

Confiden	tiality Requested:
Yes	No

Kansas Corporation Commission Oil & Gas Conservation Division

1195514

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:			F6	eet from North /	South Line of Section		
City:	State: Z	ip:+	Fe	eet from East /	West Line of Section		
Contact Person:			Footages Calculated from I	Nearest Outside Section C	Corner:		
Phone: ()			□ NE □ NW	V □SE □SW			
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:	W	/ell #:		
	e-Entry	Workover	Field Name:				
	_		Producing Formation:				
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW □ SIGW	Elevation: Ground:	Kelly Bushing:	:		
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total C	Depth:		
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet		
☐ Cathodic ☐ Other (Co	ore, Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No		
If Workover/Re-entry: Old Well I			If yes, show depth set:		Feet		
Operator:			If Alternate II completion, c	cement circulated from:			
Well Name:			feet depth to:	w/	sx cmt.		
Original Comp. Date:							
Deepening Re-perf	•	NHR Conv. to SWD	Drilling Fluid Managemer	nt Plan			
☐ Plug Back	Conv. to G		(Data must be collected from the				
Commingled	Pormit #:		Chloride content:	ppm Fluid volume	e: bbls		
Dual Completion			Dewatering method used: _				
SWD			Location of fluid disposal if	hauled offsite			
☐ ENHR			1				
GSW	Permit #:		Operator Name:				
_ _			Lease Name:	License #:_			
Spud Date or Date R	eached 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 Two



Operator Name:				Lease N	Name: _			Well #:		
Sec Twp	S. R	East	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres o surface test, along	sures, whethe with final cha	er shut-in pre art(s). Attach	essure reac n extra shee	hed stati t if more	c level, hydrosta space is neede	itic pressures, bot d.	tom hole temp	erature, fluid re	ecovery,
Final Radioactivity Lo files must be submitte						ogs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electr	ronic log
Drill Stem Tests Taker (Attach Additional		Yes	☐ No				on (Top), Depth ar		Sampl	
Samples Sent to Geo	logical Survey	Yes	□No		Nam	е		Тор	Datum	1
Cores Taken Electric Log Run		☐ Yes ☐ Yes	☐ No ☐ No							
List All E. Logs Run:										
				RECORD	Ne					
	2	1				ermediate, product		T	I	
Purpose of String	Size Hole Drilled		Casing n O.D.)	Weig Lbs. /		Setting Depth	Type of Cement	# Sacks Used	Type and Pe Additive	
			ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Type of	Cement	# Sacks	Sacks Used Type and Percent Additives					
Perforate Protect Casing	100 20111111									
Plug Back TD Plug Off Zone										
1 lug 0 li 20 lio										
Did you perform a hydrau	ulic fracturing treatment	on this well?				Yes	No (If No, ski	ip questions 2 ar	nd 3)	
Does the volume of the t							= :	p question 3)		
Was the hydraulic fractur	ring treatment information	on submitted to	the chemical	disclosure re	gistry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot		ION RECORD Footage of Eac								epth
	open,					,,				
TUBING RECORD:	Size:	Set At:		Packer A	t:	Liner Run:				
							Yes No			
Date of First, Resumed	Production, SWD or Ef	NHR. F	Producing Met	hod: Pumpin	a	Gas Lift 0	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat			Gas-Oil Ratio	Gra	avity
	1									
	ON OF GAS:		en Hole	METHOD OF			mmingled	PRODUCTION	ON INTERVAL:	ļ
Vented Solo	I Used on Lease bmit ACO-18.)		en noie _	Perf.	(Submit		mmingled mit ACO-4)			

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Kenneth 1-35
Doc ID	1195514

Tops

Name	Тор	Datum
Anhydrite (top)	3216	+110
Anhydrite (base)	3248	+78
Neva	3214	-388
Foraker	3826	-500
Wabaunsee	3946	-620
Topeka	4040	-714
Deer Creek Sand	4084	-758
Oread	4172	-846
Lansing/KS City A	4266	-940
LKC B	4323	-997
LKC C	4382	-1056
LKC D	4424	-1098
LKC E	4466	-1140
LKC F	4504	-1178
Pawnee	4654	-1328
Cherokee	4677	-1351
RTD	4740	
LTD	4736	-1410

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Kenneth 1-35
Doc ID	1195514

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	309	Common	3% cc, 2% gel

WELL FILE ALLIED OIL & GAS SERVICES, LLC 061451 Federal Tax I.D. # 20-8651475

SOUTHLA		EXAS 7609	92	3	SERV	ICE POINT:	VC
	, .		,,,			Oakl.	ey (C)
DATE)-23-14 SI	35	TWP	RANGE 36	CALLED OUT	ON LOCATION	JOB START LICODM	JOB FINISH
		1-35	LOCATION ML	Donald N.	to Rdw	COUNTY	STATE,
OLD OR NEW Circle	e one)		Follow Corv	es to Rd Y			
		des)	OWNER .S.	ame		
TYPE OF JOB	wr.				•		
HOLESIZE 12'		<u>T.D.</u>	310'	CEMENT	A	- : /	201
CASING SIZE 95	18	DEP		AMOUNT OF	RPERED <u>225</u>	SKS CON	m 5/0 CC
TUBING SIZE		DEP		_ 2% ge	/		
DRILL PIPE		DEP			·		
TOOL PRES. MAX		DEP		Andrews			41
MEAS. LINE		St. 100-11	IMUM	COMMON	J25sks	@ 17-90	4027,50
CEMENT LEFT IN C	20 1	SHO	EJOINT	POZMIX		_@	
PERFS.	<u>50. 1</u>	٥	TV III	GEL		@ 23.40	93.60
DISPLACEMENT	10	80 66		CHLORIDE_	8sks		512.00
DIOLD/ICE/ILITE			water	ASC	· · · · · · · · · · · · · · · · · · ·		
	EQU	IPMENT				_@	
						_@	
	MENT	ER Tau	Seaver			- <u>@</u>	•
	LPER	EXX	Flipse	 		_@	
BULK TRUCK			٠ - ١٠	-		_@ @	
	IVER	Adam	Flipse			·@	
BULK TRUCK		•	9 1			-@	
# DR	IVER			- HANDLING	243.30 C+ 3	@ 2.48	603.38
					10 tous & 50mi	V. 2 (a)	1,443.00
	REN	ARKS:		10100,000	105-10812 2 12 0 1111		
Mix =	1 7 5	- - - - - - - - 	Com 3/2C(^ • ·		TOTAL	4,679.48
290 90	404	SKS	1614 3/8C				
	/	J.			SERVI	CE	
Displace Ceinful		circu	1140			-	
- CANALL	-CAUE		sins =	DEPTH OF JO	11///	310	
				PUMPTRUCI	· · · · · · · · · · · · · · · · · · ·		1512.25
			1	EXTRA FOOT			- Me-
			11/2 041	MILEAGE "		@ 7.70	385.00
			7		swedge	@ <u>275.00</u> @ <u>4.40</u>	NIC
			400	, mild	5.0	@ <u>7. 70</u> @	_N/C
CHARGE TO: 5	0800	~ ^ ~	111	·			
~						TOTAL.	1897.25
STREET							
CITY	\$T;	NTE	ZIP		PLUG & FLOAT	TO STATE OF THE ST	n r
					1 DOG & PLOAT	EQUITIVEN	1
						_@	
	~ .					_@	
To: Allied Oil & Gas				A. 1819 C. A. 1919 C. G. C. 1919 C. C. 1919 C.	· / · · · · · · · · · · · · · · · · · ·	<u>@</u>	
You are hereby reque	ested to	rent ceme	enting equipment	<u> </u>		.@	
and furnish cementer					**************************************	_@	
contractor to do work				3			
done to satisfaction a	ind sup	ervision o	f owner agent or			TOTAL	
contractor. I have rea				L GIT BOOK I	WA		
TERMS AND CONE	OITIO	VS" listed	on the reverse sid	le. SALESTAX (If Any)		
				TOTAL CHAR	RGES 8,57	6.13	
PRINTED NAME	m	1, 5	linus		2,401.48		
TANA MANAGE	1-16	10 00	u>	DISCOUNT _			
gr	າ ກໍ	0 /	/		6.175.0	34 Nest	•
SIGNATURE ///	My la	Salve	(C)			, , . = •	



CEMENTING LOG

STAGE NO.

1-22	-14	nola	a. , VS .	ricket No. 06	451	CEMENT DA				
Date 1 2	er exco			Rig Beredeo		Spacer Type			(12/1) D	
	ineth			Nell No	5	Amt	Sks Yleid		_ft³/sk Density	PP
	aulins			State KS			**************************************			
	35-1-	36		ield		LEAD: Pump			hrs. TypeExcess	
CASING DATA	: Conductor	Π .	PTA 🔲	Squeeze M	isc \square	Amt.	Sks Yield			
		7	_	roduction 🔲 Lir					hrs. Type Com 3%CC	
Size 85/2				Collar		2%	ael		Fyress	
	6		-			Amt.	Sks Yield	<u> 36 </u>	ft³/sk Density 15.02	PPC
						WATER: Lead	d <u>lo : S</u> gals	s/sk Tail	gals/sk Total	_ Bbl
	/	B		3/0.16	····		130	4.1		
Casing Depths:	Top		Bottom _ 	70(16		Pump Trucks	s Used 120	A Low	<i>£</i>	
						BUIK EQUIP	<u> </u>	TELLU		
						•				
Drill Pipe: Size _		Weight		Collars						
Open Hole: Size	(> 1.1.	T.D. 3	10_ft	P.B. to	ft.	Float Equip: N	Manufacturer			
CAPACITY FACT	ORS:		_			Shoe: Type _			Depth	
Casing:	Bbls/Lin. ft	1063	∠ _ Lin. ft./£	ЗЫ		Float: Type _			Depth	
Open Holes:	8bis/Lin. ft		Lin. ft./l	3bl		Centralizers:	Quantity	Plugs Top _	Btm	
Drill Pipe:	Bbls/Lin. ft		Lin. ft./6	3bl		Stage Collars	5	~~		
Annulus:	Bbls/Lin. ft		Lin. ft./f	3bl		Special Equip)		1205	
	Bbls/Lin. ft		Lin. ft./E	3bl		Disp. Fluid Ty	pe Water	Amt.	1 <u>880</u> Bbls, Weight	PPC
Perforations:	From	ft. to	·	ft. Amt		Mud Type			Weight	PPC
COMPANY REPE	RESENTATIVE					CEMENTE	R Paul	Bee	rver	
710.45	DDECOL	DEC DOL	T ru	IID OUR ADED I			*			
AM/M	PRESSU DRILL PIPE CASING	ANNULUS	TOTAL FLUID	LUID PUMPED DATA Pumped Per RATE Time Period Bbls M		REMARKS				
							Hold S	afet	meeting	
2,00						Ş	tart cen	rent		
			34.8244	34.82661		mi	x 225 5	KS (a) 15 77	
	<u> </u>			11.05 133			of ceme			
				40.82661		140	ish-up	Dugg	or lines	
-			12.8 65	53.62bb		112	isplace i	u ('t	vaites	
2:30						Co	ment a	lid o	irculate	
		•								
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							•	-		
				,						

ALLIED OIL & GAS SERVICES, LLC 061459 Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999	SERVICE POINT:						
SOUTHLAKE, TEXAS 76092	- Dakley KS						
DATE 2-2-14 SEGS TWP. RANGE 36	CALLED OUT ON LOCATION JOB START JOB FINISH						
Q n	6 CAM 6130 AM						
LEASE CHINCH WELLS 1-35 LOCATION MC	and w to Rdw Rawlins STATES						
OLD OR NEW Circle one) C follow a	rvestoRdY Ninto						
f f							
CONTRACTOR BEVELOS	OWNER Jame						
HOLE SIZE 77/8 T.D. 4740	CEMENT						
CASING SIZE DEPTH	AMOUNT ORDERED 220 Sks 60/40						
TUBING SIZE DEPTH	4º/0 gel 1/4# Flo-Segl						
DRILL PIPE DEPTH							
TOOL DEPTH	12 - 1						
PRES. MAX MINIMUM MEAS: LINE SHOE JOINT	COMMON 1325KS@ 17.90 2362.80						
MEAS: LINE SHOE JOINT CEMENT LEFT IN CSG.	POZMIX						
PERFS.	GEL 8sks @ 2340 187.20						
DISPLACEMENT	CHLORIDE@						
EQUIPMENT	ASC						
EQUIPMENT	Flo-Stal 55#@2.97 163.35						
PUMPTRUCK CEMENTER : Nelly Gule (@						
# 422 HELPER Wayne Mcghalu	@						
BULK TRUCK							
# 600 DRIVER Brandon William							
BULKTRUCK							
#3734308 DRIVER Eddie (TUS)							
	HANDLING 236,28 ft = @ 2.48 585.97 MILEAGE 9,87 tons 450m 2.60 1283,10						
REMARKS:							
mil 25 8/6 3 210	TOTAL \$ 5,405.2						
100 @ 2465	,						
- 40 @ 310	SERVICE						
10 0 40	DEPTH OF JOB 3240						
30 R H	PUMPTRUCK CHARGE &600,47						
ISMH	EXTRA FOOTAGE @						
	MILEAGE MINV 50@7.70 3850						
	MANIFOLD @						
•	MILV 50 @ 4.40 M/C						
Range							
CHARGE TO: Berexco							
STREET	TOTAL 2985.42						
4							
CITYSTATEZIP	DITIC 9. TI ALT PARITY APAIG						
	PLUG & FLOAT EQUIPMENT						
4							
	wooden Dlug @ 107.64						
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							
done to satisfaction and supervision of owner agent or	TOTAL +07.64						
contractor. I have read and understand the "GENERAL	: IOIAL 10 FC 7						
TERMS AND CONDITIONS" listed on the reverse side.	SALES TAX (If Any)						
	TOTAL CHARGES 8,498.33						
PRINTED NAME Mylo Sylinus							
LYNATED NAME 11 WANT YOUTH AS	DISCOUNT 2.349.39 IF PAID IN 30 DAYS						
M = M = M = M	6.148.93 Net.						
SIGNATURE ////	6'INCOUC.						



CEMENTING LOG

STAGE NO.

67		wide	to a			CEMENT DATA:	n. #1			
	-14 Distri		7/\T	icket No. <u>614</u> ia Beradee		Spacer Type:			ft³/sk Density	pag
Company 134	NexCO	h		vell No. 1-3		Amt. 2001	Sks Yield		it % sk Density	PPG
Lease Da	whim	<u> </u>		tate 14,5		·	•			
-1A4	2 Donald	N 70 P				EAD: Dump Time			hrs. Type	
Location		* Wint		ela		LEAD. Fump time.			Excess	
CASING DATA			-	Squeeze 🔲 M	isc 🔲	Ami 2205/	Sks Yield	1,40	_ft³/sk Density 142	
	Surface			oduction D Lin	ner 🗇	TAIL: Pump Time	,, O.O 1.0.O.	•	hrs. Type	
ei	Түре					ran tomp time =			Excess	
3120	iAbe	vver@	JIII	Collar		Amt	Ske Vield		_ ft ³ /sk Density	
<u></u>							-		gals/sk Total	
						VYAILIN. Leau	y	515/ SK 1611	gas/sk lotal	0013.
0	Гор		Pattern			Pump Trucks Used	422	_		
Casing Depths:	юр		. bottom			Bulk Equip. <u>66</u>	77 sh 32	73 + 308	1	
					······································	soik Edoib	3			
			***					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		245-2-2-4		0-11-					***************************************	****
						Tank Faviar Manuf			· · · · · · · · · · · · · · · · · · ·	
		1.0	n. :	P.B. 10		Float Equip: Manufa				
CAPACITY FACT									Depth	
Casing:	•			3bl		• •			Depth	
Open Holes:				3bf					8tm	
Drill Pipe:				ßb1		•				
Annulus:				lbl		Special Equip				··········
	-			3b1		Disp. Fluid Type			Bbls. Weight	
Perforations:	From	ft. to		ft. Amt	N	Mud Type			Weight	PPG
201101111/0507	DECEMPATIVE					CEMENTER	Kelly.	State		
COMPANT REP	RESENTATIVE					GEWENTEN	10			
TIME	PRESSU	RES PSI	FLU	JID PUMPED I	DATA			REMARK	* *	
AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE 8bls Min.			HEMAN	.5	
	CASING		1 2010	Title Lenou	OD/S (VIII).		7. 1	`		
	-					ngge	ar-ap			
					 	25.sk	N @ 12.	2110		
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	<u> </u>	<u> </u>			<u> </u>					
FINIAL MINE DE-	ne.	DCI.	D11840 D110	2 TO		.PSI BLEEDBAG	ск	8BL	.s. Thank you	
FINAL DISP. PRE	oo:	PSI	BUMP PLUC	3 IV		PLLCDDM				



Berexco LLC

35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood

Kenneth #1-35

Reference Elevations:

Tester:

Wichita KS 67206

Job Ticket: 55957 DST#: 1

3326.00 ft (KB)

3313.00 ft (CF)

ATTN: Peter Vollmer Test Start: 2014.01.27 @ 17:10:00

GENERAL INFORMATION:

Formation: Oread

Deviated: No Whipstock: Test Type: Conventional Bottom Hole (Initial) ft (KB)

Time Tool Opened: 21:00:50 Time Test Ended: 04:23:00

Unit No: Ryan Nichols

4128.00 ft (KB) To 4180.00 ft (KB) (TVD) Interval: Total Depth: 4180.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good KB to GR/CF: 13.00 ft Hole Diameter:

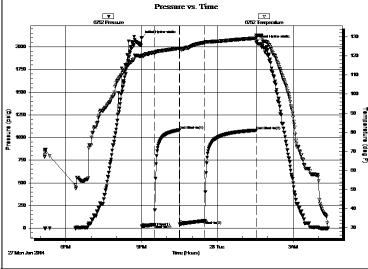
Serial #: 6752 Inside

Press@RunDepth: 4129.00 ft (KB) 82.22 psig @ Capacity: 8000.00 psig

Start Date: 2014.01.27 End Date: 2014.01.28 Last Calib.: 2014.01.28 Start Time: 17:10:01 End Time: 2014.01.27 @ 21:00:40 04:23:00 Time On Btm: Time Off Btm: 2014.01.28 @ 01:32:39

TEST COMMENT: 30 IF - Suface blow built to 2"

60 ISI - No return 60 FF - No blow 120 FSI - No return



		Г	\L330I\	L SOMMAN
Ī	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2101.47	120.37	Initial Hydro-static
	1	18.93	119.89	Open To Flow (1)
	31	40.32	121.46	Shut-In(1)
	90	1083.39	124.09	End Shut-In(1)
	90	43.76	123.87	Open To Flow (2)
	150	82.22	127.04	Shut-In(2)
•	272	1079.77	129.34	End Shut-In(2)
9	272	2049.58	130.00	Final Hydro-static

PRESSURE SUMMARY

Recovery

Description	Volume (bbl)
Mud - 100%M	0.47
	·

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

Trilobite Testing, Inc. Ref. No: 55957 Printed: 2014.01.28 @ 07:00:17



FLUID SUMMARY

Berexco LLC

35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Job Ticket: 55957

Serial #:

DST#: 1

ATTN: Peter Vollmer

Test Start: 2014.01.27 @ 17:10:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil A Pl:deg A PlMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Viscosity: 52.00 sec/qt Cushion Volume: bbl

Water Loss: 8.77 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1200.00 ppm Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
95.00	Mud - 100%M	0.467

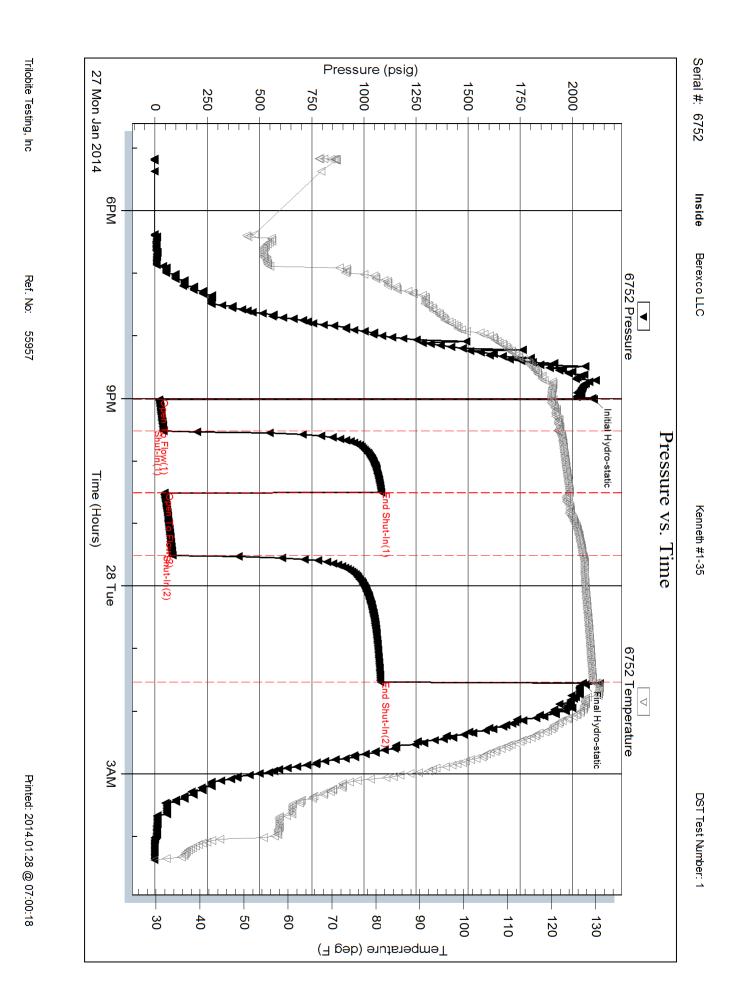
Total Length: 95.00 ft Total Volume: 0.467 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 55957 Printed: 2014.01.28 @ 07:00:17





Berexco LLC

35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Tester:

Job Ticket: 55958 **DST#: 2**

ATTN: Peter Vollmer Test Start: 2014.01.28 @ 21:02:00

GENERAL INFORMATION:

Formation: LKC " A - B"

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 03:10:20 Time Test Ended: 11:08:40

Total Depth:

11:08:40 Unit No: Ryan Nichols

Interval: 4284.00 ft (KB) To 4340.00 ft (KB) (TVD) Reference ⊟evations:

3313.00 ft (CF)

3326.00 ft (KB)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 13.00 ft

Serial #: 6752 Inside

Press@RunDepth: 1116.84 psig @ 4285.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2014.01.28
 End Date:
 2014.01.29
 Last Calib.:
 2014.01.29

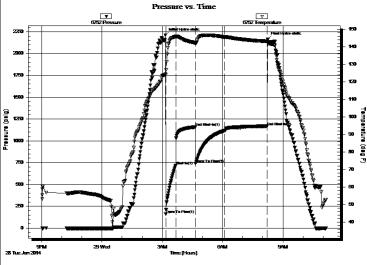
 Start Time:
 21:02:01
 End Time:
 11:08:40
 Time On Btm:
 2014.01.29 @ 03:10:00

 Time Off Btm:
 2014.01.29 @ 08:14:40

TEST COMMENT: 30 IF - BoB @ 1 min

60 ISI - No return 60 FF - BoB @ 1 min 120 FSI - No return

4340.00 ft (KB) (TVD)



Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2208.20	124.65	Initial Hydro-static
1	160.90	124.19	Open To Flow (1)
30	715.71	145.98	Shut-In(1)
89	1158.14	142.30	End Shut-In(1)
90	739.02	142.01	Open To Flow (2)
177	1116.84	145.65	Shut-In(2)
303	1165.99	143.23	End Shut-In(2)
305	2160.79	142.41	Final Hydro-static
			_
	(Min.) 0 1 30 89 90 177 303	(Min.) (psig) 0 2208.20 1 160.90 30 715.71 89 1158.14 90 739.02 177 1116.84 303 1165.99	(Min.) (psig) (deg F) 0 2208.20 124.65 1 160.90 124.19 30 715.71 145.98 89 1158.14 142.30 90 739.02 142.01 177 1116.84 145.65 303 1165.99 143.23

PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
1935.00	MCW - 2%M - 98%W	22.31
186.00	MCW - 20%M - 80%W	2.61
279.00	MCW - 35%M - 65%W	3.91
40.00	OWCM - 5%o - 25%W - 70%M	0.56
* Recovery from mult	inle tests	•

Gas Rat		
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc Ref. No: 55958 Printed: 2014.01.29 @ 13:49:24



FLUID SUMMARY

Berexco LLC 35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Job Ticket: 55958

DST#: 2

ATTN: Peter Vollmer

Test Start: 2014.01.28 @ 21:02:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil API:deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:22000 ppm

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: Viscosity: 40.00 sec/qt Cushion Volume: bbl

Water Loss: 7.99 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1800.00 ppm Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1935.00	MCW - 2%M - 98%W	22.306
186.00	MCW - 20%M - 80%W	2.609
279.00	MCW - 35%M - 65%W	3.914
40.00	OWCM - 5%o - 25%W - 70%M	0.561

Total Length: 2440.00 ft Total Volume: 29.390 bbl

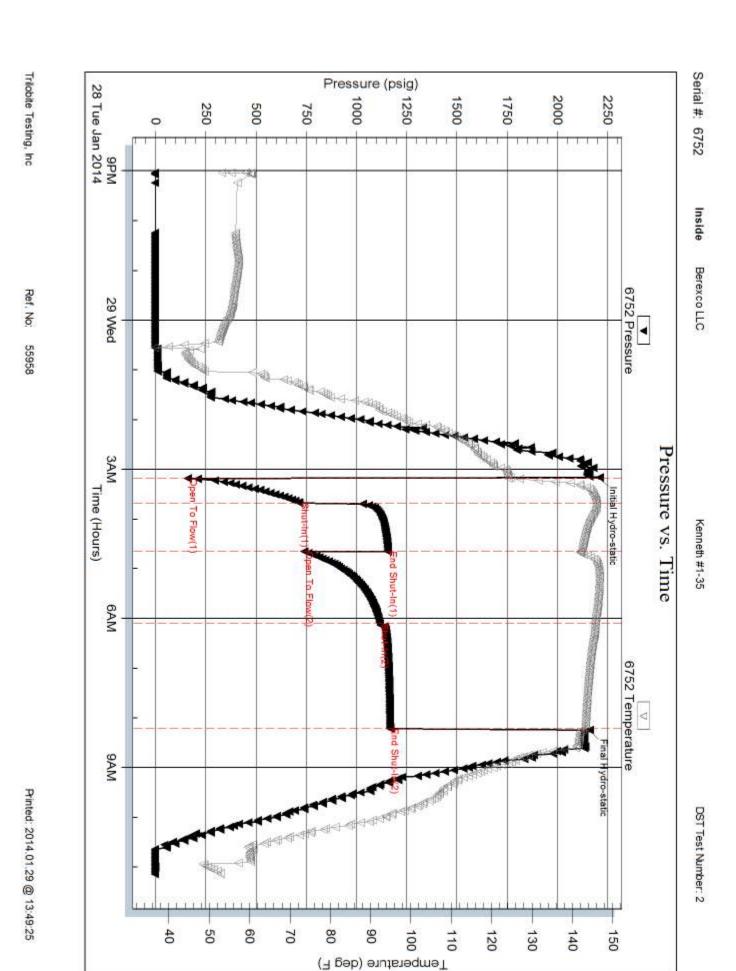
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW = .444 @ 51 DEG F

CHLORIDES = 22,000 PPM

Trilobite Testing, Inc Ref. No: 55958 Printed: 2014.01.29 @ 13:49:25





Berexco LLC

35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Reference Elevations:

Tester:

Job Ticket: 55959

DST#: 3

3326.00 ft (KB)

3313.00 ft (CF)

ATTN: Peter Vollmer Test Start: 2014.01.29 @ 21:32:00

GENERAL INFORMATION:

Formation: LKC " C "

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 01:17:50 Time Test Ended: 08:13:40

08:13:40 Unit No: Ryan Nichols

Interval: 4356.00 ft (KB) To 4410.00 ft (KB) (TVD)

Total Depth: 4410.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 13.00 ft

Serial #: 8322 Outside

Press@RunDepth: 38.42 psig @ 4357.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2014.01.29
 End Date:
 2014.01.30
 Last Calib.:
 2014.01.30

 Start Time:
 21:32:01
 End Time:
 08:13:40
 Time On Btm:
 2014.01.30 @ 06:17:40

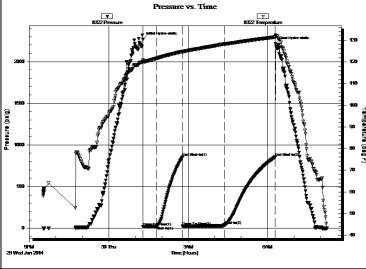
 Time Off Btm:
 2014.01.30 @ 06:17:40

TEST COMMENT: 30 IF - 1/2" blow built to 2"

60 ISI - No return

90 FF - Surface blow built to 1"

120 FSI - No return



		Г	\L330I\	L SUIVIIVIAITI
	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2265.62	120.92	Initial Hydro-static
	1	19.96	119.92	Open To Flow (1)
	30	22.79	121.62	Shut-In(1)
	90	854.04	124.83	End Shut-In(1)
	90	25.04	124.38	Open To Flow (2)
	184	38.42	128.26	Shut-In(2)
Ć.	300	855.73	131.49	End Shut-In(2)
9	301	2215.12	132.37	Final Hydro-static
		1	1	

PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%m	0.05
* Recovery from mult	iple tests	

Gas Rates			
	Choko (inahaa)	Drossuro (poig)	Coo Boto (Mof/d)

Trilobite Testing, Inc Ref. No: 55959 Printed: 2014.01.30 @ 09:51:28



FLUID SUMMARY

Berexco LLC 35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Serial #:

Job Ticket: 55959

DST#: 3

ATTN: Peter Vollmer

Test Start: 2014.01.29 @ 21:32:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil API:deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Viscosity: 48.00 sec/qt Cushion Volume: bbl

Water Loss: 7.60 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1800.00 ppm Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud 100%m	0.049

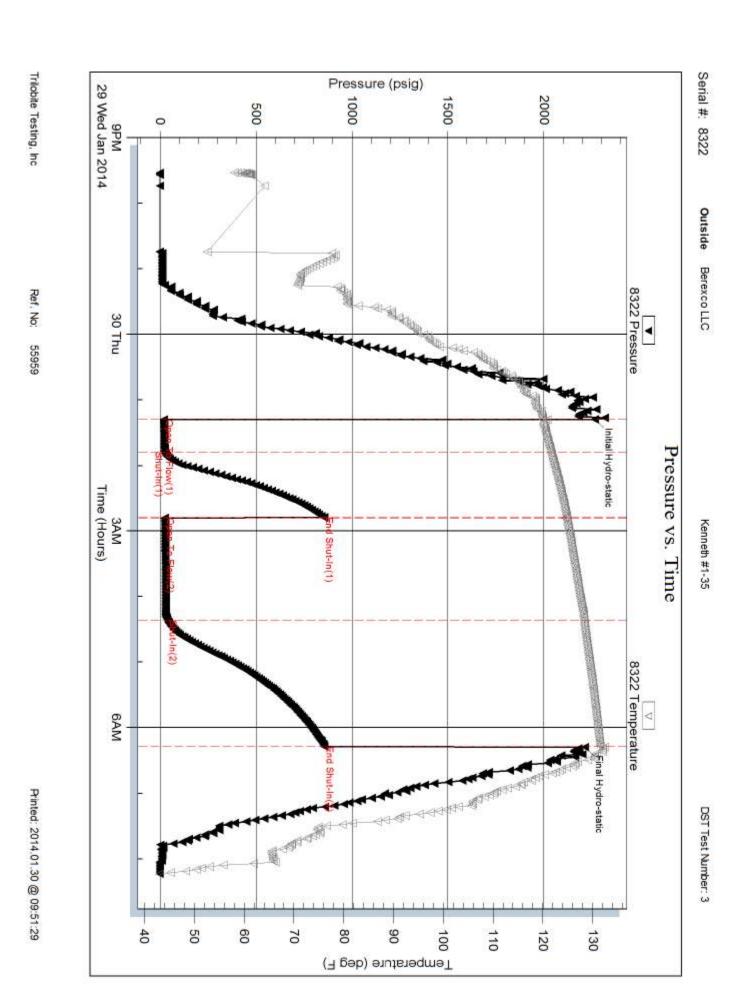
Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 55959 Printed: 2014.01.30 @ 09:51:29





Berexco LLC

35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206

Kenneth #1-35

Job Ticket: 55960

DST#:4

ATTN: Peter Vollmer

Test Start: 2014.01.30 @ 20:39:00

GENERAL INFORMATION:

LKC " D - E" Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:21:50 Time Test Ended: 09:17:19

4396.00 ft (KB) To 4490.00 ft (KB) (TVD)

Total Depth: 4490.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good Hole Diameter:

Test Type: Conventional Bottom Hole (Reset)

Tester:

Unit No: Ryan Nichols

Reference Elevations:

3326.00 ft (KB) 3313.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 6752 Inside

Interval:

Start Date:

Start Time:

Press@RunDepth: 93.07 psig @ 4397.00 ft (KB) 2014.01.30

20:39:01

End Date: 2014.01.31 End Time:

Capacity: Last Calib.: 8000.00 psig

09:17:19

Time On Btm:

2014.01.31 2014.01.31 @ 00:21:40

Time Off Btm:

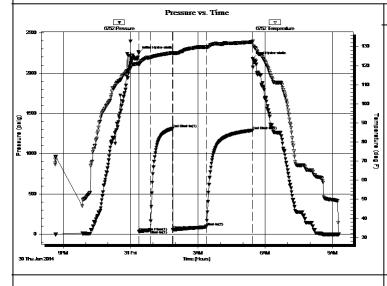
2014.01.31 @ 05:26:30

TEST COMMENT: 30 IF - 1" blow built to 4"

60 ISI - No return

90 FF - Surface blow built to 2"

120 FSI - No return



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2249.02	121.11	Initial Hydro-static
1	32.24	120.42	Open To Flow (1)
31	49.69	124.20	Shut-In(1)
91	1311.57	126.74	End Shut-In(1)
92	53.85	126.33	Open To Flow (2)
181	93.07	129.68	Shut-In(2)
305	1289.93	132.40	End Shut-In(2)
305	2177.57	132.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Mud w/oil spots 100%m	0.49
* Recovery from r	nultiple tests	•

Gas Rates

Choke (inches) Pressure (psig) Gas Rate (Mcf/d)

Ref. No: 55960 Printed: 2014.01.31 @ 11:01:45 Trilobite Testing, Inc



FLUID SUMMARY

Berexco LLC 35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Job Ticket: 55960

DST#: 4

ATTN: Peter Vollmer

Test Start: 2014.01.30 @ 20:39:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil API:deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Mud Weight: 9.00 lb/gal Cushion Length: ft Viscosity: 44.00 sec/qt Cushion Volume: bbl

Water Loss: 7.99 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1600.00 ppm Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	Mud w /oil spots 100%m	0.492

Total Length: 100.00 ft Total Volume: 0.492 bbl

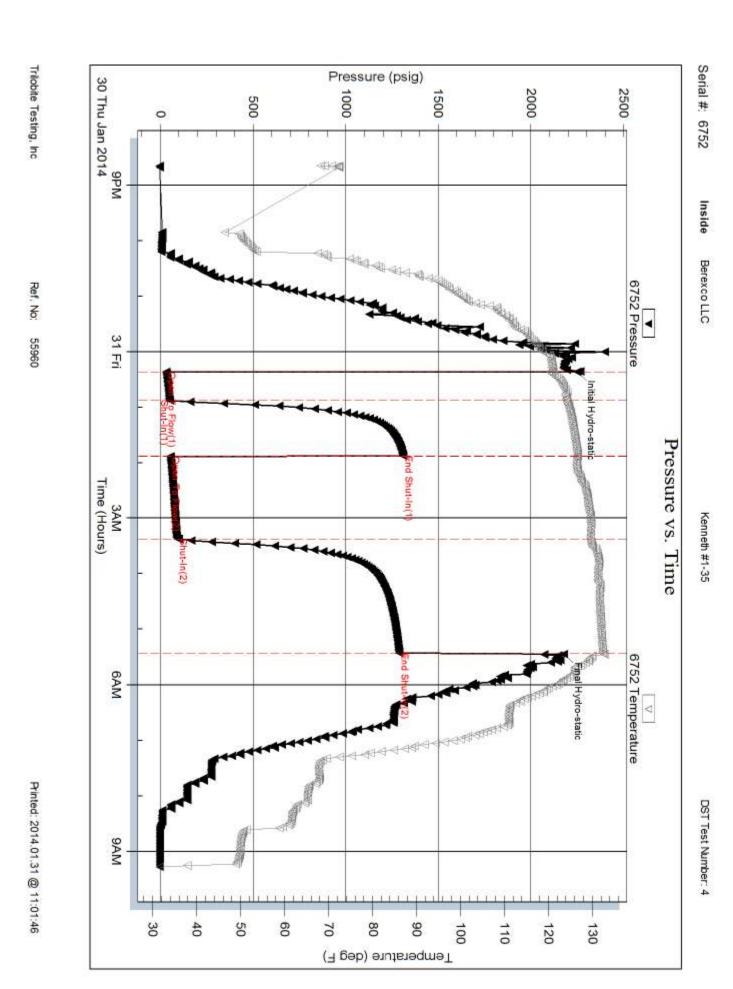
Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #:

Trilobite Testing, Inc Ref. No: 55960 Printed: 2014.01.31 @ 11:01:46





Berexco LLC

35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Job Ticket: 55961

DST#: 5

ATTN: Peter Vollmer

Test Start: 2014.02.02 @ 02:40:00

GENERAL INFORMATION:

Formation: Paw nee

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 08:28:30 Time Test Ended: 15:27:49

Unit No: Ryan Nichols

4625.00 ft (KB) To 4736.00 ft (KB) (TVD)

Reference Elevations: 3326.00 ft (KB)

Total Depth: 4736.00 ft (KB) (TVD)

3313.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

Serial #: 6752

Press@RunDepth:

Interval:

Inside

279.24 psig @ 4626.00 ft (KB)

Capacity:

Last Calib.:

Tester:

8000.00 psig

Start Date: 2014.02.02 Start Time: 02:40:01 End Date: 2014.02.02 End Time: 15:27:49

Time On Btm: 2014.

2014.02.03 2014.02.02 @ 08:28:09

9 11

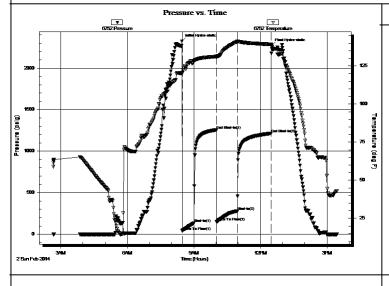
Time Off Btm: 2014.02.02 @ 12:29:40

TEST COMMENT: 30 IF - Surface blow built to BoB @ 7 mins

60 ISI - No return

60 FF - Suface blow started @ 4 mins built to BoB @ 45 mins

90 FSI - No return



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2324.05	120.49	Initial Hydro-static
1	39.79	120.25	Open To Flow (1)
33	133.04	128.02	Shut-In(1)
94	1256.31	131.15	End Shut-In(1)
94	149.29	130.88	Open To Flow (2)
150	279.24	141.04	Shut-In(2)
241	1214.18	139.21	End Shut-In(2)
242	2265.71	137.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
440.00	MCW - 5%M - 95%W	2.16
120.00	WCM - 25%W - 75%M	0.85
* Recovery from multiple tests		

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Trilobite Testing, Inc Ref. No: 55961 Printed: 2014.02.03 @ 14:18:36



FLUID SUMMARY

Berexco LLC 35 - 1S - 36W Rawlins KS

2020 N. Bramblew ood Wichita KS 67206 Kenneth #1-35

Job Ticket: 55961

DST#: 5

ATTN: Peter Vollmer

Test Start: 2014.02.02 @ 02:40:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil API:deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Viscosity: 43.00 sec/qt Cushion Volume: bbl

Water Loss: 7.60 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 1400.00 ppm Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
440.00	MCW - 5%M - 95%W	2.164
120.00	WCM - 25%W - 75%M	0.854

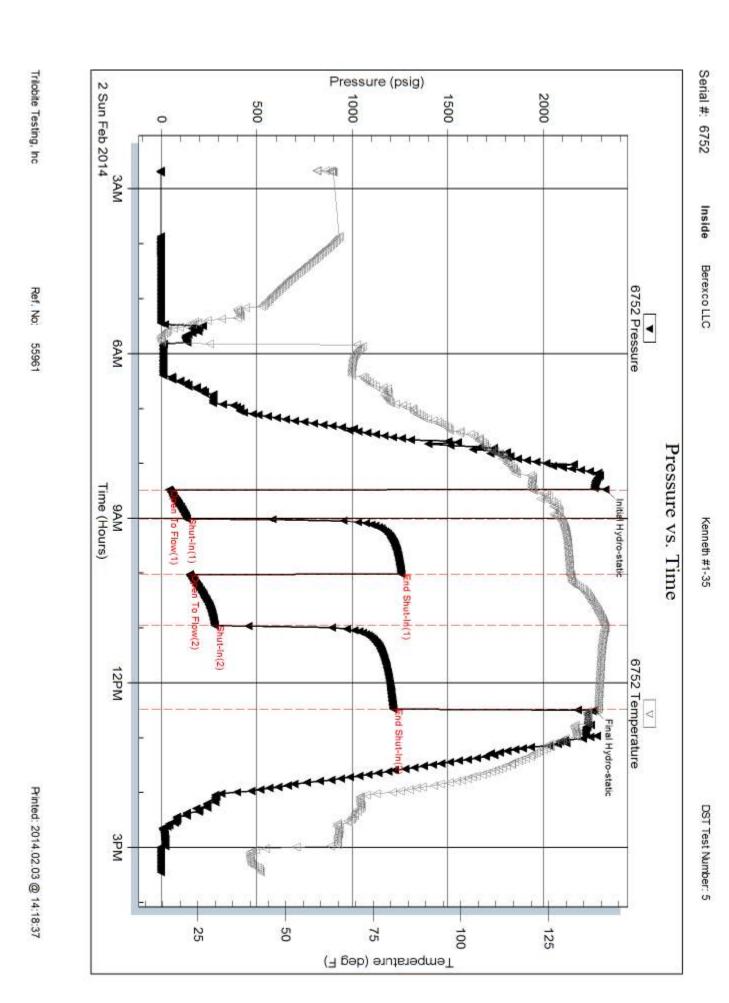
Total Length: 560.00 ft Total Volume: 3.018 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 55961 Printed: 2014.02.03 @ 14:18:37



BEREXCO LLC

KENNETH 1-35

S2 SW SW SEC 35 T1S R36W

RAWLINS COUNTY, KANSAS

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SUMMARY

The Berexco LLC Kenneth 1-35 in Rawlins County, Kansas spud January 23, 2014 and reached a total depth of 4740' on February 1, 2014. The test drilled into the Pennsylvanian Cherokee for wireline logs. Wellsite geological supervision commenced at 3000'. The primary objective was the Pennsylvanian Missourian Lansing-Kansas City carbonate benches, which produce nearby. Secondary zones of interest were the Foraker and Oread Limestones. The Kenneth 1-35 was drilled using seismic and nearby well control.

Evaluation of the primary zones of interest was by drill stem testing after sample analysis. Five DSTs were run.

Foraker, Oread, Lansing-Kansas City, and Pawnee

Samples of the Foraker revealed clean, nonporous limestone that did not warrant testing.

DST 1 in the Oread recovered 800 ft of muddy water. Samples were fossiliferous packstone with poor interparticle porosity, scattered oil stain, and good cuts.

The Lansing A was circulated out for evaluation. The limestone was nonporous with no hydrocarbons evident. The lower sandstone was very fine grained with fair porosity and abundant black dead oil specks and flakes. The decision was made to drill deeper to the Lansing B before testing. Lansing B limestone displayed scattered poor vuggy and interparticle porosity with spotty black oil stain. DST 2 tested the Lansing A lower sandstone and Lansing B. Recovery was 2400 ft of water and 40 ft of oil and water cut mud.

DST 3 in the Lansing C recovered 10 ft of mud with poor flow pressures. The limestone had only trace porosity and trace hydrocarbon shows. Wireline logs showed the Lansing C was tight.

The Lansing D was a thin tight mudstone with very poor sample shows and porosity. The decision was made to drill through the Lansing E limestone and test the D and E zones together. The Lansing E limestone was mudstone to packstone with scattered heavy oil specks and stain. DST 4 in the combined D and E zones recovered 100 ft of mud with oil spots. Wireline logs confirmed lack of porosity in the E.

The Lansing F was nonporous limestone with no sample shows.

Structurally the Kenneth 1-35 was 17 ft low to the nearby Berexco Lillie 1-26 F interval. With the lack of potential production the test was deepened through the Pawnee and into the Cherokee. No shows in traces of poor porosity were observed in the Pawnee. The Cherokee was nonporous. After wireline logs DST 5 tested the Pawnee with anchor pipe run to TD. Recovery was 500 ft of water and mud.

Plugged and Abandoned

Subsequent to wireline logs the Kenneth 1-35 was plugged and abandoned according to orders from the Oil & Gas Conservation Division of the Kansas Corporation Commission.

Peter J. Vollmer Consulting Wellsite Geologist, WPG #3369 February 2014

WELL DATA

OPERATOR: Berexco LLC

2020 North Bramblewood Drive

Wichita, Kansas 67206

WELL NAME: Kenneth 1-35

SURFACE LOCATION: 330' FSL & 660' FWL

S2 SW SW, Sec 35, T1S, R36W

Rawlins County, Kansas

LATITUDE & LONGITUDE: 39.9164827, -101.3330731 (From State, calculated from footages)

BOTTOM HOLE LOCATION: Vertical hole

ELEVATIONS: 3313' GL 3326' KB

API NUMBER: 15-153-20979

BASIN: Mid-Continental Arch

FIELD: Wildcat

HOLE SIZE: 12 1/4" to 310'; 7 7/8" to 4740'

CASING: 8 5/8" J-55 24# STC set to 310' KB

SPUD DATE: January 23, 2014

TD DATE: February 1, 2014

TOTAL DEPTH: 4740' Rig TD 4736' Log TD

LAST FORMATION: Pennsylvanian Cherokee

WELL STATUS: Plugged and abandoned

OPERATOR Dana Wreath - Vice President

REPRESENTATIVE:

WELLSITE GEOLOGIST: Peter J. Vollmer

FORMATION TOPS

Formation KB	Sample Top	Log Top	Log TVD	Log Datum 3326
Pierre Sh	Cased	Cased	N/A	N/A
Niobrara Fm	N/A	1206	1206	+2120
Fort Hays Ls Mbr	N/A	1753	1753	+1573
Carlile Sh	N/A	1807	1807	+1519
Dakota	N/A	2050	2050	+1276
Cheyenne	N/A	2718	2718	+608
Blaine	N/A	3004	3004	+322
Stone Corral Anhydrite	3218	3216	3216	+110
Base Anhydrite	3251	3248	3248	+78
Neva	3708	3714	3714	-388
Foraker	3816	3826	3826	-500
Wabaunsee	3946	3946	3946	-620
Topeka	4046	4040	4040	-714
Deer Creek Sand	4090	4084	4084	-758
Oread	4164	4172	4172	-846
Lansing-Kansas City				
"A"	4270	4266	4266	-940
"B"	4325	4323	4323	-997
"C"	4387	4382	4382	-1056
"D"	4431	4424	4424	-1098
"E"	4473	4466	4466	-1140
"F"	4510	4504	4504	-1178
Pawnee	4657	4654	4654	-1328
Cherokee	4688	4677	4677	-1351
TD Driller	4740			
TD Logger		4736	4736	-1410

The following descriptions are interpretive. Rig crew members collected unlagged samples from 3500' to 4625' TD. Depths are rig depths except where noted as wireline.

3500' - 3550'	SHALE: red to gray, firm, blocky, very silty, occasional sandy in part, non calcareous, trace Limestone stringers.	
3550' - 3600'	SHALE: reddish brown, soft to firm, sub blocky to platy, non to slightly calcareous, occasionally silty.	
3600'- 3650'	SHALE: reddish brown, soft to firm, sub blocky to platy, non to slightly calcareous, occasional silty, trace limestone.	
3650' - 3708'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty.	
NEVA	SAMPLE TOP: 3708' LOG TOP: 3714' SUBSEA: -388'	
3708' - 3715'	LIMESTONE: white to light gray, firm to hard, chalky, fossil fragment, tight, no shows.	
3715' - 3750'	SHALE: reddish brown, soft to firm, sub blocky to sub fissile, non calcareous, occasionally silty.	
3750' - 3784'	SHALE: reddish brown to brown, soft to firm, sub blocky, non calcareous, occasional silty, with interbedded LIMESTONE: white to light gray, firm to hard, cryptocrystalline, fossil fragment, tight, no shows.	
3784' - 3816'	SHALE: reddish brown to reddish orange, soft to firm, sub blocky to sub fissile, non calcareous, occasional silty.	
FORAKER	SAMPLE TOP: 3816' LOG TOP: 3826' SUBSEA: -500'	
3816' - 3830'	LIMESTONE: white to light gray, firm to hard, cryptocrystalline, chalky, fossil fragment, clean, tight, no shows.	
3830' - 3848'	SHALE: gray, firm, blocky, non to slightly calcareous, fossil fragments.	
3848' - 3878'	LIMESTONE: light tan to light gray to white to cream, firm to soft, cryptocrystalline, slightly chalky, sandy/silty, rare fossil fragments, argillaceous in part, occasional light gray Shale, tight, no shows.	

3878' - 3896'	SHALE: reddish brown to gray green, soft to firm, sub blocky, non calcareous, occasionally silty.	
3896' - 3905'	LIMESTONE: light tan to light gray to white to cream, firm to soft, cryptocrystalline, slightly chalky, occasional sandy, rare fossil fragments, argillaceous in part, occasional light orange Shale stringers, trace light orange chert, tight, no shows.	
3905' - 3926'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty.	
3926' - 3932'	LIMESTONE: cream to gray, hard, slightly silica, embedded dark gray rounded fine grained sand, tight, no shows.	
3932' - 3946'	SHALE: dark gray to black, firm, fissile to blocky, non calcareous, carbonaceous in part.	
WABAUNSEE	SAMPLE TOP: 3946' LOG TOP: 3946' SUBSEA: -620'	
3946' - 3980'	SHALE: red brown, soft to firm, blocky, non to slightly calcareous, with interbedded LIMESTONE: white to cream, occasional light reddish brown mottling, hard to firm, cryptocrystalline, fossil fragments, tight, no shows.	
3980' - 4018'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional LIMESTONE stringers.	
4018' - 4030'	LIMESTONE: white to very light gray, firm to hard, cryptocrystalline, chalky, fossil fragment, clean, tight, no shows.	
4030' - 4046'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous.	
ТОРЕКА	SAMPLE TOP: 4046' LOG TOP: 4040' SUBSEA: -714'	
4046' - 4060'	LIMESTONE: light gray to white, hard to firm, cryptocrystalline, fossil fragments, sparry calcareous, algal stain, (dead oil), micro fractures with dead oil, tight, no shows.	
4060' - 4072'	LIMESTONE: light gray to white, hard to firm, packstone, fossil fragments, clear calcareous fill in vugs, opaque chert, black live oil stain, tight, bright yellowish white fluorescence, streaming bright yellowish white cuts, fair shows.	
4072' - 4084'	LIMESTONE: white, hard to firm, cryptocrystalline, fossil fragments, chalky, algal stain, (dead oil), no shows.	

4084' - 4090' SHALE: gray, firm, platy, non to slightly calcareous, dull, plant remains.

DEER CREEK SAND	SAMPLE TOP: 4090' LOG TOP: 4084' SUBSEA: -758'
4090' - 4106'	SANDSTONE: light gray to white, friable to soft, very fine grained, well rounded, well sorted, calcareous, clay filled, plant remains, black dead oil specks, no visible porosity, no show.
4106' - 4118'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty.
4118' - 4130'	LIMESTONE: white to cream, with reddish brown mottlings and partings, hard to firm, cryptocrystalline, chalky, trace black dead oil, interbedded SHALE, red, firm, calcareous.
4130' - 4164'	SHALE: reddish brown, maroon, soft to firm, sub blocky, non calcareous, moderately to very silty in part, white LIMESTONE partings.
OREAD	SAMPLE TOP: 4164' LOG TOP: 4172' SUBSEA: -846'
4164' - 4174'	LIMESTONE: white to cream, hard, microcrystalline, patchy black oil stain, tight, dull yellowish white fluorescence, instant blooming yellowish white cuts, with slow streaming bright yellowish white cuts, fair show.
4174' - 4181'	LIMESTONE: cream to white, firm to hard, wackestone to packstone, trace oolites, chalky in part, fossil fragments, tight to trace interparticle porosity, scattered black to dark brown live oil stain, bright yellowish white fluorescence, instant blooming yellowish white cuts, fair show.
4181' - 4195'	LIMESTONE: white to cream, very hard, cryptocrystalline, slightly chalky, fossil fragment, very thin black Shale partings, clean, tight, no shows.
4195' - 4228'	SHALE: gray to very dark gray,, firm, platy to fissile, n to slightly calcareous, occasional very carbonaceous and silty, interbedded LIMESTONE.
4228' - 4236'	SHALE: reddish brown to reddish orange, soft to firm, sub blocky, non calcareous.
4236' - 4244'	SHALE: grayish black to dark gray, firm, sub fissile, carbonaceous, non to very slightly calcareous.
4244' - 4252'	LIMESTONE: white to light brown to cream, very hard, cryptocrystalline, rare fossil fragment, clean, tight, no shows.
4252' - 4270'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous.

LANSING- KANSAS CITY "A"	SAMPLE TOP: 4270'	LOG TOP: 4266'	SUBSEA: -940'
4270' - 4292'	LIMESTONE: very light gray to cream to white, hard, cryptocrystalline, occasional very thin micro fracture faces with dark brown dead oil, no visible matrix porosity, mineral fluorescence, no cut.		
4292' - 4300'	SANDSTONE: very light gray to white, very friable, very fine grained, well rounded, well sorted, very weak calcareous cement, abundant black dead oil specs, fair intergranular porosity, no show.		
4300' - 4325'	SHALE: reddish brown, so to light gray LIMESTONE	•	a calcareous, interbedded white
LANSING- KANSAS CITY "B"	SAMPLE TOP: 4325'	LOG TOP: 4323'	SUBSEA: -997'
4325'- 4334'	intergranular and pin point	t vuggy porosity, spotty liv	ossil(Crinoid, Fusulinids), trace e heavy black oil, bright hite cuts with slow streaming
4334' - 4350'	SHALE: dark gray, firm, pLIMESTONE.	olaty, slightly carbonaceous	s in part, interbedded light gray
4350' - 4357'	LIMESTONE: light tan, ha	ard, cryptocrystalline, dens	se, tight, no shows.
4357' - 4387'	SHALE: reddish brown to dull, fossil fragments.	gray to maroon, firm, sub	blocky, slightly calcareous,
LANSING- KANSAS CITY "C"	SAMPLE TOP: 4387'	LOG TOP: 4382'	SUBSEA: -1056'
4387' - 4399'	LIMESTONE: white to light gray, hard to firm, packstone to mudstone, chalky, very fossil, poor intergranular porosity and trace pin-point vuggy porosity, occasional spotty black heavy oil, dull yellowish white fluorescence, bright streaming and blooming yellowish white cuts, poor show.		
4399' - 4423'	SHALE: gray to dark gray, firm, sub blocky, slightly carbonaceous in part, interbedded light gray LIMESTONE.		
4423' - 4431'	SHALE: reddish brown to	gray, firm, sub blocky, sli	ghtly calcareous, dull.

LANSING- KANSAS CITY "D"	SAMPLE TOP: 4431' LOG TOP: 4424' SUBSEA: -1098'		
4431' - 4441'	LIMESTONE: light gray to white to grayish brown, hard, mudstone grainstone, occasional abundant oolites heavily included by sparry calcite, fossil fragments, no stain, no visible porosity, no shows.		
4441' - 4448'	SHALE: grayish black to dark gray, firm, sub fissile, slightly carbonaceous in part, non calcareous.		
4448' - 4453'	LIMESTONE: light brown to tan, firm, argillaceous, fossil fragments, tight.		
4453' - 4473'	SHALE: gray to dark gray, firm, platy, non to slightly calcareous, interbedded light gray LIMESTONE.		
LANSING- KANSAS CITY "E"	SAMPLE TOP: 4473' LOG TOP: 4466' SUBSEA: -1140'		
4473' - 4488'	LIMESTONE: white to very light brown, firm, grainstone to wackestone, scattered fossil fragment, rare oolites, slightly chalky, scattered dark brown to black oil stain, free oil in vugs, trace intergranular and vuggy porosity, bright yellowish white fluorescence, instant blooming bright yellowish white cuts, fast streaming cuts, good show.		
4488' - 4494'	SHALE: gray to dark gray, firm, platy, non to slightly calcareous, occasional fossil (Brachiopod), dull.		
4494' - 4510'	SHALE: reddish brown, soft to firm, sub blocky, non to slightly calcareous, silty.		
LANSING- KANSAS CITY "F"	SAMPLE TOP: 4510' LOG TOP: 4504' SUBSEA: -1178'		
4510' - 4520'	LIMESTONE: cream to white, firm to hard, mudstone to very fine crystalline,, trace fossil fragment, trace black asphalt specs(dead oil), no visible porosity, faint yellow grain fluorescence, weak residual green cuts, very poor show.		
4520' - 4525'	SHALE: gray to dark gray, firm, fissile to platy, n to slightly calcareous, dull, slightly carbonaceous in part.		
4525' - 4532'	LIMESTONE: very light gray to white, hard, cryptocrystalline, clean, chalky, tight, no shows.		

4532' - 4563'	SHALE: light gray to reddish brown, mottled in part, firm, sub fissile to sub blocky,		
4332 - 4303	non calcareous, interbedded white to light gray LIMESTONE.		
4563' - 4584'	SHALE: maroon to reddish brown, soft to firm, sub blocky to sub fissile, non calcareous.		
4584' - 4592'	LIMESTONE: cream to white, firm to hard, mudstone, chalky, clean, tight, no shows.		
4592' - 4598'	SANDSTONE: white to light gray, very friable, very fine grained, well rounded, well sorted, weak calcareous cement, clean, poor porosity, no shows.		
4598' - 4622'	SHALE: gray to reddish brown to maroon to brown, mottled in part, firm, blocky to sub fissile, silty in part, non to moderately calcareous, thin white Limestone stringers.		
4622' - 4632'	LIMESTONE: white, hard, mudstone, chalky, very fine rounded black Phosphatic pellets, trace black algal stain (dead oil), tight, no shows.		
4632' - 4657'	SHALE: gray to dark gray to black, firm, fissile to platy, non to slightly calcareous, dull, slightly carbonaceous in part.		
PAWNEE	SAMPLE TOP: 4657' LOG TOP: 4654' SUBSEA: -1328'		
4657' - 4670'	LIMESTONE: white to very light gray, hard, mudstone, rare fossil fragment, clean, tight to trace intercrystalline porosity, no shows.		
4670' - 4688'	LIMESTONE: white to very light gray, hard, mudstone, occasional fossil, occasional sandy, occasional black rounded Phosphatic concretions, tight, no shows.		
CHEROKEE	SAMPLE TOP: 4688' LOG TOP: 4677' SUBSEA: -1351'		
4688' - 4694'	SHALE: black to dark gray to gray, firm, blocky to fissile, occasional carbonaceous, trace pyrite, plant remains.		
4694' - 4716'	LIMESTONE: white to light gray, firm to hard, mudstone, occasional sandy in part, argillaceous, tight, no shows.		
4716' - 4740' TD	LIMESTONE: light gray to gray, firm to hard, mudstone, argillaceous, sandy in part, occasional dark gray moderately to non carbonaceous SHALE partings, tight, no shows.		

SERVICES

CONTRACTOR: Beredco Drilling Inc., Rig 2

Toolpusher: Milo Salinas

DRILLING FLUIDS: Morgan Mud, Inc. McCook, ND Mud Type: Freshwater Chemical 308-340-5946

Engineer: Dave Lines, Cade Lines

MUD LOGGING: None

WELLSITE GEOLOGY: T. M. McCoy & Co., Inc. Wilson, WY

Peter J. Vollmer 307-733-4332

DRILL STEM TESTING: Trilobite Testing, Inc. Hays, KS

Ryan Nichols

DST 1: 4126' - 4180' Oread

DST 2: 4284' - 4340' LKC "A" & "B" DST 3: 4356' - 4410' LKC "C" DST 4: 4396' - 4490' LKC "D & E"

DST 5: 4625' - 4736' TD (wireline depth) Pawnee

DIRECTIONAL DRILLING: None

WIRELINE LOGS: Pioneer Wireline Services Hays, KS

RAG: Surface casing - TD 785-625-3858

Engineer: Josh Ruiz