KOLAR Document ID: 1367304

Confiden	tiality Requested:
Yes	No

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

Form ACO-1 January 2018 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.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
Gas DH EOR	Elevation: Ground: Kelly Bushing:
□ OG □ GSW	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used? 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 EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #: SWD Permit #:	Location of fluid dianocal if hould affaite.
EOR Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion	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 Drill Stem Tests Received
Geologist Report / Mud Logs Received
UIC Distribution
ALT I II III Approved by: Date:

KOLAR Document ID: 1367304

Operator Name:	Lease Name: Well #:
Sec TwpS. R East 🗌 West	County:

Page Two

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)	Y	es 🗌 No			og Formatio	n (Top), Depth	and Datum	Sample
Samples Sent to Geolog	*		és 🗌 No	Ν	lame	e		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:			ies No ies No ies No						
		Repo	CASING I] Ne	w Used rmediate, productio	on, etc.		
Purpose of String	Size Hole Drilled		ze Casing tt (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	Туре	e of Cement	# Sacks Used		Type and Percent Additives			
Protect Casing Plug Back TD Plug Off Zone									
 Did you perform a hydra Does the volume of the is Was the hydraulic fractu Date of first Production/Inj 	total base fluid of the h ring treatment informa	nydraulic fra tion submit	acturing treatment	al disclosure regis	-	Yes Yes Yes Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Injection:			Flowing	Pumping		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Oil Bbls. Per 24 Hours		Bbls.	Gas	Mcf	Wate	er Bb	ls.	Gas-Oil Ratio	Gravity
DISPOSITION	I OF GAS:		M	ETHOD OF COM	IPLE	TION:			ON INTERVAL:
Vented Sold Used on Lease O (If vented, Submit ACO-18.)		Open Hole Perf.		Ually Comp. Commingled (Submit ACO-5) (Submit ACO-4)		Тор	Bottom		
Shots Per Perforation Perforation Bridge Plug Foot Top Bottom Type			Bridge Plug Set At		Acid,		ementing Squeeze		
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	BUTTON 1
Doc ID	1367304

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	757	60-40 POZ	2%gel,4% CC

Office (620) 588-4250

Mai Oil Operations Button #1 N/2-NE-SE-NE Section 13-19s-13w Barton County, Kansas

Page 1

Dry and Abandoned

.Contractor:	Southwind Drilling Co. (rig #3)
Commenced:	June 30, 2017
Completed:	July 6, 2017
Elevation:	1892' K.B., 1890' D.F., 1884' G.L.
Casing program:	Surface; 8 5/8" @ 757' Production, 5 ½" @ none
Sample:	Samples saved and examined 3000' to the Rotary Total Depth.
Drilling time:	One (1) foot drilling time recorded and kept 3000' to the Rotary Total Depth.
Measurements:	All depths measured from the Kelly Bushing.
Drill Stem Tests:	There were two (2) Drill Stem Tests ran by Trilobite Testing Co.
Electric Log:	By Eli Wireline Services, Dual Induction, Compensated Density/Neutron and Micro Log.

Formation	Log Depth	Sub-Sea Datum
Anhydrite	751	+1141
Base Anhydrite	777	+1115
Heebner	3082	-1190
Toronto	3099	-1207
Douglas	3113	-1221
Brown Lime	3190	-1298
Lansing	3203	-1311
Base Kansas City	3441	-1549
Conglomerate	3452	-1560
Arbuckle	3510	-1618
Rotary Total Depth	3555	-1663
Log Total Depth	3554	-1662

(All tops and zones corrected to Electric Log Measurement)

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

Res. Claflin (620) 587-3444

Mai Oil Operations Button #1 N/2-NE-SE-NE Section 13-19s-13w Barton County, Kansas

Page 2

TOPEKA SECTION

3030-3036 Limestone, gray, tan, fossiliferous in part, sub-oomoldic, chalky, trace poor brown spotty stain, no free oil and no odor in fresh samples.

TORONTO SECTION

3099-3110' Limestone, gray, tan, fine and medium crystalline, chalky in part, no shows.

LANSING SECTION

3203-3208'		an, fossiliferous, chalky in part, poor visible porosity; golden no free oil and no odor in fresh samples
3228-3232'		white, tan, fossiliferous, chalky, poor porosity, poor stain, of free oil and no odor in fresh samples.
3247-3252'		gray, fossiliferous, scattered vuggy type porosity, gray and no free oil and questionable odor in samples, broken.
3268-3272'		gray, oolitic, poor to fair porosity, golden brown stain; show of aint odor in fresh samples.
	Drill Stem T	est #1 3196-3276
	Times:	30-30-45-60
	Blow:	Strong
	Recovery:	1736' gas in pipe 124' oil and gas cut mud (20% gas; 15% oil; 65% mud)
	Pressures:	ISIP 355 psi FSIP 797 psi IFP 18-39 psi FFP 46-61 psi HSH 1564-1517 psi
3290-3300'	Limestone, t	an, oomoldic, fair oomoldic porosity, (barren)
3300-3310'	Limestone, a	as above, good oomoldic porosity, no shows.
3336-3342'	,	tan, sub-oomoldic, poor to fair porosity, poor brown stain, of free oil and questionable odor in fresh samples.
3352-3355'		white, oolitic, chalky; poor porosity, brown spotty stain,, no no odor in fresh samples.
3367-3371'		as above, poorly developed porosity, poor spotty brown stain, free oil and no odor in fresh samples.

Mai Oil Operations Button #1 N/2-NE-SE-NE Section 13-19s-13w Barton County, Kansas

Page 3

3374-3380' Limestone, white, gray, fossiliferous, chalky, no show.

3396-3400' Limestone, white, fine to medium crystalline, fossiliferous, fair brown stain and saturation, show of free oil and faint odor in fresh samples.

Drill Stem Test #2				3321-3410	
Times:	30-30	-45-60			
Blow:	Stron	Strong			
Recovery:		gas in pipe oil; 80% mud	4))		
Pressures:	ISIP FSIP IFP FFP HSH	367 837 17-30 31-42 1641-1606	psi psi psi psi psi		

CONGLOMERATE SECTION

	3452-3464'	Shale, maroon, blocky, plus orange, red opaque chert; plus white oolitic chert.		
	3464-3480'	Chert and shale as above.		
	3480-3500'	Chert; as above, plus white, oolitic, chert; and maroon blocky to soft shale.		
	3500-3513'	Chert and shale as above.		
ARBUCKLE SECTION				

3510-3520'	Dolomite, tan,	finely cr	ystalline,	sucrosic,	scattered	porosity, no shows.

- 3520-3530' Dolomite, as above, poor visible porosity, no shows.
- 3530-3540' Dolomite, tan, sucrosic, poorly developed porosity, trace white to clear to translucent chert and no shows.
- 3540-3555' Dolomite, white and gray, finely crystalline, sucrosic in part, poor porosity, plus trace white chert; no shows.

Rotary Total Depth	3555
Log Total Depth	3554

Mai Oil Operations Button #1 N/2-NE-SE-NE Section 13-19s-13w Barton County, Kansas

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Recommendations:

The Button #1 was plugged and abandoned at the Rotary Total Depth 3555

Respectfully yours,

2 C, James C. Musgrove Petroleum Geologist



RILOBITE	Mai Oil Operations Incorporated	13-19S-13W Barton,KS						
ESTING , INC.			Butto		- Durton,			
	Dallas TX 75225+5520				DST#:1			
	ATTN: Jim Musgrove		Test S	start: 20	017.07.04 @	08:32:00		
GENERAL INFORMATION:								
Formation:LKCA-FDeviated:NoWhipstock:Time Tool Opened:10:04:30Time Test Ended:14:06:30	ft (KB)		Test T Tester Unit N	r: 1	Conventiona Ken Sw inne 72	al Bottom Hol Y	e (Initial)	
Interval:3196.00 ft (KB) To32Total Depth:3276.00 ft (KB) (THole Diameter:7.88 inchesHole			Refere		evations:	1892.00 1884.00 8.00	ft (CF)	
Serial #: 8960 Outside Press@RunDepth: 797.64 psig Start Date: 2017.07.04 Start Time: 08:32:05	@ 3198.00 ft (KB) End Date: End Time:	2017.07.04 14:06:29	Capacity: Last Calib.: Time On Bti Time Off Bt	m: :	2017.07.04 2017.07.04	-	psig	
			minutes					
Pressure vs. 7	Ennie #500 Temponium				RE SUMM			
The MADE THE THE PARTY STATES		Time (Min.) 0 1 31 60 61 105 166 167	(psig) (1563.36 18.22 39.88 356.30 46.18 61.95 797.64	107.16 108.12	Open To F Shut-In(1)	o-static low (1) n(1) low (2) n(2)		
Recovery			II_	Ga	s Rates			
Length (ft) Description	Volume (bbl)			Choke (i	nches) Pressu	re (psig) Ga	s Rate (Mcf/c	
124.00 GOCM Oil 15%Gas20% 0.00 1736' GIP	Mud 65% 1.74 0.00							

	OBITE		LLSTE	MTEST	REPO	RI	TOOL DIAGRA
		Mai Oil	Operations Inc	orporated		13-19S-13W Barton	,KS
	ESTING , INC	8411 P	eston Road S	Suite 800		Button #1	
		Dallas	X 75225+552	0		Job Ticket: 64799	DST#:1
		ATTN	Jim Musgrove	•		Test Start: 2017.07.04 @	08:32:00
Hi) all.			oin wasgrow			1031 Olan. 2017.07.04 @	
ool Information							
Drill Pipe: Len	gth: 3205.00 ft	Diameter:	3.80 inc	hes Volume:	44.96 bb	I Tool Weight:	2000.00 lb
leavy Wt. Pipe: Len	+	Diameter:		hes Volume:	0.00 bb	0	
Drill Collar: Len	gth: 0.00 ft	Diameter:	_	hes Volume:	0.00 bb	-	
Drill Pipe Above KB:	29.00 ft			Total Volume:	44.96 bb	I Tool Chased String Weight: Initial	0.00 ft 37000.00 lb
Depth to Top Packer:	3196.00 ft					Final	37000.00 lb
Depth to Bottom Packe							07000.0010
nterval between Pack							
ool Length: Jumber of Packers:	99.70 ft 2	Diameter:	6.75 inc	hos			
ool Comments:	2	Diameter.	0.75 mc	illes			
oor comments.							
ool Description	Le	enath (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool		5.00			3181.00		
hydraulic tool		5.00			3186.00		
op Packer		5.00			3191.00		
Packer		5.00			3196.00	20.00	Bottom Of Top Packe
Recorder		1.00	8354	Inside	3197.00		
Recorder		1.00	8960	Outside	3198.00		
nchor		10.00			3208.00		
change Over Sub		1.00			3209.00		
Drill Pipe		62.70			3271.70		
hange Over Sub		1.00			3272.70		
Bullnose		3.00			3275.70	79.70	Anchor Too
Total	Tool Length:	99.70					
	^o						
Trilobite Testina. Inc		R	ef. No: 64799			Printed: 2017.07.06	6 @ 13:59:51
Trilobite Testing, Inc	,	R	əf. No: 64799			Printed: 2017.07.06	s @ 13:59:51
Trilobite Testing, Inc	2	R	ef. No: 64799			Printed: 2017.07.06	6 @ 13:59:51

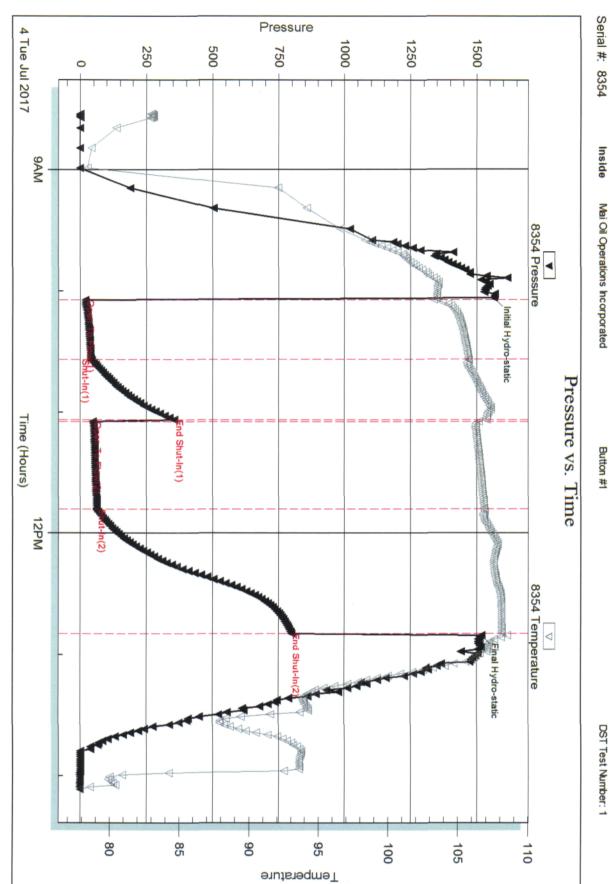
RILOBITE DRILL STEM TEST REPORT FLU					
	Mai Oil Operations Incorporated	13-19S-13W Barton,KS			
ESTING , INC	8411 Preston Road Suite 800 Dallas TX 75225+5520 ATTN: Jim Musgrove	Button #1 Job Ticket: 64799 DS Test Start: 2017.07.04 @ 08:32:	T#: 1 00		
Mud and Cushion Information					
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 68.00 sec/qt Water Loss: 8.78 in ³ Resistivity: ohm.m Salinity: 3500.00 ppm Filter Cake: 2.00 inches	Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure:	Oil API: ft Water Salinity: bbl psig	deg API ppm		
Recovery Information	Bassing, Table				
Len		Volume			
f	124.00 GOCM Oil 15%Gas20%Mud 65%	1.739			
	0.00 1736' GIP	0.000			
Total Length:	124.00 ft Total Volume: 1.739 bbl				
Num Fluid San Laboratory Na Recovery Con	me: Laboratory Location:	Serial #:			

Ref. No: 64799

Printed: 2017.07.06 @ 13:59:51

Ref. No: 64799

Printed: 2017.07.06 @ 13:59:51



DST Test Number: 1

RILOBITE	DRILL STEM TES	TREP	ORT				
	Mai Oil Operations Incorporated		13-	19S-13V	V Bart	on,KS	
ESTING , INC	8411 Preston Road Suite 800 Dallas TX 75225+5520			tton #1 Ticket: 64	1800	DST	#: 2
	ATTN: Jim Musgrove					05 @ 03:31:00	
GENERAL INFORMATION:							
Formation:LKCH-KDeviated:NoWhipstock:Time Tool Opened:04:43:30Time Test Ended:08:49:00	ft (KB)		Tes Tes Unit	ter: ł	Conven Ken Sw 72	tional Bottom inney	Hole (Initial)
Interval:3321.00 ft (KB) To3Total Depth:3410.00 ft (KB) (THole Diameter:7.88 inches Hole			Refe	erence ⊟e KB t	evations o GR/C	1884.	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 8960 Outside Press@RunDepth: 837.24 psig Start Date: 2017.07.05 Start Time: 03:31:05	End Date: End Time:	2017.07.05 08:48:59	Capacity Last Calil Time On Time Off	b.: Btm: 2		8000. 2017.07. 7.05 @ 04:42: 7.05 @ 07:29:	30
		25					
Pressure vs.	Time 800 Temperature	True				MMARY	
		Time (Min.) 0 1 31 60	Pressure (psig) 1640.16 14.84 30.00 367.20	Temp (deg F) 105.61 105.30 107.24 107.82	Initial H Open Shut-li	-tydro-static To Flow (1) n(1) hut-ln(1)	
	anyoundura (day 7)	61 106 166 167	29.93 41.98 837.24 1606.00	108.65	Shut-li End S	To Flow (2) n(2) hut-ln(2) tydro-static	
5 West AM 2007							
Recovery				Ga	s Rate	s	
Length (ft) Description	Volume (bbl)			Choke (i		Pressure (psig)	Gas Rate (Mcf/d)
75.00 OCM Oil 20% Mud 80% 0.00 1103' GIP	1.05 0.00						
	Bef. No: 64800					7.06.@ 13:58	

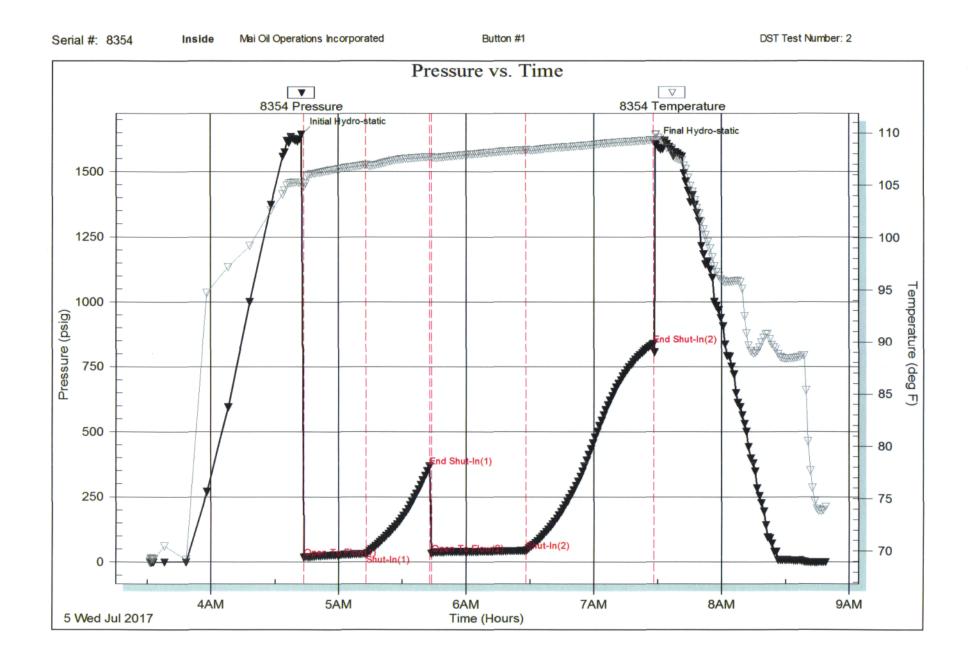
 Trilobite Testing, Inc
 Ref. No: 64800
 Printed: 2017.07.06 @ 13:58:54

			LSIE	MTEST	REPOR	K 1	TOOL DIAGRA
	BITE TING , INC	Mai Oil (Operations In	corporated		13-19S-13W Barton,	KS
EST	ING , INC	8411 Pr	eston Road	Suite 800		Button #1	
		Dallas T	X 75225+552	20		Job Ticket: 64800	DST#: 2
			Jim Musgrov	A		Test Start: 2017.07.05 @	03:31:00
uh-all.			oinnividogrov				
ool Information							
rill Pipe: Length:	3330.00 ft		3.80 in	ches Volume:	46.71 bbl	0	2000.00 lb
leavy Wt. Pipe: Length:		Diameter:		ches Volume:	0.00 bbl	5	
orill Collar: Length:	0.00 ft	Diameter:		ches Volume:	0.00 bbl	-	
orill Pipe Above KB:	29.00 ft			Total Volume:	46.71 bbl	Tool Chased String Weight: Initial	0.00 ft 34000.00 lb
epth to Top Packer:	3321.00 ft					Final	36000.00 lb
epth to Bottom Packer:	ft						
terval between Packers:	88.70 ft						
ool Length: umber of Packers:	108.70 ft 2	Diameter:	6.75 in	ches			
ool Comments:	2	Dameter	0.75 10	01105			
con commenta.							
ool Description	Le	ngth (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
hut-In Tool		5.00			3306.00		
ydraulic tool		5.00			3311.00		
op Packer		5.00			3316.00		
acker		5.00			3321.00	20.00	Bottom Of Top Packe
ecorder		1.00	8354	Inside	3322.00		
lecorder		1.00	8960	Outside	3323.00		
nchor		19.00			3342.00		
hange Over Sub		1.00			3343.00		
Drill Pipe		62.70			3405.70		
Change Over Sub		1.00			3406.70		
		3.00			3409.70	88.70	Anchor Too
ullnose							
ullnose Total Too	I Length:	108.70					
	I Length:	108.70					
	l Length:	108.70					
	l Length:	108.70					
	I Length:	108.70					
	l Length:	108.70					
	I Length:	108.70					

RILOBITE	DRI	LL STEM TEST REPORT	FLUID SUMMARY	
	Mai Oil	Operations Incorporated	13-19S-13W Barton,	KS
TESTING , INC.		reston Road Suite 800 TX 75225+5520	Button #1	
			Job Ticket: 64800	DST#: 2
and Call	ATTN:	Jim Musgrove	Test Start: 2017.07.05 @	03:31:00
Mud and Cushion Information				
Mud Type:Gel ChemMud Weight:9.00 lb/galViscosity:68.00 sec/qtWater Loss:8.79 in³Resistivity:ohm.mSalinity:3500.00 ppmFilter Cake:2.00 inches		Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure:	Oil API: ft Water Salinit bbl psig	deg API y: ppm
Recovery Information				
		Recovery Table		
Leng	th	Description	Volume bbl	
	75.00	OCM Oil 20% Mud 80%	1.052	
	0.00	1103' GIP	0.000	
Total Length:	75	5.00 ft Total Volume: 1.052 bbl		
Num Fluid Sam Laboratory Nan Recovery Com	ne:	Num Gas Bombs: 0 Laboratory Location:	Serial #:	

Ref. No: 64800

Printed: 2017.07.06 @ 13:58:55



Ref. No: 64800

Printed: 2017.07.06 @ 13:58:55

Phone 785-483-2025	Home Office P.O.	Box 32 Russell, KS 67665 No. 254
Cell 785-324-1041	nome onice i.o.	
Date 6-30-17 13	Twp. Range	County State On Location Finish
		ation 281 + Juco Rd - 4E to 40+2 Aug.
Button	Well No.	Owner Vy 5 w/s
Contractor Southwind	#3	To Quality Ollwell Cementing, Inc. You are hereby requested to rent comenting equipment and furnish
Type Job Surface		cementer and helper to assist owner or contractor to do work as listed.
Hole Size 1244	т. 757	Charge Mai oil operations
osg. 8 5/8 "	Depth 757	Street
Tbg. Size	Depth	City State
Tobl	Depth	The above was done to satisfaction and supervision of owner agent or contractor
Cement Left in Csg. 20	Shoe Joint 201	Coment Arnount Ordered 300 60/40 41. CC 2% Ge
Meas Line	Displace 47 B.	
EQUIPA	AENT	Common 180
Pumptrk 16 No Cementer Helper	ick	Poz. Mix / Z.D
Bulktrk 9 No Driver Dou	201	Gel. 6
Bulktrk No Driver		Calcium 3
JOB SERVICES	& REMARKS	Hulls
Remarks: Cement d	el Circulate	Salt
Rat Hole	the type to the second second	Flowseal
Nouse Hole	A STATE OF A	Kol-Seal
Centralizers		Mud CLR 48
Baskets		CFL-117 or CD110 CAF 38
D/V or Port Collar	.(619.)	Sand
Siller State	A Description	Sand Handling State Production
	The state of the s	AN IMILEE THE A
our the second sec		
ALLA IN DOM		A Stande Shoe Rubber Divis
and the state of the second		Centralizer
e Maple Malagaran ana an		Baskets
difference and	Automa a second a	AFt Inserts
		Float Shoe
STATE MINISTRAL	asimersu un aur unau iller	
and Marian		
4131 to x co mb (12.	ALL DESCRIPTION OF THE OWNER	
		Furptrk Charge Ing Sand San Acc
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