KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1261508

Form ACO-1 August 2013 Form must be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM

WELL HISTORY - DESCR	RIPTION OF WELL & LEASE
	API No. 15

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.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:
Gas D&A ENHR SIGW	Total Vertical Depth: Plug Back Total Depth:
OG GSW Temp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used? Yes No
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 Plug Back Conv. to GSW Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #:	
SWD Permit #:	Location of fluid disposal if hauled offsite:
ENHR Permit #:	Operator Name:
GSW Permit #:	Lease Name: License #:
	Quarter Sec TwpS. R East West
Spud Date or Date Reached TD Completion Date or Description Description Description	
Recompletion Date 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	1261508
Operator Name:	Lease Name:	Well #:
Sec TwpS. R □ East □ West	County:	
INCTDUCTIONS. Chain important tang of formations panatrated. Dat	ail all aaraa Danart all final	panias of drill stome tosts siving interval tested 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	eets)	Yes No		0	on (Top), Depth ai		Sample
Samples Sent to Geolog	jical Survey	Yes No	Name	•		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING Report all strings set-c	RECORD New		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	EEZE RECORD			

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

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

Yes	No
Yes	No
Yes	No

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

(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					ement Squeeze Record I of Material Used)	Depth			
TUBING RECORD:	Siz	ze:	Set At:		Packe	r At:	Liner R		No	
Date of First, Resumed	I Product	ion, SWD or ENH	٦.	Producing Me	ethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	ər	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI				On on Liolo	_				PRODUCTION INTER	RVAL:
Vented Sol	d 🗌 I	Used on Lease		Open Hole	Perf.	Uually (Submit A		Commingled (Submit ACO-4)		
(If vented, Su	ıbmit ACC	D-18.)		Other (Specify) _						

Form	ACO1 - Well Completion
Operator	Thoroughbred Associates L.L.C.
Well Name	Cozza 1-20
Doc ID	1261508

All Electric Logs Run

Dual Induction
Micro
Density Neutron
Sonic

Form	ACO1 - Well Completion
Operator	Thoroughbred Associates L.L.C.
Well Name	Cozza 1-20
Doc ID	1261508

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.25	8.625	23	346	common	3%cc 2%gel

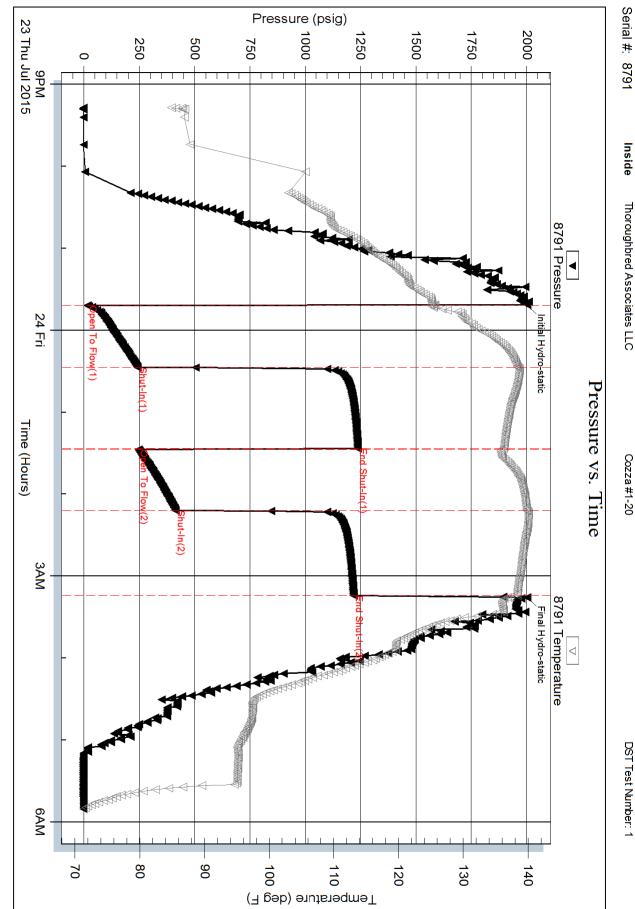
RILOBITE	DRILL STEM T	ES	TREP	ORT				
	Thoroughbred Associates	LLC		20/	4s/35w	Rawlir	ns KS	
ESTING , I	Bldg 600 STE F				zza #1-2 Ticket: 62		DST#	÷ 1
	Wichita, KS 67226 ATTN: Phil Askey						3 @ 21:17:00	
GENERAL INFORMATION:								
Formation:Lans. "A"Deviated:NoWhipstorTime Tool Opened:23:41:45Time Test Ended:05:51:00	k: ft (KB)			Tes	ter:	Convent James V 83	ional Bottom H Vinder	lole (Initial)
Total Depth: 4180.00 ft (KB)	4180.00 ft (KB) (TVD) (TVD) ⊣ole Condition: Fair			Ref	erence Ele KB t	evations: o GR/CF	3263.0	0 ft (KB) 00 ft (CF) 00 ft
Serial #: 8791 Inside								
Press@RunDepth:414.55 psStart Date:2015.07.Start Time:21:17:	End Date:		2015.07.24 05:51:00	Capacity Last Calil Time On Time Off	b.: Btm: 2		8000.0 2015.07.2 .23 @ 23:41:3 .24 @ 03:15:3	0
60 - FSI: No Pressure	vs. Time 559 Tempendare				RESSUF			
	599 Tempendare	- 140	Time (Min.)	Pressure (psig)	Temp (deg F)	Anno	tation	
		- 130	0 1	2002.05 17.34	125.69 125.01		lydro-static Γο Flow (1)	
		- 120	46	242.86	138.39	Shut-In	n(1)	
		- 110 mp	105 106	1238.18 247.32	136.28 135.86		nut-In(1) Fo Flow (2)	
		mperature (12	151	414.55	139.79	Shut-In	n(2)	
		- 100 (d. 60 F) - 90	213 214	1218.73 2001.78	138.32 136.83		uut-In(2) ydro-static	
270 4 4 Fil 270 4 4 Fil 270 4 4 Fil 270 4 4 Fil 270 4 Fil 270 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	344 644	- 80 - 70						
Recove	rv			ļļ	Ga	s Rate	s	
Length (ft) Description	Volume (bbl)	7			Choke (i			Gas Rate (Mcf/d)
435.00 SMCW w/trace oil 96	% w , 4% m 5.01	1	I			I	Į	
125.00 MCW w /trace oil 88%	w, 12% m 1.75]						
315.00 MW w/trace oil 54%	w, 46% m 4.42	4						
5.00 SMCO 92%o, 8%m	0.07	+						
		1						
Trilobite Testing, Inc	Ref. No: 62832				Printed:			

	RILOBITE	DR	ILL STEM TEST REPOR	K I	Fl	UID SUMMAR	
能"		Thorou	ughbred Associates LLC	20/4s/35v	/ Rawlins KS		
翻	ESTING , INC.		22nd St N	Cozza #1-20			
			00 STE F a, KS 67226	Job Ticket:	Ticket: 62832 DST#:1		
			Phil Askey	Test Start:	2015.07.23 @ 21:1	17:00	
lud and Cus	shion Information	ļ					
/lud Type: Gel	I Chem		Cushion Type:		Oil A PI:	32 deg A Pl	
/lud Weight:	9.00 lb/gal		Cushion Length:	ft	Water Salinity:	26000 ppm	
'iscosity:	69.00 sec/qt		Cushion Volume:	bbl			
Vater Loss:	6.39 in ³		Gas Cushion Type:				
Resistivity: Galinity: ïlter Cake:	ohm.m 1300.00 ppm 2.00 inches		Gas Cushion Pressure:	psig			
Recovery Inf	ormation						
	·		Recovery Table		_		
	Leng ft		Description	Volume bbl			
		435.00	SMCW w/trace oil 96% w, 4% m	5.00	9		
		125.00	MCW w/trace oil 88% w, 12% m	1.75	53		
		315.00	MW w /trace oil 54% w , 46% m	4.41	9		
		5.00	SMCO 92%o, 8%m	0.07	0		
		000	0.00 ft Total Volume: 11.251 bb	Ы			
	Total Length:	880		51			
	Total Length: Num Fluid Sam		Num Gas Bombs: 0	Serial	#:		
	Num Fluid Sam Laboratory Nar	ples: 0 me:	Num Gas Bombs: 0 Laboratory Location:	Serial	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location:	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
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	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		
	Num Fluid Sam Laboratory Nar	ples:0 me: ments:G	Num Gas Bombs: 0 Laboratory Location: ravity = 33.2 api @ 72 deg F Corrected Gra	Serial s	#:		

Printed: 2015.07.24 @ 06:56:04

Ref. No: 62832





Thoroughbred Associates LLC

Cozza #1-20

DST Test Number: 1

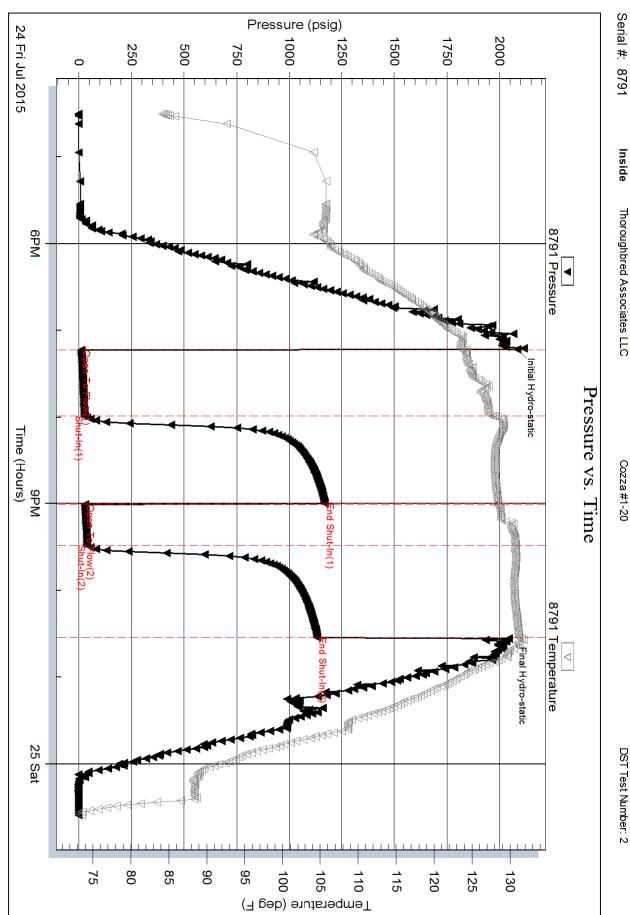
	LOBITE	DRILL STEM		I REPO					
		Thoroughbred Associate	s LLC		20/	4s/35w	Rawlins K	(S	
	ESTING , INC.	8100 E 22nd St N			Co	zza #1-2	20		
		Bldg 600 STE F Wichita, KS 67226			Job	Ticket: 62	2833	DST#: 2	!
		ATTN: Phil Askey			Tes	t Start: 20)15.07.24 @	16:30:00	
GENERAL INFOR	MATION:								
Formation: La	ns. "B - C"								
Deviated: No Time Tool Opened: 19: Time Test Ended: 00:	:13:15	ft (KB)			Tes	ter:	Conventional James Winde 83		e (Reset)
nterval: 4182.0	00 ft (KB) To 42	15.00 ft (KB) (TVD)			Ref	erence Ele	evations:	3268.00	ft (KB)
Total Depth:4;Hole Diameter:	215.00 ft (KB) (T) 7.88 inchesHole					KB t	o GR/CF:	3263.00 5.00	. ,
Serial #: 8791	Inside								
Press@RunDepth:	38.58 psig			0045 07 05	Capacity			8000.00	psig
Start Date: Start Time:	2015.07.24 16:30:05	End Date: End Time:		2015.07.25 00:35:14	Last Cali Time On		2 015.07.24	2015.07.25 @ 19:13:00	
	10.00.00			00.00.14	Time Off		2015.07.24 (2015.07.24 (
	60 - FSI: No blow Pressure vs. T	ime			PI	RESSUR		ARY	
	60 - FSI: No blow								
	Pressure vs. T	ime					RE SUMM		
501 Pes	Pressure vs. T		130	Time (Min.)	Pressure	Temp	RE SUMM/ Annotatio		
2000 -	Pressure vs. T	ime		Time (Min.) 0			Annotatio	n	
	Pressure vs. T	ime		(Min.) 0 1	Pressure (psig) 2083.97 10.90	Temp (deg F) 124.20 123.72	Annotatio Initial Hydro Open To Fle	n o-static	
2000	Pressure vs. T	ime	125 120 1115	(Min.) 0 1 46	Pressure (psig) 2083.97 10.90 27.14	Temp (deg F) 124.20 123.72 127.75	Annotatio Initial Hydro Open To Fl Shut-In(1)	n o-static ow (1)	
2000	Pressure vs. T	ime		(Min.) 0 1	Pressure (psig) 2083.97 10.90	Temp (deg F) 124.20 123.72 127.75 128.41	Annotatio Initial Hydro Open To Fle Shut-In(1)	n o-static ow (1) n(1)	
2000 1759 1500	Pressure vs. T	ime	Temperature 15 12 15 15 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	(Min.) 0 1 46 107 108 136	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2)	n o-static ow (1) n(1) ow (2)	
2000	Pressure vs. T	ime		(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir	n o-static ow (1) n(1) ow (2) n(2)	
2000	Pressure vs. T	ime	Temperature 15 12 15 15 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	(Min.) 0 1 46 107 108 136	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir	n o-static ow (1) n(1) ow (2) n(2)	
2000 779 700 700 700 700 700 700	Pressure vs. T	inne 5791 Tempendure 1 Tempe	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir	n o-static ow (1) n(1) ow (2) n(2)	
	Pressure vs. T	inc 5791 Tempendure 5791 Tempendure 1 Tem (1) 1 Tem	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir	n o-static ow (1) n(1) ow (2) n(2)	
	Pressure vs. T	inc 5791 Tempendure 5791 Tempendure 1 Tem (1) 1 Tem	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir Final Hydro	n o-static ow (1) n(1) ow (2) n(2) -static	s Rate (Mcf/d)
2000 779 1000 789 1000 1	Pressure vs. T	inc 571 Emponiero 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir Final Hydro	n o-static ow (1) n(1) ow (2) n(2) -static	s Rate (Mcf/d)
2000 779 700 700 700 700 700 700	Pressure vs. T	inc 579 Temperature 579 Temperature 1 10 - 1 10	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir Final Hydro	n o-static ow (1) n(1) ow (2) n(2) -static	s Rate (Mcf/d)
2000 779 1000 789 1000 1	Pressure vs. T	inc 579 Empender 1 10 00 1	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir Final Hydro	n o-static ow (1) n(1) ow (2) n(2) -static	s Rate (Mcf/d)
2000 1729 1700 1700 1700 1700 1000 779 1000 779 1000 779 1000 779 1000 779 1000	Pressure vs. T	inc 579 Empender 1 10 00 1	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir Final Hydro	n o-static ow (1) n(1) ow (2) n(2) -static	s Rate (Mcf/d)
2000 779 700 700 700 700 700 700	Pressure vs. T	inc 579 Empender 1 10 00 1	Temperature (de p.)	(Min.) 0 1 46 107 108 136 200	Pressure (psig) 2083.97 10.90 27.14 1169.73 28.98 38.58 1134.82	Temp (deg F) 124.20 123.72 127.75 128.41 127.99 130.66 131.18 131.54	Annotatio Initial Hydro Open To Fle Shut-In(1) End Shut-Ir Open To Fle Shut-In(2) End Shut-Ir Final Hydro	n o-static ow (1) n(1) ow (2) n(2) -static	s Rate (Mcf/d)

	DRI	LL STEM TEST R	REPORT	Г		FLUID S	UMMARY
RILOBITE	Thorou	ughbred Associates LLC		20/4s/35w	Rawlins KS		
ESTING , INC.	8100 E	22nd St N		Cozza #1-	-20		
		00 STE F a, KS 67226		Job Ticket: 6	62833	DST#:2	
		Phil Askey		Test Start: 2	2015.07.24 @ 16	6:30:00	
Mud and Cushion Information							
Mud Type: Gel Chem		Cushion Type:			Oil A PI:		deg API
Mud Weight: 9.00 lb/gal		Cushion Length:		ft	Water Salinity:		ppm
Viscosity: 57.00 sec/qt		Cushion Volume:		bbl			
Water Loss:6.37 in³Resistivity:ohm.m		Gas Cushion Type: Gas Cushion Pressure		psig			
Salinity: 2600.00 ppm				psig			
Filter Cake: 2.00 inches							
Recovery Information							
		Recovery Table		1	7		
Leng ft	th	Description		Volume bbl			
	60.00	Mud 100%		0.295	5		
	0.00	Trace of Oil in tool		0.000	2		
Total Length:	60	0.00 ft Total Volume:	0.295 bbl				
Num Fluid Samp		Num Gas Bombs:	0	Serial #	:		
Laboratory Nan Recovery Comr		Laboratory Location	n:				
)-{ No. 00000		Drivete e			

Printed: 2015.07.25 @ 03:10:04

Ref. No: 62833

Trilobite Testing, Inc



Thoroughbred Associates LLC

Inside

Cozza #1-20

DST Test Number: 2

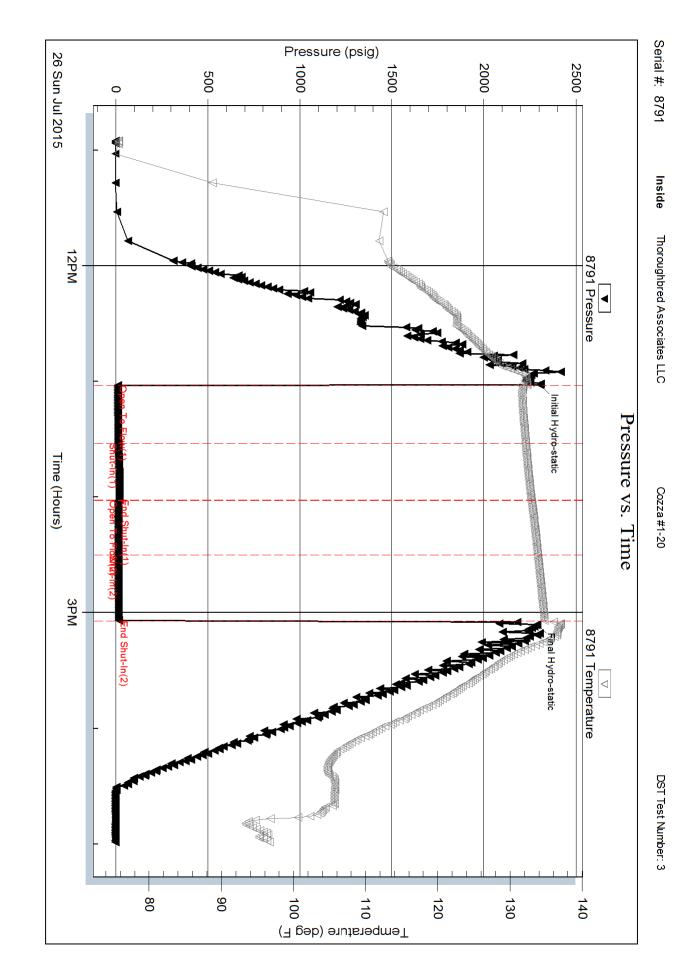
	BITE -			T REPO					
	TING , INC.	Thoroughbred Associates	s LLC		20/4	s/35w I	Rawlins	KS	
		8100 E 22nd St N			Coz	za #1-2	20		
		Bldg 600 STE F Wichita, KS 67226			Job 7	Ficket: 62	2834	DST#	:3
		ATTN: Phil Askey			Test	Start: 20)15.07.26	@ 10:55:00	
GENERAL INFORMA	ATION:								
ormation: Pawn					Teet	Tura	Constantion		lala (Dagat)
Deviated: No Time Tool Opened: 13:02 Time Test Ended: 16:59		ft (KB)			Test Test Unit I	er:	James Win 83	al Bottom H der	ioie (Reset)
nterval: 4517.00	ft (KB) To 45	55.00 ft (KB) (TVD)			Refe	rence Ele	evations:	3268.0	0 ft (KB)
	5.00 ft(KB)(T∖ 2.00 in cheal lala								0 ft (CF)
Hole Diameter: 7	.oo incheshole	Condition: Fair				ĸВt	o GR/CF:	5.0	0 ft
Serial #: 8791	Inside				0			0000 0	
Press@RunDepth: Start Date:	13.45 psig 2015.07.26	@ 4518.00 ft (KB) End Date:	:	2015.07.26	Capacity: Last Calib			8000.0 2015.07.2	
Start Time:	10:55:05	End Time:	-	16:58:59	Time On E		2015.07.26	6 @ 13:01:4	
					Time Off E	3tm: 2	2015.07.26	8 @ 15:06:0	0
2500 T	Pressure vs. T	ime 8791 Tempenture		Time	PR Pressure	ESSUR Temp	RE SUM		
				Time (Min.)	Pressure (psig)	Temp (deg F)	Annotat	tion	
2000			- 130	0	2306.92	132.38	1 1		
			-	1 31	10.93 12.89	131.47 132.17	Open To Shut-In(1		
19300				60	21.35		End Shut	,	
7				00	10 70	400.05	<u>о</u>		
			- 10	60	12.72			Flow (2)	
1000			- ntura	89	13.45	133.84	Shut-In(2)	
			110 rperatura (deg F) 110 120 retura (deg F)) - I n(2)	
			110 ;;;erreture (deg F) 110 ; 100 ; (deg F) 100 ; 50 ; 50 ; 50 ; 50 ; 50 ; 50 ; 50 ;	89 123	13.45 15.53	133.84 134.77	Shut-In(2 End Shut) - I n(2)	
			(deg 6 7	89 123	13.45 15.53	133.84 134.77	Shut-In(2 End Shut) - I n(2)	
				89 123	13.45 15.53	133.84 134.77	Shut-In(2 End Shut) - I n(2)	
	Jan Lillion (Laure)			89 123	13.45 15.53	133.84 134.77	Shut-In(2 End Shut) - I n(2)	
	Time(Hars)			89 123	13.45 15.53	133.84 134.77 136.93	Shut-In(2 End Shut) - I n(2)	
500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Recovery Description	314 Volume (bbl)		89 123	13.45 15.53	133.84 134.77 136.93	Shut-In(2 End Shut Final Hyd) -ln(2) ro-static	Gas Rate (Mcf/d)
500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Recovery Description			89 123	13.45 15.53	133.84 134.77 136.93 Ga:	Shut-In(2 End Shut Final Hyd) -ln(2) ro-static	Gas Rate (Mct/d)
500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Recovery Description	314 Volume (bbl)		89 123	13.45 15.53	133.84 134.77 136.93 Ga:	Shut-In(2 End Shut Final Hyd) -ln(2) ro-static	Gas Rate (Mcf/d)
500	Recovery Description	314 Volume (bbl)		89 123	13.45 15.53	133.84 134.77 136.93 Ga:	Shut-In(2 End Shut Final Hyd) -ln(2) ro-static	Gas Rate (Mct/d)
500 0 501 4295 Length (ft)	Recovery Description	314 Volume (bbl)		89 123	13.45 15.53	133.84 134.77 136.93 Ga:	Shut-In(2 End Shut Final Hyd) -ln(2) ro-static	Gas Rate (Mcf/d)
500	Recovery Description	314 Volume (bbl)		89 123	13.45 15.53	133.84 134.77 136.93 Ga:	Shut-In(2 End Shut Final Hyd) -ln(2) ro-static	Gas Rate (Mcf/d)

A DAT	RILOBITE	DRI	LL ST	EM TEST R	EPORT			FLUID S	UMMARY
		Thorou	ghbred As	ssociates LLC		20/4s/35w	Rawlins K	s	
	TESTING , INC		8100 E 22nd St N Bldg 600 STE F Wichita, KS 67226			Cozza #1-		DST#:3	
M.S.N.			Phil Aske			Test Start: 2	015.07.26 @	10:55:00	
Mud and Cu	ushion Information								
	el Chem		С	ushion Type:			Oil A PI:		deg API
Mud Weight:	9.00 lb/gal			ushion Length:		ft	Water Salinity	<i>r</i> :	ppm
Viscosity:	64.00 sec/qt			ushion Volume:		bbl			
Water Loss:	6.80 in ³			as Cushion Type:					
Resistivity: Salinity:	ohm.m 1800.00 ppm		G	as Cushion Pressure		psig			
Filter Cake:	2.00 inches								
Recovery In	formation								
			R	ecovery Table					
	Leng ft			Description		Volume bbl			
		2.00	Mud w/tr	ace of oil		0.010			
	Total Length:	2	.00 ft	Total Volume:	0.010 bbl				
	Recovery Com								

Printed: 2015.07.26 @ 23:00:07

Ref. No: 62834





ALLIED OIL & GAS SERVICES, LLC 067640 Federal Tax I.D. #20-5975804 REMIT TO P.O. BOX 93999 SERVICE POINT: SOUTHLAKE, TEXAS 76092 Dakley ^{TWP}↓ SEC. 20 RANGE CALLEDOUT ON LOCATION JOB START JOB FINISH DATE 7-28-15 1 230 AL COUNTY, ROGLIDS LEASE CO229 WELL# / =20 OLD OK NEW (Cirole one) LOCATIONLEVENT NTOREB 20 6.5 WHIT WINTO 1.03 markin CONTRACTOR A4. OWNER Sin Hick TYPE OF JOB 4850 HOLE SIZE TD, CEMENT AMOUNT ORDERED 240 31-5 4940 496300 CASING SIZE DEPTH TUBING SIZE DEPTH DRILL PIPE 4/2 300 DEPTH TOOL DEPTH PRES. MAX MINIMUM COMMON 0 MEAS. LINE SHOE JOINT POZMIX ത CEMENT LEFT IN CSG GEL 0 PERFS. CHLORIDE 6 DISPLACEMENT Ò 60.493 cel 24ASIA EQUIPMENT @ 19.89 4723.60 0 40# FLO-SEOC @ 2197 178.20 PUMPTRUCK CEMENTER Andrew. Fordund ര HELPER V Darren Bacette ര BULK TRUCK 0 # 323 DRIVER / Terry Heloneb a BULK TRUCK <u>^_</u>@ DRIVER TOTAL 4951.80 -391-⁸⁰ DISCOUNT 40 % 1936, 72 REMARKS: SERVICE 50 5450, 3015-1 HANDLING257,76 c4/25 @ 2148 639,24. IDD SKEP 22651 MELEAGE 2.25 TON/Mile 10, 2 ton 1622.45 400 50 565 C 10 54 @ 401 DEPTH OF JOB 3015' 30 55 Rathale PUMP TRUCK CHARGE 9600.47 EXTRA FOOTAGE Q HV MILEAGE 55 Miles @ 2170 423.50 Thank you LV MILEAGE SS MILEAGE @ 4.40 242.00 @ CHARGE TO: Thorogy bored STREET ____ TOTAL J.J.J.Q.CC DISCOUNT 40 % 2013104 CITY_____STATE__ ZIP..... PLUG & FLOAT EQUIPMENT Dry hole plug Ò 110,00 To: Allied Oil & Gas Services, LLC, @ You are hereby requested to rent cementing equipment @ and furnish cementer and helper(s) to assist owner or @ contractor to do work as is listed. The above work was Ô done to satisfaction and supervision of owner agent or TOTAL 1100.000 contractor. I have read and understand the "GENERAL DISCOUNT 8% TERMS AND CONDITIONS" listed on the reverse side, SALES TAX (If Any) 874.05 TOTAL CHARGES 10, 524 46 PRINTED NAME ANTHONY !! DISCOUNT SIGNATURE COntribuis III NET TOTAL HEGA T IF PAID IN 30 DAYS 5



CEMENTING LOG

STAGE NO,

		r				CEMENT DATA:		
Date 7 - 28		Oghe		icket No.047	40	Spacer Type:		
Company	horough	breo	Ri	ig mu Fin	24		ft³/sk Density	
LeaseC	<u>6229</u>		W	Vell No	0		· · · · · · · · · · · · · · · · · · ·	
County	Rawling	<u>د</u>	, S1	tateK				
,	20 4	(35		eld		LEAD: Pump Time	hrs. Type 493.5	sec_
Levant p	TO B 20	<u>1 714N</u>		0		14 Flo-see	Excess	
CASING DATA:	Conductor] Р	TA 🔂 🤅	Squeeze 🔲 🛛 M	isc 🔲	Amt. 240 Sks Yield	4ft3/sk Density 14/1	PPG
	Surface	Intermedi	iate 🔲 🛛 Pro	oduction 🔲 Lir	ner 🔲	TAIL: Pump Time	hrs. Type	
Size	Туре	Weig	,ht	Collar			Excess	
						Amt Sks Yield	ft³/sk Density	PPG
							sk Tail gals/sk Total	
			<u> </u>					
Casing Depths: 3	Гор		Bottom			Pump Trucks Used		
	····			:		Bulk Equip. <u>323</u>		
				-				
Drill Pipe: Size	412	Weight		Collars P.B. to	<u></u>		· · · · · · · · · · · · · · · · · · ·	
Open Hole: Size	718	т.р. 🗳	<u>850</u> ft. 1	P.B. to <u>301</u> 9	ft.	Float Equip: Manufacturer		
CAPACITY FACT	ORS:					Shoe: Type	Depth	
Casing:	Bbls/Lin. ft.		Lin. ft./B	lbl			Depth	
Open Holes:	Bols/Lin. ft Bols/Lin. ft Bols/Lin. ft		, Lin. ft./B	lbl			Plugs Top Btm	
Drill Pipe:	Bbls/Lin. ft	01422	Lin. ft./B	lbl				
Annulus:	Bbls/Lin. ft		Lin. ft./B	ibi				
	Bbls/Lin. ft.		Lin. ft./B	lbl	ہ ے ،	Disp. Fluid Type	Amt Bbls. Weight	PPG
Perforations:	From					{ }	Weight	
			· · · · · · · · · · · · · · · · · · ·			CEMENTER Andrea)	
TIME	PRESSUR			JID PUMPED I		_	REMARKS	
AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.			
				1	1			
				· · · ·	1	Pump Water	30151	
			,	8		Pump Water Mik Coment	3215-1	
				8			30151	
				8 5 35		Mik coment Pour water		
				5		Mik coment Pour water		
				5 35 5	, ,	Mik coment Pour water		
				5 35	, ,	Mik coment Pour water		
				5 35 5 16 5	· · · · · · · · · · · · · · · · · · ·	Mik coment Pour water		
				5 35 5 16 5 21	· · · · · · · · · · · · · · · · · · ·	Mik coment Pour water		
				5 35 5 16 5 21		Mik coment Pour water		
				5 35 5 16 5 21		Mik coment Pour water		
				5 35 5 16 5 21 5 8 2,5		Mik coment Pour water		
				5 35 5 16 5 21 5 8 2,5		Mik coment Pour water		
				5 35 5 16 5 21		Mik coment pump water		
				5 35 5 16 5 21 5 8 2,5		Mik coment Pour water		
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				5 35 5 16 5 21 5 8 2,5		Mik coment Pour water		
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				5 35 5 1 6 5 21 5 8 2,5		Mik coment Pour water		
				5 35 5 1 6 5 21 5 8 2,5		Mik coment Pour water		

FINAL DISP. PRESS: ___ MILLER PRINTERS, INC. - Graat Band, KS

_____ PSI BUMP PLUG TO ______ PSI BLEEDBACK ______ BBLS.

THANK YOU