castle I	Resources,	inc.		10.10 10 -	TOOL DIAGR/
EST FST	TING , INC					13-16s-12w Bai	ton,KS
	ATO PATO	PO Box	87 chen, KS 6	7607		Dolecheck #1	
						Job Ticket: 59426	DST#: 1
		ATTN:	Jerry Gree	n		Test Start: 2014.06	6.20 @ 03:11:15
Tool Information				······			
Drill Pipe: Length:	3211.00 ft D	lameter:	3.75 k	nches Volum	ne: 43.86 b		
Heavy Wt. Pipe: Length:		iameter:		nches Volum			2500.00 lb
Drill Collar: Length:	87.00 ft D	iameter:		nches Volum	~		ose: 51000.00 lb
Drill Pipe Above KB:	23.00 ft			Total Volum			0.00 ft
D	3302.00 ft					String Weight: In	
Depth to Bottom Packer:	3342.00 ft						nal 48000.00 lb
Interval between Packers:	40.00 ft						
Tool Length:	124.00 ft						
Number of Packers:	3 Di	ameter:	6.75 in	ches			
Tool Comments:							
Tool Description	Lengt	h(ft) S	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub		.00			3276.00		
Shut in Tool		.00			3281.00		
Hydraulic tool Jars		.00			3286.00		
		.00			3291.00		
Safety Joint Packer		00			3293.00		
Packer		00			3298.00	27.00	Bottom Of Top Packer
Stubb		00			3302.00		
Perforations		00			3303.00		
Change Over Sub	1.1				3304.00		
Drill Pipe	1.0				3305.00		
	30.0				3335.00		
hange Over Sub	1.(3336.00		
Recorder	0.0		8321	Inside	3336.00		
	0.0	10	8372	Outside	3336.00		
lecorder							
Recorder Perforations	2.0				3338.00		
lecorder erforations lank Off Sub	2.0 1.0	0			3338.00 3339.00		
lecorder erforations lank Off Sub lank Spacing	2.0 1.0 3.0	0 10				40.00	Tool Interval
ecorder erforations lank Off Sub lank Spacing acker	2.0 1.0 3.0 1.0	0 0 0			3339.00	40.00	Tool Interval
ecorder erforations lank Off Sub lank Spacing acker tubb	2.0 1.0 3.0 1.0 1.0	0 0 0			3339.00 3342.00	40.00	Tool Interval
lecorder erforations lank Off Sub lank Spacing acker tubb erforations	2.0 1.0 3.0 1.0 1.0 18.0	10 10 0 0 0			3339.00 3342.00 3343.00	40.00	Tool Interval
ecorder erforations lank Off Sub lank Spacing acker tubb erforations nange Over Sub	2.0 1.0 3.0 1.0 1.0 18.0 18.0	0 0 0 0 0 0			3339.00 3342.00 3343.00 3344.00	40.00	Tool Interval
Recorder Perforations Jank Off Sub Jank Spacing acker tubb erforations hange Over Sub ecorder	2.0 1.0 1.0 1.0 18.0 1.0 0.0		8647	Below	3339.00 3342.00 3343.00 3344.00 3362.00	40.00	Tool Interval
Recorder Perforations Jank Off Sub Jank Spacing acker tubb erforations hange Over Sub ecorder ill Pipe	2.0 1.0 1.0 1.0 18.0 18.0 1.0 32.0		8647	Below	3339.00 3342.00 3343.00 3344.00 3362.00 3363.00	40.00	Tool Interval
Recorder Perforations Wank Off Sub Wank Spacing acker tubb erforations hange Over Sub ecorder rill Pipe hange Over Sub	2.0 1.0 1.0 1.0 18.0 1.0 0.0	0 0 0 0 0 0 0 0 0 0	8647	Below	3339.00 3342.00 3343.00 3344.00 3362.00 3363.00 3363.00	40.00	Tool Interval

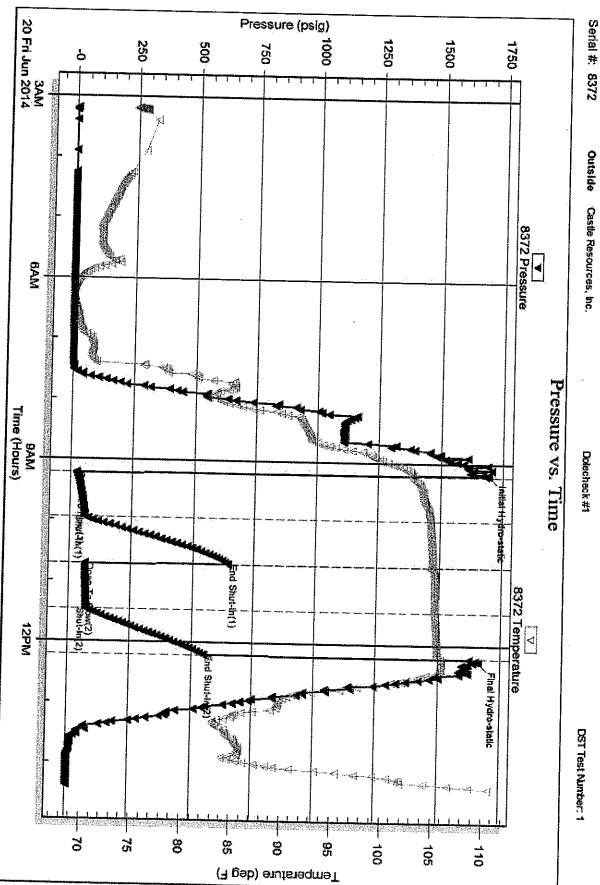
Trilobite Testing, Inc

Printed: 2014.06.24 @ 10:24:01

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Ref. No: 59426



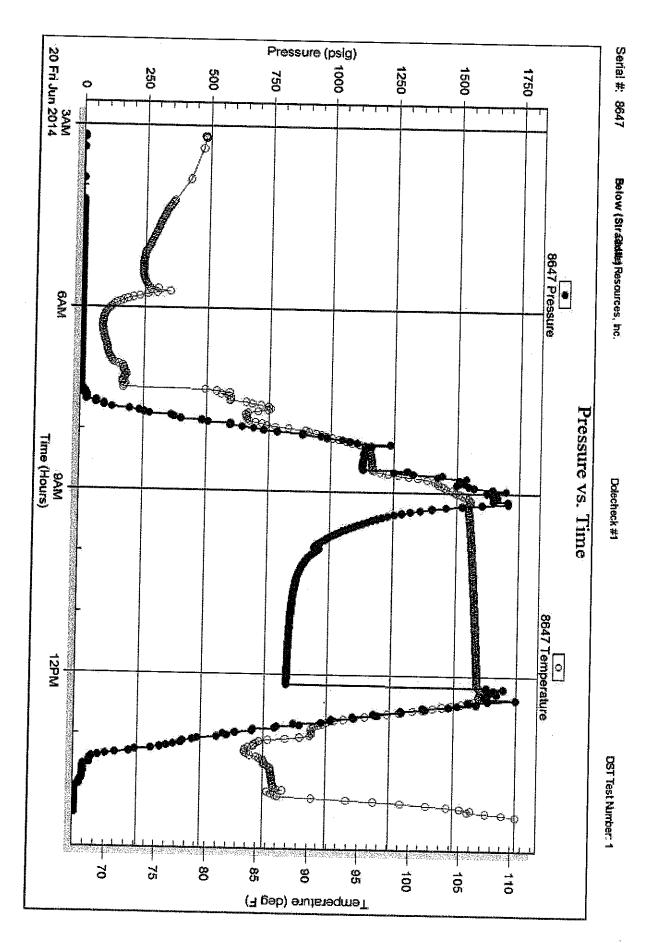


Dolecheck #1

Printed: 2014,06.24 @ 10:24:01

Ref. No: 59426





RILOBITE ESTING INC.

1515 Commerce Parkway + Hays, Kansas 67601

Test Ticket

NO. 59426

Well Name & No. Dole check #1		Test No.	E	Date 6/201	14
company Castle Resources, Tu	<u>(.</u>	Elevation	1897	кв 18	85 GL
ne a mar	1	7667	V ; -		
Co. Rep/Geo. Jerry Green	- /		top		
Location: Sec. 13 Twp. 165	_Rge 12, W	Co	Barton	StateK	5
Interval Tested 3302-3342	Zone TestedR	equan	Sand	2 21.01207777-7-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	21000 A 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Anchor Length 40' Text: 57'	Drill Pipe Run		11	owt. 93	
Top Packer Depth32,97	Drill Collars Run		<u>87</u> vis	48	·
Bottom Packer Depth 3302	Wt. Pipe Run	*	WL	. <u> </u>	
Total Depth3342	Chlorides	JUOO ppr	System LC	M 2++	
Blow Description IF-Stonly built	- 10.3 "	1			
ISI-No blow	F				·····
FF = Sloup buil	F. to 1'/2"			·····	· · ·
Rec_160' Feet of 000M		%gas	20 %oil	%water	80%mud
Rec Feet of 10 GLP		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oll	%water	%mud
RecFeet of		%gas	%oil	%water	%mud
Rec Total BHT BHT	Gravity AP	"I RW@	F Ch	Ilorides	ppm
(A) Initial Hydrostatic 16 1.5	X Test 1150	·····	T-On Locat	\^	
(B) First Initial Flow 22	X Jars <u>250</u>		T-Started	0311	······································
(C) First Final Flow 57	X Safety Joint 75		T-Open	0912	
(D) Initial Shut-In647	Circ Sub		T-Pulled	1212	
(E) Second Initial Flow <u>64</u>	Hourly Standby _2h	200	T-Out	1422	R ((())))))))))))))))
(F) Second Final Flow	X Mileage 116		Comments		
(G) Final Shut-In <u>549</u>	Sampler				
(H) Final Hydrostatic	Straddle 600		() D	Ohala D-il	
	G Shale Packer			Shale Packer	
Initial Open <u>45</u>	C Extra Packer			Packer	
Initial Shut-In 45	Extra Recorder			opies	
Final Flow 45	Day Standby			0 2454.80	
Final Shut-In 45	Accessibility				
	Sub Total2454.80		WF7U3 (U	lisc't	
* 10			5	0	1

Approved By _

Approved By ______ Our Representative _____ Brownan Lons Jule Tridoble 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.

	RILOBITE ESTING 1515 Commerce Pa
4/10	1515 Commerce Pa

1515 Commerce Parkway • Hays, Kansas 67601

ESTING INC.

Test Ticket

NO. 59426

Well Name & No. <u>Pole check</u> the		Test No.	. D	ate 6/201	114
company Castle Resources, To	.c	Elevation	1005	квЯ	285 GL
Address PO Box 87 School	rchen, KS	67667		· · · ·	
Co. Rep/Geo. Jerry Green	· / · · ·	Rig Sky	top		
Location: Sec. 13 Twp. 165	Rge. 12.W	Co	Barton	State K	:5
Interval Tested 3302-3342	Zone Tested	Reagan	Sand		
Anchor Length 40' Tal: 57'	Drill Pipe Run	32	11	IWL 93	
Top Packer Depth	Drill Collars Run	8	27 Vis	110	
Bottom Packer Depth 3302	Wt. Pipe Run		WL		
Total Depth 3342		5,000 ppm !		44 6	
Blow Description JE-Slowly build	-to 3"				
- ISI-No blow					
EF- Slouly buil	H.J.a. 1'b"			ilente	<u></u>
Est - No blow					
Rec_160' Feet of OCM		%gas 💭	ک _{%oil}	%water	80%mud
Rec Feet of 16 GIP		%gas	%oil	%waler	%mud
Rec Feet of	91	%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Total BHT BHT CG °	Gravity		F Chic		ppm
(A) Initial Hydrostatic 1643	X Test 1150		T-On Locatio	· · · · · ·	
(B) First Initial Flow 22	X Jars 250		T-Started	2.1	
(C) First Final Flow 59	A Safety Joint	75	T-Open	CAIL	······
(D) Initial Shut-In647	Circ Sub		T-Pulled	the second s	
(E) Second Initial Flow64	Hourly Standby	2h 200	T-Out	1422	and the Date Descent of the Descent
(F) Second Final Flow	X Mileage		Comments		
(G) Final Shut-In549	Sampler		Break versamen verse verse og som samtes at hannen.		18 48 ay fei fear a staff of the spinishes a staff of spaces.
(H) Final Hydrostatic	Straddle 60				
	C Shale Packer			hale Packer	
Initial Open 45	C Extra Packer			acker	
Initial Shut-In45	Extra Recorder			pies	
Final Flow 45	D Day Standby			0 54.80	
Final Shut-In 45	Accessibility				
		30			
Annen and Du		<u> </u>	`	1 1	ſ

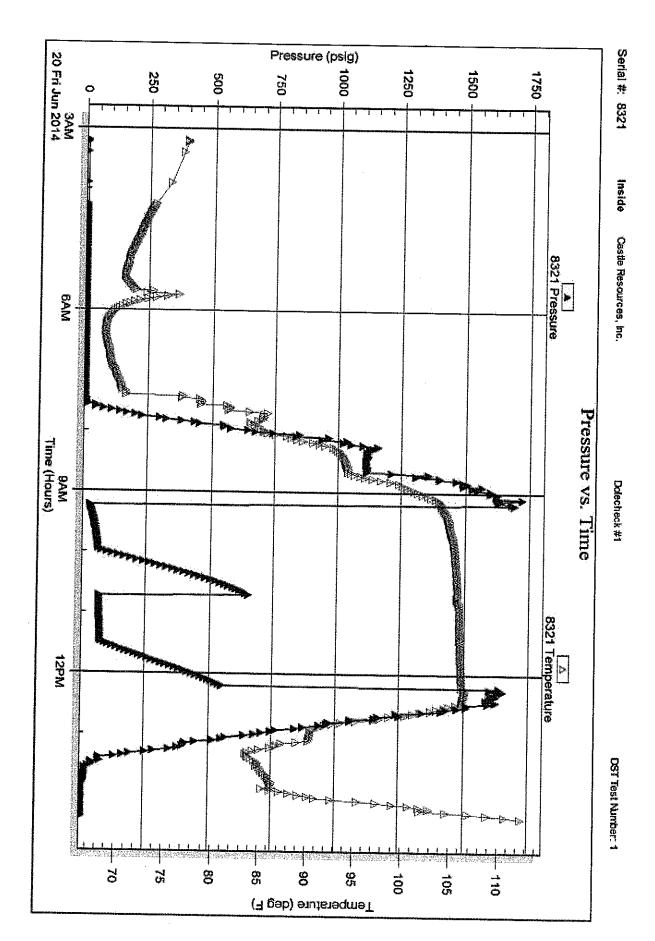
Approved By ____

Our Representative_ Brannan 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. Lonsdale

Printed: 2014.06.24 @ 10:24:01

Ref. No: 59426

Triobite Testing, Inc



		7						
TOM	RILOBITE	DR	ILL STEM TEST	REPOR	Т		FLUID S	UMMARY
薬	All factors and blacks	Castle	e Resources, Inc.		13-16s-12	w Barton,KS		
個書	ESTING , IN				Dolecheo	ck #1		
			enchen, KS 67667		Job Ticket:	59426	DST#:1	
		ATTN	: Jerry Green		Test Start:	2014.06.20 @ 0:	3:11:15	
Mud and	Cushion Information							
Mud Type: Mud Weight: Viscosity: Water Loss: Resistivity: Salinity: Filter Cake:	48.00 sec/qt	·	Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressu	re:	ft bbl psig	Oil API: Water Salinity:		deg API ppm
Recovery	Information					, <u></u> ,		
			Recovery Table					
	Leng ft	th	Description		Volume bbl] .		
		100.00	OCM, 20%O 80%M		0.605			
	Total Length:	0.00	10' GIP 1.00 ft Total Volume:	0.605 bbl	0.000	2		
	Num Fluid Sam Laboratory Nan Recovery Com	ie:	Num Gas Bombs: Laboratory Locati	0 on:	Serial #	:		

Trilobite Testing, Inc

RILOBITE	DRILL STEM TE	ST REP	ORT	
	Castle Resources, Inc.			Barton,KS
ESTING, INC	PO Box 87 Schoenchen, KS 67667		Dolecheck	#1
			Job Ticket: 594	26 DST#:1
	ATTN: Jerry Green		Test Start: 201	4.06.20 @ 03:11:15
GENERAL INFORMATION:				
Formation:Reagan SandDeviated:NoWhipstock:Time Tool Opened:09:12:45Time Test Ended:14:22:15	ft (KB)			onventional Straddle (Initial) 'annan Lonsdale }
Interval:3302.00 ft (KB) To334Total Depth:3400.00 ft (KB) (TVHole Diameter:7.88 inches Hole	D)		Reference Bev KB to	ations: 1892.00 ft (KB) 1885.00 ft (CF) GR/CF: 7.00 ft
Serial #: 8647 Below (Stradd	le)			
Press@RunDepth:psig(c)Start Date:2014.06.20Start Time:03:10:36	 3363.00 ft (KB) End Date: End Time: 	2014.06.20 14:19:05	Capacity: Last Calib.: Time On Btm:	8000.00 psig 2014.06.20
Pressare vs. 1in 507 Prans	ic DO Lagradua			SUMMARY
			Pressure Temp (psig) (deg F)	Annotation
	57N			
Recovery			Gas f	Rates
Length (ft) Description 100.00 OCM, 20%O 80%M	Volume (bbl) 0.61		Choke (inch	es) Pressure (psig) Gas Rate (Mcf/d)
0.00 10'GP	0.00			
Trilobite Testing, Inc	Ref. No: 59426			

Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISI- No blow 45- IF- Slow ly built to 1 1/2" 45- ISI- No blow	13-16s-12w Barton,KS Dole che ck #1 Job Ticket: 59426 DST#:1 Test Start: 2014.06.20 @ 03:11:15 Test Type: Conventional Straddle (Initial) Test Type: Conventional Straddle (Initial) Tester: Brannan Lonsdale Unit No: 48 Reference Elevations: 1892.00 ft (KB) 1885.00 ft (CF) KB to GR/CF: KB to GR/CF: 7.00 ft 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 14:22:15 Time On Btm: 2014.06.20 @ 12:15:45 PRESSURE SUMMARY
Schoenchen, KS 67667 ATTN: Jerry Green GENERAL INFORMATION: Formation: Reagan Sand Deviated: No Whipstock: ft (KB) Time Tool Opened: 09:12:45 Time Tool Opened: 09:12:45 Time Tool Opened: 09:12:45 Time Test Ended: 14:22:15 Interval: 3302.00 ft (KB) To 3342.00 ft (KB) (TVD) Hole Diameter: 7.88 inchesHole Condition: Poor Serial #: 8372 Outside Press@RunDepth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Date: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISI- No blow 45- FSI- No blow Tester vs. Time Tester of the top of top of the top of	Job Ticket: 59426 DST#:1 Test Start: 2014.06.20 @ 03:11:15 Test Type: Conventional Straddle (Initial) Tester: Brannan Lonsdale Unit No: 48 Reference Elevations: 1892.00 ft (KB) 1885.00 ft (CF) KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 Time On Btm: 2014.06.20 @ 12:15:45
GENERAL INFORMATION: Formation: Reagan Sand Deviated: No Whipstock: ft (KB) Time Tool Opened: 09:12:45 Time Test Ended: 14:22:15 Interval: 3302.00 ft (KB) To 3342.00 ft (KB) (TVD) Total Depth: 3400.00 ft (KB) To 3342.00 ft (KB) (TVD) Total Depth: 3400.00 ft (KB) To 3342.00 ft (KB) Total Depth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Date: 03:11:16 End Time: TEST COMMENT: 45- IF- Slowly built to 3" 45- ISI- No blow 45- FF- Slow ly built to 1 1/2" 45- FS- No blow 45- FF- Slow ly built to 1 1/2" 45- FS- No blow	Test Start: 2014.06.20 @ 03:11:15 Test Type: Conventional Straddle (Initial) Tester: Brannan Lonsdale Unit No: 48 Reference Elevations: 1892.00 ft (KB) 1885.00 ft (CF) KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10.45 Time On Btm: 2014.06.20 @ 12:15:45
Formation: Reagan Sand Deviated: No Whipstock: ft (KB) Time Tool Opened: 09:12:45 Time Test Ended: 14:22:15 Interval: 3302.00 ft (KB) To 3342.00 ft (KB) (TVD) Total Depth: 3400.00 ft (KB) (TVD) Hole Diameter: 7.88 inchesHole Condition: Poor Serial #: 8372 Outside Press@RunDepth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- FS- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow	Test Type: Conventional Straddle (Initial) Tester: Brannan Lonsdale Unit No: 48 Reference Elevations: 1892.00 ft (KB) 1885.00 ft (CF) KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 Time On Btm: 2014.06.20 @ 09:10:45 Time Off Btm: 2014.06.20 @ 12:15:45
Formation: Reagan Sand Deviated: No Whipstock: ft (KB) Time Tool Opened: 09:12:45 Time Test Ended: 14:22:15 interval: 3302.00 ft (KB) To 3342.00 ft (KB) (TVD) Total Depth: 3400.00 ft (KB) (TVD) Hole Diameter: 7.88 inchesHole Condition: Poor Serial #: 8372 Outside Press@RunDepth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- FS- No blow 45- FS- No blow Test Presserver w: Test Test of the test of test	Tester: Brannan Lonsdale Unit No: 48 Reference Elevations: 1892.00 ft (KB) 1885.00 ft (CF) KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 Time On Btm: 2014.06.20 @ 12:15:45
Deviated: No Whipstock: ft (KB) Time Tool Opened: 09:12:45 Time Test Ended: 14:22:15 Interval: 3302.00 ft (KB) To 3342.00 ft (KB) (TVD) Total Depth: 3400.00 ft (KB) (TVD) Total Depth: 7.88 inchesHole Condition: Poor Serial #: 8372 Outside Press@RunDepth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISI- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow Test FSI- No blow Test Presser ver. Time Test of the test of	Tester: Brannan Lonsdale Unit No: 48 Reference Elevations: 1892.00 ft (KB) 1885.00 ft (CF) KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 Time On Btm: 2014.06.20 @ 12:15:45
Total Depth: 3400.00 ft (KB) (TVD) tole Diameter: 7.88 inchesHole Condition: Poor Serial #: 8372 Outside Press@RunDepth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISH- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow Presser vz. Time The formula of the formula	1885.00 ft (CF) KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 14:22:15 Time On Btm: 2014.06.20 @ 09:10:45 Time Off Btm: 2014.06.20 @ 12:15:45
tole Diameter: 7.88 inchesHole Condition: Poor Serial #: 8372 Outside Press@RunDepth: 69.66 psig @ 3336.00 ft (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISI- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow Pressere vs. Time: 0 The series of the series of	KB to GR/CF: 7.00 ft Capacity: 8000.00 psig 014.06.20 Last Calib.: 2014.06.20 @ 09:10:45 14:22:15 Time On Btm: 2014.06.20 @ 09:10:45 Time Off Btm: 2014.06.20 @ 12:15:45
Press@RunDepth: 69.66 psig @ 3336.00 ff (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISI- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow	014.06.20 Last Calib.: 2014.06.20 14:22:15 Time On Btm: 2014.06.20 @ 09:10:45 Time Off Btm: 2014.06.20 @ 12:15:45
Press@RunDepth: 69.66 psig @ 3336.00 ff (KB) Start Date: 2014.06.20 End Date: 20 Start Time: 03:11:16 End Time: TEST COMMENT: 45- IF- Slow ly built to 3" 45- ISI- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow	014.06.20 Last Calib.: 2014.06.20 14:22:15 Time On Btm: 2014.06.20 @ 09:10:45 Time Off Btm: 2014.06.20 @ 12:15:45
45- ISI- No blow 45- FF- Slow ly built to 1 1/2" 45- FSI- No blow	PRESSURE SUMMARY
	PRESSURE SUMMARY
	Time Pressure Temp Annotation
	(Min.) (psig) (deg F)
	0 1692.64 102.77 Initial Hydro-static 2 22.16 102.62 Open To Flow (1)
	46 59.11 104.65 Shut-In(1)
	92 647.20 104.95 End Shut-In(1)
	92 64.24 104.64 Open To Flow (2) 137 69.66 105.22 Shut-In(2)
	182 549.15 105.49 End Shut-In(2)
	185 1662.53 105.89 Final Hydro-static
Recovery	Gas Rates
Length (ft) Description Volume (bbl) 100.00 OCM, 20%O 80%M 0.61	Choka (inches) Pressure (psig) Gas Rate (Mcf/d)
00.00 OCM, 20%O 80%M 0.61 0.00 10' GIP 0.00	