Confidentiality Requested: Yes No

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

1245035

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.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:
GG GSW Temp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane)	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 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 #: Dual Completion Permit #:	Dewatering method used:
SWD 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 TwpS. R East West
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 Approved by: Date:

				Page Iwo	12450	
Operator Na	me:			Lease Name:		_ Well #:
Sec	Twp	_S. R	East West	County:		

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

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

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 Sh	eets)	Yes No		-	n (Top), Depth an		Sample
Samples Sent to Geolog	gical Survey	Yes No	Nam	ie		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING Report all strings set-c		ew Used	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 / SQU	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 on this well?	Yes	No
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes	No
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes	No

Shots Per Foot		PERFORATION Specify For		RD - Bridge P Each Interval I		00	A		ement Squeeze Record	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packe	r At:	Liner Ru		No	
Date of First, Resumed	Product	ion, SWD or ENHF	} .	Producing N	lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITI	ON OF (AS:			METHOD	OF COMPLE	TION:		PRODUCTION INT	ERVAL:
Vented Solo		Jsed on Lease		Open Hole	Perf.	Dually (Submit)	^r Comp. 4 <i>CO-5)</i>	Commingled (Submit ACO-4)		
(If vented, Su	bmit ACC)-18.)		Other (Specify)						

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

Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	Hawkeye 1-22
Doc ID	1245035

All Electric Logs Run

CND	
DIL	
Micro	
Sonic	

Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	Hawkeye 1-22
Doc ID	1245035

Tops

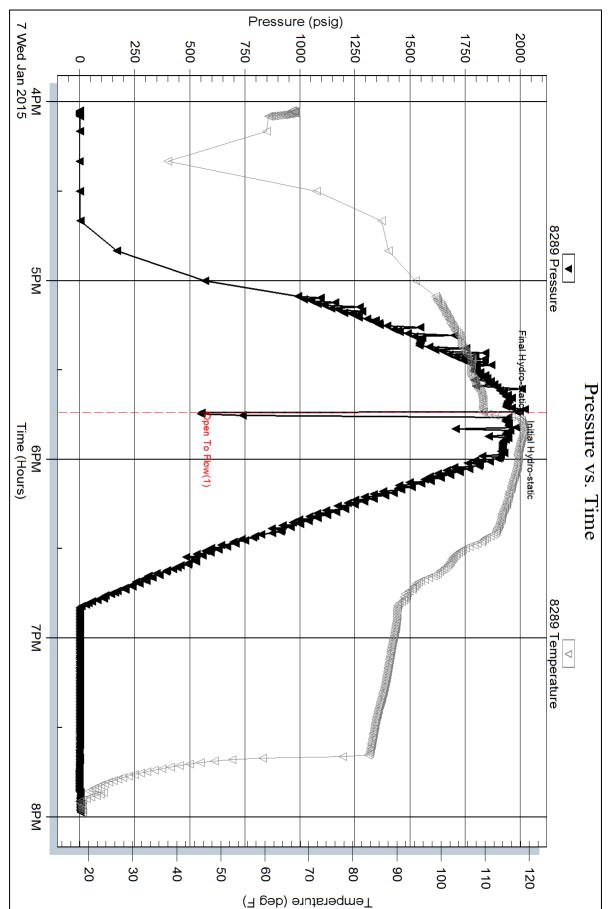
Name	Тор	Datum
Anhydrite	2432	+395
Base Anhy	2463	+364
Topeka	3673	-846
Heebner	3989	-1262
Lasing	3930	-1103
Muncie	4056	-1229
Stark	4141	-1314
ВКС	4199	-1372
LTD	4308	-1481

RILOBITE	DRILL STEM TES	ST REP	ORT			
	Culbreath Oil & Gas Co. Inc.		22 10s 30	w Sheri	dan KS	
ESTING , INC	1532 S Peiria Ave Tulsa OK 74120-6202		Hawkeye			
	ATTN: Anthony Luna		Job Ticket: Test Start:		DST# 7 @ 16:03:00	
			rest otart.	2010.01.01	r @ 10.00.00	
GENERAL INFORMATION: Formation: LKC " B - D "						
Deviated: No Whipstock: Time Tool Opened: 17:44:15 Time Test Ended: 19:58:00	ft (KB)		Test Type: Tester: Unit No:	Conventi Jim Svaty 76	onal Bottom I /	lole (Initial)
Interval:3956.00 ft (KB) To4Total Depth:4000.00 ft (KB) (THole Diameter:7.88 inchesHol			Reference	Elevations: B to GR/CF	2823.0	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 8289 Outside						
Press@RunDepth:psigStart Date:2015.01.07Start Time:16:03:02	 3965.00 ft (KB) End Date: End Time: 	2015.01.07 19:58:30	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.0 2015.01.0 07 @ 17:44:0 07 @ 17:45:4	00
Pressure vs. ' Z289 Pressure 2000	Finne 5279 Tempenåre 	Time	Pressure Temp			
8279 Pressure	∑ 5289 Tempers≜ure	-	Pressure Temp	Annot		
7200	10	(Min.) 0	(psig) (deg F 1983.72 109.6		ydro-static	
	50	1	552.62 109.2 1945.00 115.8		o Flow (1) ∕dro-static	
	20					
47M 57M 67M Wed.ten 2015 Time (Hous)	лы ям					
Recovery			 	as Rates		
Length (ft) Description	Volume (bbl)				essure (psig)	Gas Rate (Mcf/d)
370.00 Mud 100%	4.08					
ļ	ļ					

Printed: 2015.01.07 @ 22:31:33

Ref. No: 61386

Trilobite Testing, Inc



Serial #: 8289 Outside

Culbreath Oil & Gas Co. Inc.

Haw keye 1-22

DST Test Number: 1

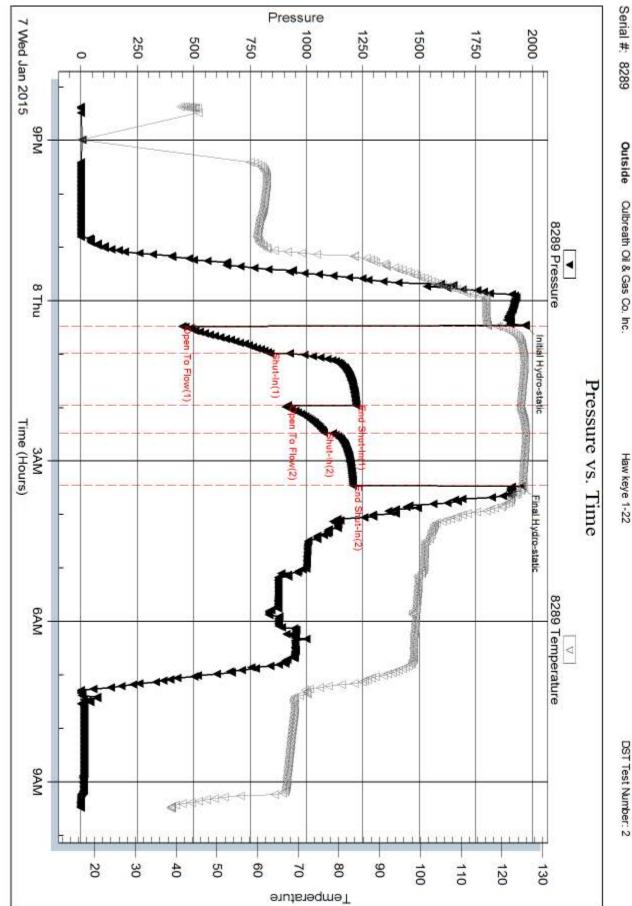
Classed of the Case Control 22 tog Solver Site Find in KS Hawkeye 1-22 Job Ticket: 61387 DST#: 2 ATTN: Anthony Luna Test Start: 2015 01.07 @ 20.22:00 SENERAL INFORMATION: Test Type: Conventional Bottom Hole (Reset) Trest Start: 2015 01.07 @ 20.22:00 SENERAL INFORMATION: Test Type: Conventional Bottom Hole (Reset) Trest Start: 2015 01.07 @ 20.22:00 SENERAL INFORMATION: Test Type: Conventional Bottom Hole (Reset) Trest Start: 2015 01.07 @ 20.22:00 Seneral #: Start Start: 2015 01.07 @ 20.22:00 Seneral #: Start Start: 2015 01.07 @ 20.22:00 Seneral #: Start Start: 2015 01.07 Seneral #: Start Start: 2015 01.07 Seneral #: Start Start: 2015 01.08 Seneral #: Start Start: 2015 01.08 Could be used: 2015 01.08 Case Open: 2015 01.08 Seneral #: Start Time: 2015 01.08 @ 00.27:30 Time On Birm: 2015 01.08 @ 00.27:30 Time On Birm: 2015 01.08 @ 00.27:30 Time Of Birm: 2015 01.08 @ 00.27:30		DRILL	STEM TES	T REP	ORT										
Tubes OK 74120-6202 ATTN: Anthony Luna The filter of 1337 Destination of the set of 1337 Destination of 1237 Destination of 12			il & Gas Co. Inc.		22 1	l0s 30w	Sherida	n KS							
ATTN: Anthony Luna Test Start: 2015.01.07 @ 20.22.00 SENERAL INFORMATION: Image: Seneration of the se	I ESTING	1002 01 011				-		Det	#• 2						
Ormation: LKC "B - D" beviated: No Winjestock: ft (KB) ime Tool Opencie: 2083.00 Test Type: Conventional Bottom Hole (Reset) ime Tool Opencie: 3946.00 ft (KB) TO 400.00 ft (KB) (TVD) Reference Bevalons: 282.00 ft (KB) iola Depti: 209.00 ft (KB) (TVD) 2823.00 ft (KB) 2823.00 ft (KB) 2823.00 ft (KB) iola Depti: 209.02 ft (KB) 2823.00 ft (KB) 2823.00 ft (KB) 2823.00 ft (KB) iola Depti: 2015.01 n7 End Date: 2015.01.08 (D 027.30 Thme On Bhm: 2015.01.08 (D 027.30 Thme On Bhm: 2015.01.08 (D 027.30 Thme On Bhm: istart Time: 20.22.02 End Time: 09.29.02 Thme On Bhm: 2015.01.08 (D 03.28.00 Time On Bhm: 2015.01.08 (D 03.28.00 EST COMMENT: 30.FFP. BOB in 45sec. Co-FSP. No Biov 30.FFP. BOB in 45sec. 31.51.51.51.51.51.51.51.51.51.51.51.51.51		ATTN: Ant	hony Luna					-							
Ime Tool Opened: 00:28:30 Ime Test Ended: 00:31:00 Tester: Jim Svaty Unit No: 76 Interval: 3946.00 ft (KB) To 4000.00 tt (KB) (TVD) old Deptin: Reference Elevations: 2828.00 ft (KB) 2823.00 tt (CF) Sorial #: 2015.01.07 End Date: 2015.01.08 Capacity: 8000.00 psig 2823.00 tt (CF) Sarial #: 2015.01.07 End Date: 2015.01.08 00:29:02 Time On Bitm: 2015.01.08 @ 00:27:30 Time: 20.22:02 End Time: 09129:02 Time Off Bim: 2015.01.08 @ 00:27:30 Time: 20.51:0.8 GB 0:35EP. No Blow 30:FFP: BOB in 45sec. 00:51P. No Blow 30:FFP: BOB in 45sec. 01:52:1. 8000.00 psig 118:55 118:85 Dong To Flow (1) 1 448.38 1 14:48.38 118:85 Dong To Flow (1) 1 1 12:52 118:85 Dong To Flow (2) 12:53 Final Hydro-static 1 1 1 12:53 Shut-In(1) 12:54 Shut-In(1) 12:54 Shut-In(2) 1 1 1 1 1 12:53 Final Hydro-static 1 1 1 1 12:53 Final Hydro-static															
Orall Depth: 4000.00 ft (KB) (TVD) 2823.00 ft (CF) bile Demter: 7.88 inchesHole Condition: Fair KB to GRICF: 5.00 ft serial #: 8289 Outside 500 ft 500 ft serial #: 82829 Outside 2015.01.07 End Date: 2015.01.08 Last Callb.: 2015.01.08 @ 00.27:30 start Time: 2022.02 End Time: 09:2902 Time Of Bitr: 2015.01.08 @ 00.27:30 Time Of Bitr: 2015.01.08 @ 00.27:30 Time Of Bitr: 2015.01.08 @ 00.27:30 EST COMMENT: 30-FP. BOB in 45sec. 60-FSP- Surface Blow in 2min. Building to 7in. Pressure Time Of Bitr: 2015.01.08 @ 03.28:00 Fisher Area Blow in 2min. Building to 7in. 114 443.8 118.81 118.61 Open To Flow(1) 11 13 839.66 125.31 Shut-In(1) 121.51 Death(11) 121 122.52 124.68 Protocol Fisher 122.53 Final Hydro-static 121 1080.03 125.53 Shut-In(2) 125.51 Final Hydro-static 121 1080.03 </td <td>Deviated: No Whips: Time Tool Opened: 00:28:30 Time Test Ended: 09:31:00</td> <td>ock: ft</td> <td>(KB)</td> <td></td> <td>Teste</td> <td>er: J</td> <td>lim Svaty</td> <td>al Bottom</td> <td>Hole (Reset)</td>	Deviated: No Whips: Time Tool Opened: 00:28:30 Time Test Ended: 09:31:00	ock: ft	(KB)		Teste	er: J	lim Svaty	al Bottom	Hole (Reset)						
Press@RunDepth: 1080.33 psig @ 3955.00 ft (KB) Capacity: 8000.00 psig itart Date: 2015.01.07 End Date: 2015.01.08 Last Calib. 2015.01.08 2015.01.08 2015.01.08 2015.01.08 2015.01.08 2015.01.08 2015.01.08 200027:30 itart Date: 2015.01.08 G0.SIP. No Blow 305.FP. BOB in 45sec. 60-SIP. No Blow 2015.01.08	Total Depth: 4000.00 ft (K	B) (TVD)			Refe			2823.	00 ft (CF)						
60-EBP. No Blow 30-FFP. BOB in 45sec. OPERSON 162 EBUW in 2min. Building to 7in. PRESSURE SUMMARY Time PRESSURE SUMMARY Time Pressure Temp Annotation OPERSON 125.15 Nutlet Hydro-static Nutlet Hydro-static <th colspan="6" hyd<="" nutlet="" td=""><td>Press@RunDepth: 1080.33 Start Date: 2015.0</td><td>psig @ 3955.0 1.07 End Da</td><td>ate:</td><td></td><td>Last Calib Time On E</td><td>o.: Btm: 2</td><td></td><td>2015.01. @ 00:27:</td><td>08 30</td></th>	<td>Press@RunDepth: 1080.33 Start Date: 2015.0</td> <td>psig @ 3955.0 1.07 End Da</td> <td>ate:</td> <td></td> <td>Last Calib Time On E</td> <td>o.: Btm: 2</td> <td></td> <td>2015.01. @ 00:27:</td> <td>08 30</td>						Press@RunDepth: 1080.33 Start Date: 2015.0	psig @ 3955.0 1.07 End Da	ate:		Last Calib Time On E	o.: Btm: 2		2015.01. @ 00:27:	08 30
Image: Note of the second se	60-ISIP- N 30-FFP- B	o Blow OB in 45sec.	. Building to 7in.												
Imme Pressure (psig) Class Rate (Mcfd) Imme Pressure (psig) Code (inches) Pressure (psig) Gas Rate (Mcfd) Imme Imme Pressure (psig) Code (inches) Pressure (psig) Gas Rate (Mcfd) Imme Imme Imme Pressure (psig) Code (inches) Pressure (psig) Gas Rate (Mcfd) Imme															
Image: constraint of the second of the se	2000	S279 Tempe		-		•	Annotati	on							
Image: Contract of the second seco	1750						Initial Hydi	ro-static							
and an arrow of the second	1500			1											
Image: state of the state	E <i>4</i> +	*	50	-											
Image: constraint of the second se			**************************************												
Recovery Gas Rates Length (ft) Description Volume (bbl) 186.00 Oil Speck WCM 5%w 95%m 1.50 1750.00 OCW 20%o 80%w 24.55 187.00 MOCCW 20%m 30%o 50%w 2.62 187.00 MWCO 10%m 25%w 65%o 2.62 0.00 GIP 125 0.00				121											
Image: Note of the second s			60	180											
Length (ft) Description Volume (bbl) 186.00 Oil Speck WCM 5%w 95%m 1.50 1750.00 OCW 20%o 80%w 24.55 187.00 MOCW 20%m 30%o 50%w 2.62 187.00 MWCO 10%m 25%w 65%o 2.62 0.00 GIP 125 0.00				181	1953.43	125.35	Final Hydr	o-static							
186.00 Oil Speck WCM 5%w 95%m 1.50 1750.00 OCW 20%o 80%w 24.55 187.00 MOCW 20%m 30%o 50%w 2.62 187.00 MWCO 10%m 25%w 65%o 2.62 0.00 GIP 125 0.00	Reco	very			<u> </u>	Gas	s Rates								
1750.00 OCW 20%o 80%w 24.55 187.00 MOCW 20%m 30%o 50%w 2.62 187.00 MWCO 10%m 25%w 65%o 2.62 0.00 GIP 125 0.00	Length (ft) Descrip	ion	Volume (bbl)			Choke (in	nches) Press	ure (psig)	Gas Rate (Mcf/d)						
187.00 MOCW 20%m 30%o 50%w 2.62 187.00 MWCO 10%m 25%w 65%o 2.62 0.00 GIP 125 0.00	186.00 Oil Speck WCM 59	w 95%m	1.50			•	<u>I</u>		<u>.</u>						
187.00 MWCO 10%m 25%w 65%o 2.62 0.00 GIP 125 0.00	1750.00 OCW 20%o 80%w		24.55												
0.00 GIP 125 0.00	187.00 MOCW 20%m 30%	o 50%w	2.62												
	187.00 MWCO 10%m 25%	w 65%o	2.62												
* Recovery from multiple tests	0.00 GIP 125		<u> </u>												
* Recovery from multiple tests															
	* Recovery from multiple tests		·												

O	BILOBITE		LL STEM TEST REPOR		F	LUID SUMMAR	
割っ	RILOBITE ESTING , INC	Culbre	ath Oil & Gas Co. Inc.	22 10s 30w Sheridan KS			
	ESTING , INC.		S Peiria Ave	Hawkeye	1-22		
		Tulsa (DK 74120-6202	Job Ticket:	61387	DST#:2	
NOV.		ATTN:	Anthony Luna	Test Start: 2	2015.01.07 @ 20::	22:00	
ud and Cus	shion Information						
ud Type: Gel	Chem		Cushion Type:		Oil API:	21 deg AP	
ud Weight:	9.00 lb/gal		Cushion Length:	ft	Water Salinity:	61000 ppm	
scosity:	52.00 sec/qt		Cushion Volume:	bbl			
ater Loss:	7.98 in ³		Gas Cushion Type:				
esistivity:	ohm.m		Gas Cushion Pressure:	psig			
alinity:	750.00 ppm						
ter Cake:	1.50 inches						
ecovery Inf	ormation		Descurr Table				
	· · ·		Recovery Table		7		
	Leng ft	in	Description	Volume bbl			
		186.00	Oil Speck WCM 5%w 95%m	1.49	8		
	1	750.00	OCW 20%o 80%w	24.54			
		187.00	MOCW 20%m 30%o 50%w	2.62			
		<u>187.00</u> 0.00	MWCO 10%m 25%w 65%o GIP 125	2.62			
	Recovery Com	nents: .3	40 @ 26				

Printed: 2015.01.08 @ 10:25:16

Ref. No: 61387





Haw keye 1-22

DST Test Number: 2

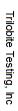
Outside Oulbreath Oil & Gas Co. Inc.

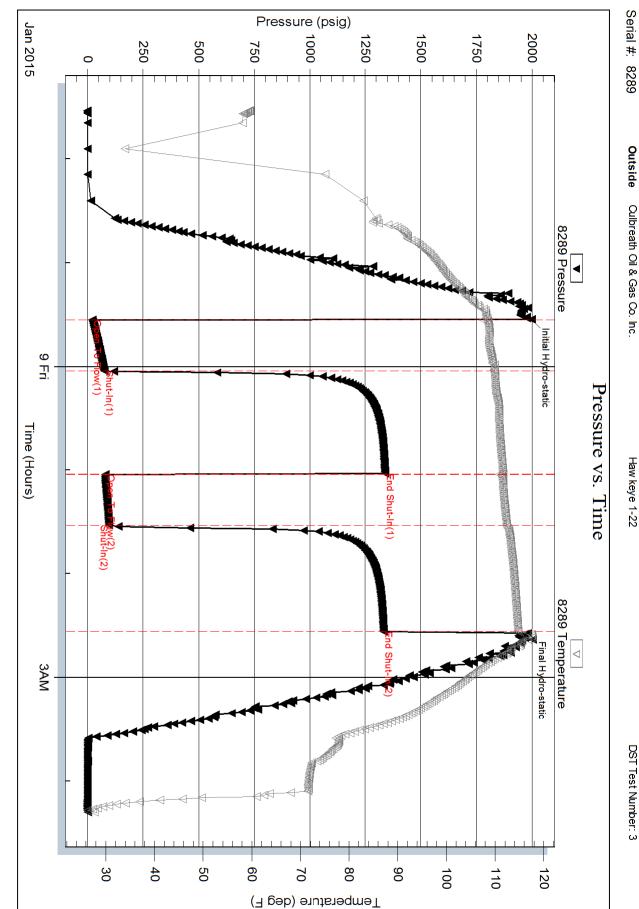
RILOBITE	DRILL STEM TES	ST REP	ORT				
	Culbreath Oil & Gas Co. Inc.		22 1	0s 30w	Sherida	n KS	
ESTING , INC	1532 S Peiria Ave Tulsa OK 74120-6202			keye 1 icket: 61		DST#	+ 3
	ATTN: Anthony Luna				000 015.01.08 @	-	-
GENERAL INFORMATION:							
Formation:LKC " H "Deviated:NoWhipstock:Time Tool Opened:23:33:00Time Test Ended:04:18:00	ft (KB)		Test ⁻ Teste Unit N	er: J	Conventiona Jim Svaty 76	Il Bottom H	lole (Reset)
Interval:4056.00 ft (KB) To409Total Depth:4090.00 ft (KB) (TVHole Diameter:7.88 inches Hole	(D)		Refer	ence Ele KB to	evations: o GR/CF:	2823.0	00 ft (KB) 10 ft (CF) 10 ft
Serial #: 8289OutsidePress@RunDepth:97.35 psigStart Date:2015.01.08Start Time:21:32:02TEST COMMENT:30-IFP- Surface E 60-ISIP- No Blow	End Date: End Time: Blow Building to 5 3/4in.	2015.01.09 04:17:45	Capacity: Last Calib. Time On B Time Off B	tm: 2	2015.01.08 2015.01.09	2015.01.0 @ 23:32:4	5
30-FFF- Surface 60-FSIP- No Blow Pressure vs. Ti ZØlfresure		Time			E SUMM		
Len 205		Time (Min.) 0 1 30 90 90 120 181 182	Pressure (psig) 1997.84 21.92 75.58 1339.11 80.40 97.35 1332.76 1981.25	110.80	Annotatio Initial Hydr Open To F Shut-In(1) End Shut-I Open To F Shut-In(2) End Shut-I Final Hydro	o-static low (1) n(1) low (2) n(2)	
Recovery				Gas	s Rates		
Length (ft) Description 132.00 MCW 10%m 90%w	Volume (bbl) w of Oil in Too 0.74			Choke (ir	nches) Pressu	ire (psig)	Gas Rate (Mcf/d)
* Recovery from multiple tests Trilobite Testing, Inc	Ref. No: 61388			Printed	2015.01.09	@ 05.51.1	26

RILOBI		RILL STEM T	EST REPOR	Т	F	LUID SUMMAR	
	Cui	oreath Oil & Gas Co. Inc	.	22 10s 30w Sheridan KS			
I ESTI		1532 S Peiria Ave Tulsa OK 74120-6202			Hawkeye 1-22 Job Ticket: 61388 DST#:3		
	AT	N: Anthony Luna			2015.01.08 @ 21:		
Mud and Cushion Info	rmation						
Mud Type:Gel ChemMud Weight:9.00 lb/Viscosity:48.00 seWater Loss:9.17 infResistivity:ofSalinity:5000.00 ppFilter Cake:1.00 inf	ec/qt 3 nm.m om	Cushion Ty Cushion Le Cushion Vo Gas Cushio Gas Cushio	ength: blume:	ft bbl psig	Oil API: Water Salinity:	deg API 44000 ppm	
Recovery Information							
ſ	Length ft	Recovery Descrip		Volume bbl]		
-	132.0	0 MCW 10%m 90%v	v Show of Oil in Tool	0.740			
Num Labo	Il Length: n Fluid Samples: C oratory Name: overy Comments	Laborat	olume: 0.740 bbl is Bombs: 0 ory Location:	Serial #	:		
Trilobite Testing, Inc		Ref. No: 61388		Data	l: 2015.01.09 @ C	NE-1-1-27	

Printed: 2015.01.09 @ 05:51:27

Ref. No: 61388





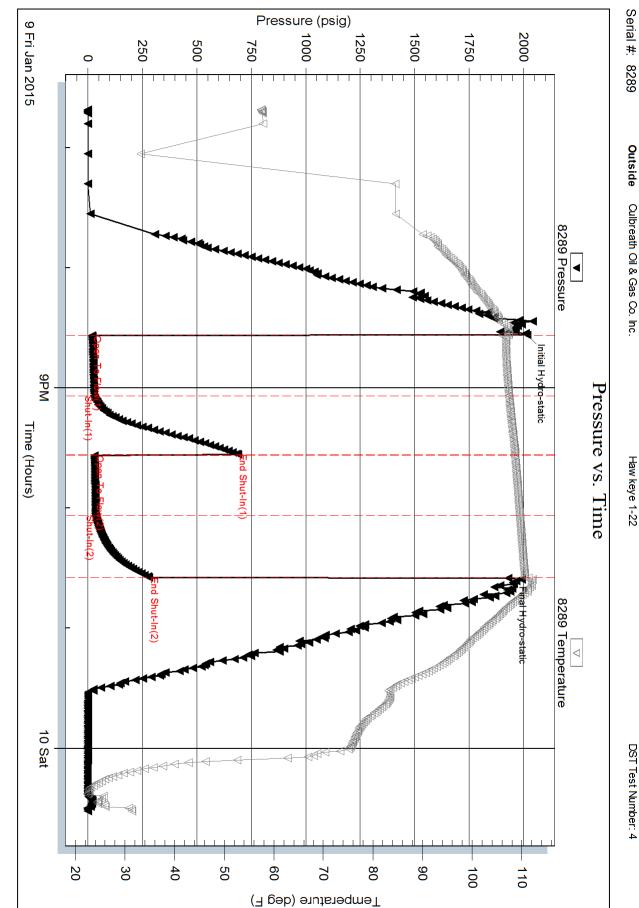
RILOBITE	DRILL STEM TES	ST REP	ORT				
	Culbreath Oil & Gas Co. Inc.		22 1	0s 30w	Sherida	n KS	
ESTING , INC	1532 S Peiria Ave Tulsa OK 74120-6202			keye 1 icket: 61;		DST	<i>#. 1</i>
	ATTN: Anthony Luna				15.01.09 @	-	
GENERAL INFORMATION:							
Formation:LKC " I - K "Deviated:NoWhipstock:Time Tool Opened:20:33:45Time Test Ended:00:32:00	ft (KB)		Test ⁻ Teste Unit N	r: J	Convention im Svaty 6	al Bottom	Hole (Reset)
Interval:4092.00 ft (KB) To418Total Depth:4182.00 ft (KB) (TVHole Diameter:7.88 inches Hole	D)		Refer	ence Elev KB to	vations: o GR/CF:	2823.	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 8289 Outside Press@RunDepth: 35.96 psig Start Date: 2015.01.09 Start Time: 18:41:02 ITEST COMMENT: 30-IFP- Surface E 30-ISIP- No Blow 30-FFP- Good Su	End Date: End Time:	2015.01.10 00:31:45	Capacity: Last Calib. Time On Bi Time Off B	tm: 2	015.01.09 015.01.09	2015.01. @ 20:33:	30
30-FSIP- No Blow Pressure vs. Tr 2009 Pressure					E SUMM		
5.00 Preside 5.00 Preside 5.	Б.Ф. Геррпале	Time (Min.) 0 1 31 60 60 91 122 122	Pressure (psig) 2017.18 20.39 28.84 688.33 31.44 35.96 280.83 1930.18	105.98 107.41 108.64 108.48 109.58 110.59	Annotati Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1) In(1) Flow (2) In(2)	
Recovery			· · · · ·	Gas	Rates		
Length (ft) Description 15.00 OCM 4%0 96%m	Volume (bbl)			Choke (in	nches) Press	ure (psig)	Gas Rate (Mcf/d)
* Recovery from multiple tests							

RILOB		DRILL	FLUID SUMMA					
		Culbreath Oil & Gas Co. Inc. 1532 S Peiria Ave Tulsa OK 74120-6202			22 10s 30w Sheridan KS			
EST	'ING , INC.				Hawkeye 1-22 Job Ticket: 61389 DST#:4			
		ATTN: Anth	ony Luna			015.01.09 @ 18	-	
lud and Cushion Info	ormation							
alinity: 5000.00 p	sec/qt n³ ohm.m		Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure	:	ft bbl psig	Oil API: Water Salinity:		deg API ppm
ecovery Informatior	ı							
	·		Recovery Table			-		
	Length ft		Description		Volume bbl			
		15.00 OCM	4%o 96%m		0.074	_ }		
То	tal Length:	15.00 ft	Total Volume:	0.074 bbl		-		

Printed: 2015.01.10 @ 07:06:18

Ref. No: 61389





Haw keye 1-22

Culbreath Oil & Gas Co. Inc.

DST Test Number: 4

Serial #: 8289

GLOBAL CEMENTING, L.L.C.

1564

	JSSELL, F	KS 67665			SERVICE POINT:	SSELC, KS	
HO 1-7 1	Inna	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
DATE 1-2-15	>					COUNTY	STATE
LEASEHAWKEYE	WELL #.	1-22	LOCATION			SHERIDAN	KS
OLD OR NEW (CIRC	CLE ONE)						
CONTRACTOR Wh	1 DRILL	LING	R16 10	OWNER			
TYPE OF JOB SURF	ACE						
HOLE SIZE /2 /4			D. 30003469	CEMENT	275		
CASING SIZE 8 5/3			EPTH 305.49	AMOUNT	ORDERED	SY CO	M. DGEL
TUBING SIZE			EPTH EPTH		W/ 3980	CFAI	0 612 6
TOOL			EPTH				
PRES. MAX			IINIMUM		التراجية معاورته ال	0	
MEAS, LINE			HOE JOINT				
CEMENT LEFT IN CSG.	20'	0.				-	
PERFS	00				E C		
DISPLACEMENT 18	RRI.				E	_ @	
	EQUIPME	INT		ASC		 	
		1.11.11.11.11				@	
UMP TRUCK CEI	MENTER 2	BRAD				@	
	LPER BUD					@	
ULK TRUCK	1					@	
B/ DR	IVER HU.	STEN				@	
ULK TRUCK						_ @	and the second second
DR	IVER					. @	
				HANDLING	G_24	@	
				MILEAGE			
CORD REAL	REMA	ARKS:				TOTA	L
RUN IN TO	INTS ,	0	WEASINGLAS		SE	RVICE	
CIRCULATE	MUD-	- HOGE 1	UP CEMERT -				
PUMP 275		Entor	2.0	DEPTH OF			
DISPLACE + 4	JASH L	1P - 5H	FUT IN GILDOU	PUMPTRU	CK CHARGE OTAGE		
1.00	1.9. 0				UTAGE		
)	0	
					J	-	
HARCE TO. CLARE	REATH	+ DIC	+GAS			- @	
						TOTAL	· <u> </u>
			IP		PLUG & FLO	AT EQUIPME	NT
					1200 @ 120	III LQUII ML	
						@	
				1			
						@	
lo work as is listed.				1			
						. @	-
and supervision of o	INCKAL.	I EKIVIS A	IND CONDITIONS.				
and supervision of o understand the "GE						TOTA	L
and supervision of o		1 0.					
and supervision of o understand the "GE		afl.	ger	SALES TAX	X (If Any)		
and supervision of o inderstand the "GE isted on the reverse s		laf 1	iger		X (If Any) ARGES		
urnish cementer and	uested to l helper(s) The abov wner agen	to assist over work want or contra	nting equipment and wner or contractor to s done to satisfactior actor. I have read and ND CONDITIONS'	1		- @ - @ - @	-

2:00 ACONSOLIDATEDOil Well Services, LLCIGPO Box 884, Chanute, KS 66720 620-431-9210 or 800-467-8676FIELD TICKET	CEMEN	T INVOICE	#803064) akley Ks. Dry Davis Izs 5.	الاير
DATE CUSTOMER # WELL NAME & NUME		SECTION	TOWNSHIP	RANGE	COUNTY
1-11-15 2777 Hawkeye #1-2	2	11	10	30	sheridan
CUSTOMER CUI breath MAILING ADDRESS CITY STATE ZIP CODE	Grinnell N to RO 130 Witt toRD 110 Sinto	тписк # 172 460	DRIVER Jordan L. Larry K	TRUCK #	DRIVER
JOB TYPE ONO String HOLE SIZE 7 7/8	HOLE DEPTH	14,310	CASING SIZE & W	EIGHT 5 12	15.5
CASING DEPTH ፝፞፞፞፞፞፞፝፝፝፝፝፝፝፝፝፝፝፝፝፝፝	TUBING			OTHER	
SLURRY WEIGHT 14.5 SLURRY VOL 1.42	WATER gal/s	k 6.97	CEMENT LEFT in		
DISPLACEMENT 100 / 103.2 DISPLACEMENT PSI			RATE		
REMARKS: Suffey mouting ~ Rig up on www- and 43 Basketon 14 and 44 Portcoller on up to pumptruck 5 BBL water wheed mix mus hale wash up displace 101,5 BBL Wate Owas & Kolson	top of 4 I flush 20	4 shoe ct	4213 - circu	lut for 1 h	67,8,9,10,13 our Hacile 70 down

17

Lift gco 1300 Innd

		Thanks Cory	D. + Creu	J
ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT		TOTAL
5401 6	l	PUMP CHARGE	3,175,00	3,175.00
5406	20	MILEAGE	5.25	105.00
5407 H	11.1	Ton milege delivery	1.75	388.50
		• • •		
1126	200514	owc	23.70	4740.00
1110 A	1,000#	Kul-Seal	.56	560.00
4130	9	Centralizer 5 1/2	61,00	549.00
4104	2	Basket 51/2	290,00	
4159	1	AFU Float Shoe 5 1/2	433.75	433.75
4454	1	Latch down plug 51/2	567.00	567.00
4314	40	Raciprocating Scratchers	82.00	
4285	1	5 1/2 Portcollar	2,178,75	2,178.75
1142	2 00	KCL	41.10	82.20
11446	500 401	Mudflush	1.00	5 00,00
				17110 00
				17,139.20
			15% 1223	2,570.88
				14,51,8.33
			SALES TAX	933,21
lavin 3737	1. 1.	2	ESTIMATED TOTAL	155015
AUTHORIZTION		TITLE	DATE	

AUTHORIZTION

11/-

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.