

Confiden	tiality Requested:
Yes	No

## Kansas Corporation Commission Oil & Gas Conservation Division

1234150

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:			Sec	TwpS. R	East West
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			· ·		
GSW	Permit #:		Operator Name:		
_ <del>_</del>			Lease Name:	License #:_	
Spud Date or Date R	eached TD	Completion Date or	QuarterSec	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:



Operator Name:			Lease Name: _			Well #:	
Sec Twp	S. R	East West	County:				
open and closed, flow	ring and shut-in pressu	ormations penetrated. Eures, whether shut-in predict final chart(s). Attach	essure reached stati	c level, hydrosta	atic pressures, bott		
		otain Geophysical Data a or newer AND an image		gs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic log
Drill Stem Tests Taker (Attach Additional S		Yes No		_	on (Top), Depth an		Sample
Samples Sent to Geo	logical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING	RECORD Ne	ew Used			
		Report all strings set-	conductor, surface, inte	ermediate, product	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
	Donth		. CEMENTING / SQL	JEEZE RECORD			
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used		Type and P	ercent Additives	
	ulic fracturing treatment o	n this well?		Yes	No (If No, ski	p questions 2 aı	nd 3)
Does the volume of the to	otal base fluid of the hydr	aulic fracturing treatment ex submitted to the chemical	_	= :	No (If No, ski	p questions 2 at p question 3) out Page Three	
Shots Per Foot	PERFORATION Specify For	N RECORD - Bridge Plug ootage of Each Interval Per	s Set/Type forated		cture, Shot, Cement mount and Kind of Ma		d Depth
				,			
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No		
Date of First, Resumed	Production, SWD or ENH	IR. Producing Meth		Gas Lift (	Other (Explain)		
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er B	bbls. G	as-Oil Ratio	Gravity
DISPOSITIO	ON OF GAS:	Open Hole		Comp. Con	mmingled	PRODUCTIO	ON INTERVAL:
(If vented, Sul	bmit ACO-18.)	Other (Specify)	(Submit )	400-5) (Sub	omit ACO-4)		

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	RLL 1-25
Doc ID	1234150

# All Electric Logs Run

CDL/CNL/PE	
DIL	
MEL	
SONIC	

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	RLL 1-25
Doc ID	1234150

# Tops

Name	Тор	Datum
Anhydrite	2216	+ 315
B/Anhydrite	2249	+ 283
Topeka	3505	- 974
Heebner Shale	3717	- 1186
Lansing	3755	- 1224
B/KC	3958	- 1427
Marmaton	4006	- 1475
Cherokee	4161	- 1630
Mississippian	4280	- 1749

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	RLL 1-25
Doc ID	1234150

# Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.2500	8.6250	23	259	Common	3% cc, 2% gel



TICKET NUMBER	46655
LOCATION	Ochle 10
FOREMAN 7	Ites Show

)N-431-921N <i>(</i>	nanute, KS 6675 or 800-467-8676	ALC 40"	LD TICKET	CEMEN				115
DATE	CUSTOMER#		NAME & NUM		SECTION	TOWNSHIP	RANGE	COUNTY
9-2-14	51.69	RII	#1-25	<u> </u>	25	25	260.	Sherida
USTOMER	100		,, ,	Strolley 6	1.228889			i ni numan nan hadi ni mban ni Bibadi mmiri ni mban ni bibadi miri ni di babi dati miri
ŀ	Mull			41/4W	TRUCK:#	DRIVER	TRUCK#	DRIVER
IAILING ADDRE	ESS	•		Winto	454111	Jerony R		
,					400	Rob S		
ITY		STATE	ZIP CODE					
				j		<u> </u>		
ов түре		HOLE SIZE	12/4'	_HOLE DEPTI	2541	CASING SIZE & W	<del>-</del>	234
ASING DEPTH		DRILL PIPE		_TUBING			OTHER	
LURRY WEIGH		SLURRY VOL_	1.36	WATER galls	sk	CEMENT LEFT in	casing <u>201</u>	
ISPLACEMEN	15645	DISPLACEMEN	IT PSI	MIX PSI		RATE		
EMARKS:	Safely n	neeting ar	dragape	on Wh	drilling	13 4	Circala	to cesing
min 20	sks "Cla	55 A CAN	rent Gres	14 38	colcium	28 GA d	Splana	1 15661
<u> </u>		ement de	of Circum	late 45	ble to pil	•		
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						THE PARTY	CO CAPILL	
ACCOUNT	T		1					T
CODE	QUANITY	or UNITS	DI	ESCRIPTION o	f SERVICES or PF	RODUCT	UNIT PRICE	TOTAL
54015		1	PUMP CHAR	3E			1150	1150,0
5406		25	MILEAGE	4	_		5.25	13/25
5107	9.	4 7345	Jon M	110441	Telivery		430,00	
1102	56		+				1 730/	
11.02			1 / 1/2.	in Ch	1000			430,00
MAIC		·/	Colci	ym Ch	lando.		194	530.10
11045		200545	Cla	um Ch 55 B (Pr	Tarido :			530 M
1104S 1188B		200545	Cla: Bente	/ /	lando.		194	530.10
		200545	Cla:	/ /	lando.		194	530 M
		200545	Cla:	/ /	lando.		18:55	430°0 530°10 3710°0 101.52
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		200545	Cla:	/ /	landu ment		18,55 127 127 Substal Substal	430 ° 1 530 1 3710. ° 101.52 (205.2, 2 3447.

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 are in effect for services identified on this form

āS

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CELL # 620-617-0527

# **General Information**

Company Name Mull Drilling Company, Inc

**Toby Eck Job Number** Contact K165 **Well Name** RLL #1-25 Representative Jason McLemore Unique Well ID DST #1 Lans. B 3770-3795 Well Operator Mull Drilling Company, Inc **Surface Location** 25-7s-26w-Sheridan Prepared By **Jason McLemore** Wildcat Qualified By Kevin Kessler Field **Vertical Test Unit Well Type** 

#### **Test Information**

Test Type Formation	Drill Stem Test	Representative Well Operator Report Date	Jason McLemore Mull Drilling Company, Inc 2014/09/06
Well Fluid Type		Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

 Start Test Date
 2014/09/06 Start Test Time
 17:17:00

 Final Test Date
 2014/09/06 Final Test Time
 23:19:00

#### **Test Results**

#### **RECOVERED:**

5 Drilling Mud5 TOTAL FLUID



# P.O. Box 157

HOISINGTON, KANSAS 67544 (800) 542-7313

#### **DRILL-STEM TEST TICKET**

FILE: rll1dst1

TIME ON: 5:17 PM
TIME OFF: 11:19 PM

•	iiusti		
n Kiri - Cara	Lease & Well No		
Contractor WW #4	Charge to Mull	Drilling Company, Inc.	
ElevationKB 2531Formation	nsing B Effective Pay	Ft	Ticket No. K165
Date9-6-14Sec25Twp	S Range	26 W CountySt	neridan State KANSAS
Test Approved By Kevin Kessler	Diamond Represe	ntativeJaso	on McLemore
Formation Test No. 1 Interval Tested from	3770 ft. to	3795 ft. Total Dep	oth3795 ft.
Packer Depth 3765 ft. Size 6 3/4	Packer depth	ft.	Size 6 3/4 in.
Packer Depth 3770 ft. Size 6 3/4	Packer depth	ft.	Size 6 3/4 in.
Depth of Selective Zone Set			
Top Recorder Depth (Inside) 37	ft. Recorder Number	er5513 Cap	5000 P.S.I.
Bottom Recorder Depth (Outside) 37	ft. Recorder Number	er5588 Ca	pP.S.I.
Below Straddle Recorder Depth	ft. Recorder Number		P.S.I.
Mud Type Chemical Viscosity 57	Drill Collar Lengt		I.D. <u>2 1/4</u> in.
Weight 9.4 Water Loss 6.4	cc. Weight Pipe Ler		I.D. 2 7/8 in
Chlorides 600 p			I.D. 3 1/2 in
Jars: Make STERLING Serial Number 6	Test Tool Length		Tool Size 3 1/2-IF in
Did Well Flow?NoReversed OutN	Anchor Length_	25 <sub>ft.</sub>	Size 4 1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2	in. Surface Choke S	Size 1 in.	Bottom Choke Size 5/8 in
Blow: 1st Open: Weak Surface Blow, No Blowb	<		
2nd Open: Dead			ų.
Recovered 5 ft. of Drilling Mud			
Recovered 5 ft. of TOTAL FLUID			
Recoveredft. of			
Recoveredft. of			
Recoveredft. of			e Job
Recovered ft. of			er Charges
Remarks:			rance
remarks	\	madi	ance
		Tota	ı
Time Set Packer(s) 7:16 PM A.M. P.M. Time Star	Off Bottom 9:21 F	PM A.M. P.M. Maximum	Temperature 113
Initial Hydrostatic Pressure		1818 <sub>P.S.I.</sub>	
Initial Flow Period	5 <sub>(B)</sub>	8 P.S.I. to (C)	21 <sub>P.S.I.</sub>
Initial Closed In PeriodMinutes	30 <sub>(D)</sub>	1128 <sub>P.S.I.</sub>	Sormous
Final Flow PeriodMinutes	30 (E)	14 P.S.I. to (F)_	31 <sub>P.S.I.</sub>
Final Closed In PeriodMinutes	60 (G)	1081 <sub>P.S.I.</sub>	
Final Hydrostatic Pressure	Const	1800 <sub>P.S.I.</sub>	
Diamond Testing shall not be liable for damages of any kind to the property or p			stained directly or indirectly through

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RLL #1-25 Formation: Lansing E-F Pool: Wildcat Job Number: K166 5513 Temperature , °F 126 105 84 42 63 21 0 17:00 16:00 p = 1852.6415:00 p = 796.4314:00 Temp = 115.20RLL #1-25 5513 Time 13:00 p = 85.1712:00 p = 34.03p = 805.1111:00 p = 36.96p = 11.28p = 1858.11 Mull Drilling Company, Inc DST #2 Lans. E-F 3805-3865 Start Test Date: 2014/09/07 Final Test Date: 2014/09/07 10:00 9:00 2014/9/7 1600 1200 400 -400 0 800 5513 Pressure, psi(a)



#### CELL # 620-617-0527

#### **General Information**

Company Name Mull Drilling Company, Inc

Contact **Toby Eck Job Number** K166 **Well Name** RLL #1-25 Representative Jason Mclemore **Unique Well ID** DST #2 Lans. E-F 3805-3865 Well Operator Mull Drilling Company, Inc **Surface Location** 25-7s-26w-Sheridan Prepared By **Jason McLemore** Wildcat Qualified By **Kevin Kessler** Field **Vertical Test Unit Well Type** 6

#### **Test Information**

Representative Jason Mclemore
Test Type Drill Stem Test Well Operator Mull Drilling Company, Inc
Formation Lansing E-F Report Date 2014/09/07
Well Fluid Type 01 Oil Prepared By Jason McLemore
Test Purpose (AEUB) Jason McLemore

 Start Test Date
 2014/09/07 Start Test Time
 09:10:00

 Final Test Date
 2014/09/07 Final Test Time
 16:47:00

#### **Test Results**

#### **RECOVERED:**

15 Free Oil

150 OCM, 10% Oil, 90% Mud

165 TOTAL FLUID

60' Gas In pipe

**GRAVITY: 39** 



Elevation

Mud Type

Weight

Chlorides

Jars: Make

Date

# DIAMOND TESTING P.O. Box 157

HOISINGTON, KANSAS 67544 (800) 542-7313

TIME ON: 9:10 AM TIME OFF: 4:47 PM

**DRILL-STEM TEST TICKET** FILE: rll1dst2 Company Mull Drilling Company, Inc. Lease & Well No. RLL #1-25 Contractor WW #4 Charge to Mull Drilling Company, Inc. Lansing E-F Effective Pay\_ KB 2531 K166 Formation Ft. Ticket No. Sheridan KANSAS 9-7-14 7 S Range 26 W County Sec. Twp. State Test Approved By Kevin Kessler Jason McLemore Diamond Representative 3865 ft. Total Depth\_ 3805 ft. to 3865 ft. Formation Test No. Interval Tested from 3800 ft. Size 6 3/4 6 3/4 Packer Depth Packer depth ft. Size in. 3805 ft. Size\_ 6 3/4 6 3/4 Packer Depth Packer depth ft. Size Depth of Selective Zone Set 3786 ft. 5000 P.S.I. 5513 Cap. Top Recorder Depth (Inside) Recorder Number 6000 P.S.I. 3787 ft. 5588 Cap. Bottom Recorder Depth (Outside) Recorder Number Below Straddle Recorder Depth Recorder Number Cap. P.S.I. 123 ft. Chemical Viscosity Drill Collar Length I.D. 2 1/4 0 ft. 6.0 9.1 cc. Weight Pipe Length I.D. 2 7/8 Water Loss 700 P.P.M. 3650 ft. 3 1/2 I.D. Drill Pipe Length 6 32 ft. STERLING Tool Size 3 1/2-IF Serial Number Test Tool Length 60 ft. No No 4 1/2-FH Did Well Flow? Reversed Out Anchor Length Size 31' Drill Pipe in Anchor 7 7/8 4 1/2 XH Main Hole Size **Tool Joint Size** Surface Choke Size Bottom Choke Size 5/8 in. 2nd Open: Dead

Blow: 1st Open: Weak Surface Blow, No Blowback

Recovered	15 ft. of Free Oil	
Recovered	150 ft. of OCM 10% Oil, 90% Mud	
Recovered	165 ft. of TOTAL FLUID	
Recovered	ft. of	
Recovered	ft. of 60' Gas In Pipe	Price Job
Recovered	ft. of	Other Charges
Remarks: GRA	VITY: 39	Insurance
Tool Sample:	Oil Cut Mud, 25% Oil, 75% Mud	
		Total

Time Set Packer(s) 10:5	58 AM	A.M. _P.M. T	ime Started Off Bott	om	2:33 PM	A.M. P.M.	Maximum Tem	perature 115
Initial Hydrostatic Pressure				(A)_		1858 <sub>P</sub>	.S.I.	
Initial Flow Period		Minute	s5	(B)		11 <sub>P</sub>	.S.I. to (C)	37 <sub>P.S.I.</sub>
nitial Closed In Period		Minute	30	(D)_		805 <sub>P</sub>	.S.I.	
Final Flow Period		Minute	es 60	(E)_		34 <sub>P.</sub>	S.I. to (F)	85 <sub>P.S.I.</sub>
Final Closed In Period	******	Minute	s 120	(G)		796 <sub>P.</sub>	S.I.	
Final Hydrostatic Pressure		*************		(H)		1853 <sub>P.</sub>	S.I.	



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#### CELL # 620-617-0527

## **General Information**

Company Name Mull Drilling Company, Inc

Contact **Toby Eck Job Number** K167 **Well Name** RLL #1-25 Representative Jason McLemore **Unique Well ID** DST #3 Lansing H 3855-3890 Well Operator **Mull Drilling Company, Inc Surface Location** 25-7s-26w-Sheridan Prepared By **Jason McLemore** Wildcat Qualified By Kevin Kessler Field **Vertical Test Unit Well Type** 6

#### **Test Information**

Representative Jason McLemore
Test Type Drill Stem Test Well Operator Formation Lansing H Report Date 2014/09/08
Well Fluid Type 01 Oil Prepared By Test Purpose (AEUB) Jason McLemore

 Start Test Date
 2014/09/07 Start Test Time
 22:48:00

 Final Test Date
 2014/09/08 Final Test Time
 06:49:00

#### **Test Results**

#### **RECOVERED:**

5 Free Oil

120 OCM, 8% Oil, 92% Mud

125 TOTAL FLUID

**GRAVITY: 39** 



# P.O. Box 157 OISINGTON, KANSAS 6754

HOISINGTON, KANSAS 67544 (800) 542-7313

#### **DRILL-STEM TEST TICKET**

FILE: rll1dst3

TIME ON: 10:48 PM
TIME OFF: 6:49 AM

Company Mull Drilling Company, Inc.	Lease & Well No. RLL #1-25
Contractor WW #4	Charge to Mull Drilling Company, Inc.
	H Effective PayFt. Ticket NoK167
Date 9-7-14 Sec. 25 Twp. 7 S F	
Test Approved By Kevin Kessler	Diamond Representative Jason McLemore
	855 ft. to3890 ft. Total Depth 3890 ft.
Packer Depth 3850 ft. Size 6 3/4 in.	Packer depthft. Size 6 3/4in.
Packer Depth 3855 ft. Size 6 3/4 in.	Packer depthft. Size6 3/4 in.
Depth of Selective Zone Set	
Top Recorder Depth (Inside) 3836 ft.	Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3837 ft.	Recorder Number5588_Cap6000_ P.S.I.
Below Straddle Recorder Depthft.	Recorder Number Cap. P.S.I.
Mud Type Chemical Viscosity 60	Drill Collar Length         123 ft.         I.D.         2 1/4         in.
Weight	. Weight Pipe Length0 ft. I.D2 7/8 in
Chlorides 700 P.P.M.	Drill Pipe Length 3700 ft. I.D 3 1/2 in
Jars: Make STERLING Serial Number 6	Test Tool Length 32 ft. Tool Size 3 1/2-IF in
Did Well Flow? No Reversed Out No	Anchor Length 35 ft. Size 4 1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in.	Surface Choke Size 1 in. Bottom Choke Size 5/8 in
Blow: 1st Open: Weak Blow, Built to 1", No Blowback	
<sup>2nd Open:</sup> Fair Blow, Built to 7", No Blowback	
Recovered 5 ft. of Free Oil	
Recovered 120 ft. of OCM 8% Oil, 92% Mud	
Recovered 125 ft. of TOTAL FLUID	
Recoveredft. of	
Recoveredft. of	Price Job
Recoveredft. of	Other Charges
Remarks: GRAVITY: 39	Insurance
40.47.ANA A.M.	Total A.M.
Time Set Packer(s) 12:47 AM P.M. Time Started Off B	
Initial Hydrostatic Pressure	(A) 1884 P.S.I.
Initial Flow Period	(B) 9 P.S.I. to (C) 20 P.S.I.
Initial Closed In Period	(D)1266 P.S.I.
Final Flow Period	(E)8 P.S.I. to (F)66 P.S.I.
Final Closed In PeriodMinutes120	(6)
Final Hydrostatic Pressure	

RLL #1-25 Formation: Lansing J Pool: Wildcat Job Number: K168 5513 Temperature, °F 147 126 105 42 21 0 20:00 p = 1876.5719:00 18:00 p = 24.65Temp = 112.71p = 11.1317:00 p = 9.37RLL #1-25 5513 Time p = 43.64p = 10.8616:00 p = 8.54p = 1897.5815:00 14:00 Mull drilling Company Inc DST #4 Iansing J 3890-3920 Start Test Date: 2014/09/08 Final Test Date: 2014/09/08 13:00 2014/9/8 2400 2000 1600 513 Pressure , psi(a) 400 -400 0



CELL # 620-617-0527

## **General Information**

Company Name Mull drilling Company Inc

**Toby Eck Job Number** Contact K168 **Well Name** RLL #1-25 Representative **Jason McLemore Unique Well ID** DST #4 lansing J 3890-3920 Well Operator Mull drilling Company Inc **Surface Location** 25-7s-26w-Sheridan Prepared By **Jason McLemore** Wildcat Qualified By Kevin Kessler Field **Vertical Test Unit Well Type** 

#### **Test Information**

<u> </u>		Representative	Jason McLemore
Test Type	Drill Stem Test	Well Operator	Mull drilling Company Inc
Formation	Lansing J	Report Date	2014/09/08
Well Fluid Type	01 Oil	Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

 Start Test Date
 2014/09/08 Start Test Time
 13:58:00

 Final Test Date
 2014/09/08 Final Test Time
 19:57:00

#### **Test Results**

#### **RECOVERED:**

1/2' Mud W/Oil Specks, <1% Oil

1/2" TOTAL FLUID



KB 2531

Sec.

Contractor WW #4

Formation Test No.

Packer Depth

Packer Depth

Mud Type

Chlorides

Jars: Make

Did Well Flow?

Main Hole Size

Weight

9-8-14

Test Approved By Kevin Kessler

Depth of Selective Zone Set

Top Recorder Depth (Inside)

Below Straddle Recorder Depth

Chemical

9.2

STERLING

7 7/8

No

Elevation

Date

# DIAMOND TESTING P.O. Box 157

HOISINGTON, KANSAS 67544

TIME ON: 1:58 PM

TIME OFF: 7:57 PM (800) 542-7313 **DRILL-STEM TEST TICKET** FILE: rll1dst4 Company Mull Drilling Company, Inc. Lease & Well No. RLL #1-25 Charge to Mull Drilling Company, Inc. Lansing J Effective Pay K168 Formation Ft. Ticket No. 26 W County\_ Sheridan KANSAS 7 S Range Twp. State Jason McLemore Diamond Representative 3890 ft. to 3920 ft. Total Depth\_ 3920 ft. Interval Tested from 3885 ft. Size 6 3/4 6 3/4 Packer depth ft. Size in. 3890 ft. Size\_ 6 3/4 6 3/4 Packer depth ft. Size 3871 ft 5513 Cap. 5000 P.S.I. Recorder Number 6000 P.S.I. 3872 ft. 5588 Cap. Bottom Recorder Depth (Outside) Recorder Number ft. Recorder Number Cap. P.S.I. 55 123 ft. I.D. Drill Collar Length Viscosity 2 1/4 7.2 0 ft. I.D.\_\_\_\_ cc. Weight Pipe Length 2 7/8 Water Loss 700 P.P.M. 3735 ft. I.D. 3 1/2 Drill Pipe Length 6 32 ft. Tool Size 3 1/2-IF Serial Number Test Tool Length 30 ft. No 4 1/2-FH Size Reversed Out Anchor Length 4 1/2 XH in **Tool Joint Size** Surface Choke Size in. Bottom Choke Size 5/8 Blow: 1st Open: Weak Blow, Died in 3 Minutes

2nd Open: Dead						
Recovered	1/2 ft. of Mud W/Oil Specks <1% Oil					
Recovered	1/2 ft. of TOTAL FLUID					
Recovered	ft. of					
Recovered	ft. of					
Recovered	ft. of	Price Job				

Other Charges Recovered ft. of Insurance Remarks: Total

Time Set Packer(s)	4:06 PM	A.M. P.M.	Time Starte	ed Off Bot	om	6:11 PM	A.M. P.M.	Maximum Temp	perature113
Initial Hydrostatic Pressu	ure				(A)_		1898 <sub>P</sub>	S.I.	
Initial Flow Period		Minut	tes	5	(B)		9 <sub>P</sub>	.S.I. to (C)	11_ <sub>P.S.I.</sub>
Initial Closed In Period		Minu	tes	30	(D)_		44 P.	S.I.	
Final Flow Period		Minut	tes	30	(E)_		9 P.	S.I. to (F)	11_ <sub>P.S.I.</sub>
Final Closed In Period		Minut	tes	60	(G)_		25 p.	S.I.	
Final Hydrostatic Pressu	ıre	******************			(H)_		1877 <sub>P.</sub>	S.I.	

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

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#### CELL # 620-617-0527

# **General Information**

Company Name Mull drilling Company Inc

Contact **Toby Eck Job Number** K169 **Well Name** RLL #1-25 Representative **Jason McLemore Unique Well ID** DST #5 Lansing K-L 3915-3965 Well Operator **Mull drilling Company Inc Surface Location** 25-7s-26w-Sheridan Prepared By **Jason McLemore** Wildcat Qualified By **Kevin Kessler** Field **Vertical Test Unit Well Type** 6

#### **Test Information**

Test Type Formation	Representative Drill Stem Test Well Operator Lansing K-L Report Date	Jason McLemore Mull drilling Company Inc 2014/09/09
Well Fluid Type	01 Oil Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test	

 Start Test Date
 2014/09/09 Start Test Time
 05:12:00

 Final Test Date
 2014/09/09 Final Test Time
 11:39:00

#### **Test Results**

#### **RECOVERED:**

3 Drilling Mud3 TOTAL FLUID



### DIAMOND TESTING P.O. Box 157

HOISINGTON, KANSAS 67544 (800) 542-7313

## **DRILL-STEM TEST TICKET**

FILE: rll1dst5

TIME ON: 5:12 AM

TIME OFF: 11:39 AM

Company Mull Drilling Company, Inc.		Lease & Well No. RLL	#1-25		
Contractor WW #4		Charge to Mull Drilling	Company, Inc.		
ElevationKB 2531 Formation	Lansing k	C-L Effective Pay	F	t. Ticket No.	K169
Date 9-9-14 Sec. 25 Twp	7 S F	Range 26	W CountyS	heridan	State KANSA
Test Approved By Kevin Kessler		200		on McLemo	
Formation Test No. 5 Interval Tested from			3965 ft. Total De	pth	3965 ft.
Packer Depth 3810 ft. Size 6 3/4	in.	Packer depth			3/4 in.
Packer Depth 3915 ft. Size 6 3/4	in.	Packer depth			3/4 in.
Depth of Selective Zone Set		2 990018 3 0 1			
	3896 ft.	Recorder Number	5513 Ca	p	5000 P.S.I.
Bottom Recorder Depth (Outside)	3897 <sub>ft.</sub>	Recorder Number		ар	6000 P.S.I.
Below Straddle Recorder Depth	ft.	Recorder Number		p	
Mud Type Chemical Viscosity 60		Drill Collar Length_			
Weight 9.3 Water Loss 7.2	cc	: Weight Pipe Length_	0 <sub>ft.</sub>	I.D.	2 7/8
Chlorides 900	P.P.M.	Drill Pipe Length	3760 ft.	I.D	3 1/2
	6	Test Tool Length	32 <sub>ft.</sub>	Tool Size _	3 1/2-IF
Did Well Flow?NoReversed Out	No	Anchor Length	50 <sub>ft.</sub>	Size	4 1/2-FH
Main Hole Size 7 7/8 Tool Joint Size 4 1/	2 XH in.	31' DP in Anchor Surface Choke Size_	1in.	Bottom Cho	oke Size 5/8
Blow: 1st Open: Weak Surface Blow 2nd Open: Dead  Recovered 3 ft. of Drillling Mud					
Recovered 3 ft. of TOTAL FLUID					
Recovered ft. of					
Recoveredft. of					
Recoveredft. of			Pric	e Job	
Recoveredft. of			Oth	er Charges	
Remarks:	2000000		Insu	ırance	
			Tota	al	
Time Set Packer(s) 7:41 AM A.M. P.M. Time Set	tarted Off B	ottom_ 9:46 AM	A.M. P.M. Maximur	n Temperatu	<sub>ire</sub> 115
Initial Hydrostatic Pressure		(A)1	1924 <sub>P.S.I.</sub>		
Initial Flow Period	5	(B)	9 P.S.I. to (C)		10 <sub>P.S.I.</sub>
Initial Closed In Period Minutes	30	(D)	50 P.S.I.		
Final Flow Period Minutes	30	(E)	11 P.S.I. to (F)_		12 <sub>P.S.I.</sub>
Final Closed In PeriodMinutes	60	(G)	35 P.S.I.		
			920 <sub>P.S.I.</sub>		

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



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#### CELL # 620-617-0527

# **General Information**

Company Name Mull Drilling Company, Inc

**Toby Eck Job Number** Contact K170 **Well Name** RLL #1-25 Representative **Jason McLemore Unique Well ID** DST #6 Marmaton 3955-4070 Well Operator Mull Drilling Company, Inc 25-7-26-Sheridan Prepared By **Surface Location Jason McLemore** Wildcat Qualified By Kevin kessler Field **Vertical Test Unit Well Type** 6

#### **Test Information**

Test Type Formation	Drill Stem Test Marmaton	Representative Well Operator Report Date	Jason McLemore Mull Drilling Company, Inc 2014/09/10
Well Fluid Type		Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

 Start Test Date
 2014/09/10 Start Test Time
 00:54:00

 Final Test Date
 2014/09/10 Final Test Time
 07:23:00

#### **Test Results**

#### **RECOVERED:**

5 Drilling Mud5 TOTAL FLUID



### DIAMOND TESTING P.O. Box 157

#### HOISINGTON, KANSAS 67544 (800) 542-7313

## **DRILL-STEM TEST TICKET**

FILE: rll1dst6

TIME ON: 12:54 AM

TIME OFF: 7:23 AM

Company Mull Drilling Company, Inc.	Lease & Well No. RLL #1-25
Contractor WW #4	Charge to Mull Drilling Company, Inc.
ElevationKB 2531FormationMarm	tton Effective PayFt. Ticket NoK170
Date 9-10-14 Sec. 25 Twp. 7 S	
Test Approved By Kevin Kessler	
Formation Test No. 6 Interval Tested from	
Packer Depth 3950 ft. Size 6 3/4 in.	Packer depthft. Size 6 3/4 in.
Packer Depth 3955 ft. Size 6 3/4 in.	Packer depthft. Size 6 3/4 in.
Depth of Selective Zone Set	
Top Recorder Depth (Inside) 3936 ft.	Recorder Number5513 Cap5000 P.S.I.
Bottom Recorder Depth (Outside) 3937 ft.	Recorder Number 5588 Cap. 6000 P.S.I.
Below Straddle Recorder Depth ft.	Recorder Number Cap P.S.I.
Mud Type Chemical Viscosity 60	Drill Collar Length 123 ft. I.D. 2 1/4 in
	cc. Weight Pipe Length0 ft. I.D2 7/8 in
Chlorides 900 P.P.M.	Drill Pipe Length 3800 ft. I.D. 3 1/2 in
Jars: Make STERLING Serial Number 6	Test Tool Length 32 ft. Tool Size 3 1/2-IF ir
Did Well Flow? No Reversed Out No	Anchor Length115_ft. Size4_1/2-FHii
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in	93' DP in Anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 ir
Blow: 1st Open: Weak Blow, Built to 1/4", Died Off 2nd Open: Dead  Recovered 5 ft. of Drillling Mud	
Recovered 5 ft. of TOTAL FLUID	
Recovered ft. of	
Recoveredft. of	
Recoveredft. of	
Recovered ft. of	Other Charges
Remarks:	Insurance
TWO DOOLANGES.	
	Total
Time Set Packer(s) 3:15 AM P.M. Time Started Off	Bottom 5:20 AM P.M. Maximum Temperature 115
Initial Hydrostatic Pressure	(A)1942_P.S.I.
Initial Flow Period	(B) 13 P.S.I. to (C) 15 P.S.I.
Initial Closed In Period	( <i>D</i> )F.S.I.
Final Flow PeriodMinutes30	(E) 18 P.S.I. to (F) 24 P.S.I.
Final Closed In PeriodMinutes6	
Final Hydrostatic Pressure	(H) 1941 P.S.I.

## **ELEVATION OPERATOR: MULL DRILLING COMPANY INC.** KB: 2234' **LEASE: ERB UNIT WELL #: 1 - 24** GL: 2229' **LOCATION: 105' FNL & 1535' FWL MEASUREMENTS FROM SEC: 24 RGE: 23 W TWP: 19S** KB **COUNTY: NESS STATE: KANSAS CASING RECORD** SURFACE: **CONTRACTOR: WW DRILLING RIG#6** 8 5/8" @ 216' COMM: 05/07/2014 COMP: 05/14/2014 PRODUCTION: **LOG TD: 4476** RTD: 4475 5 1/2" @ 4475' **SAMPLES SAVED FROM: 3600** TO: RTD **GEOLOGICAL SUPERVISION FROM: 3600** TO: RTD **ELECTRICAL SURVEYS** MUD UP: 3500 **TYPE MUD: CHEMICAL** CDL/CNL STRUCT. SAMPLE LOG **FORMATION DATUM** DATUM TOP TOP COMP. DIL **MICRO** - 1456 + 07 3690 **HEEBNER** 3690 - 1456 LANSING 3738 - 1504 **SONIC** 3738 - 1504 + 06 **STARK** 4024 - 1790 4024 - 1790 + 07 - 1850 BASE/ KC 4084 4084 + 10 - 1850 FORT SCOTT 4250 - 2016 4250 - 2016 + 10 + 13 4272 - 2038 **CHEROKEE** 4272 - 2038 4415 **MISSISSIPPI** 4415 - 2118 - 2118 - 25 REFERENCE WELL FOR STRUCTURAL COMPARISON: MULL DRLG CO INC # 1 - 23 BYRD **NESS COUNTY KANSAS** SEC 23 - T 19 S - R 23 W 3600 LST: A. A. MINOR GRAY SHALE CHKY NO VIS. POR. NSO 3650 LST: CRM - TAN FXTAL CHKY | MUD CHECK @ 3650 SOFT OOLITIC IN PART SLI VIS: 47 WT: 8.8 FOSS AREN. TRC BLK SHALE NO VIS. POR. NSO LST: A. A. SOFT CHKY OOLITIC - FOSS. AREN. IN PART NO VIS. POR. NSO HEEBNER 3690 (-456) SHALE: BLACK CARB. W/ FR AMT DNSE MOTTLED MICRITIC LST. NO VIS. POR. 3700 NSO LST: WHT - CRM FXTAL DNSE BLOCKY CHERTY IN PART ABUNDANT GRAY SHALE NO VIS. POR. NSO LANSING 3738 ( - 1504 ) LST: WHT - CRM FXTAL SUBCHKY - DNSE BLOCKY FOSS. IN PART MICRITIC IN PART MINOR AMT GRAY CALC. SHALE NO VIS. POR. 3750 -MUD CHECK @ 3750 NSO VIS: 47 WT: 8.9 LST: A. A. MINOR GRAY SHALE NO VIS. POR. NSO A. A. ABUND. SHALE NSO LST: CRM - GRAY FXTAL DNSE BLOCKY FOSS. IN 3800 PART MINOR PR FOSS POR. LST: CRM - GRAY FXTAL DNSE BLOCKY FR AMT DRK GRAY SHALE NO VIS. POR. NSO LST: WHT - CRM - GRAY **FXTAL SUBCHKY - DNSE** 3850 MUD CHECK @ 3850 FOSS. IN PART MINOR VIS: 46 **OOLITES MINOR SHALE PR** WT: 9.0 INTRPRT. FOSS. POR. NSO LST: A. A. MOST DNSE SLI FOSS. NO VIS. POR. NSO LST: A. A. DNSE MICRITIC SLI FOSS. NO VIS. POR. NSO 3900 SHALE: GRAY CALCAREOUS NSO LST: WHT - CRM FXTAL SUBCHKY - DNSE SLI FOSS NSO 3950 LST: WHT - CRM - GRAY MUD CHECK @ 3950 **FXTAL MOST DNSE HARD** VIS: 49 WT: 9.0 MINOR SHALE NSO SHALE: GRAY GREEN SILTY W/ MINOR LST. A. A. NO VIS. POR. NSO LST: CRM - GRAY FXTAL SUBCHKY - DNSE FOSS. FR AMT OOLICASTIC NSO 4000 LST: CRM - TAN - GRAY FXTAL SUBCHKY - CHKY VRY FOSS FR AMT DRK **GRAY SHALE NSO ARK 4024** - 1790 ) LST: A. A. NO VIS. POR. NSO 4050 MUD CHECK @ 4050 LST: CRM - GRAY FXTAL VIS: 49 SUBCHKY - DNSE FOSS. IN WT: 9.1 PART FR AMT GRAY - DRK GRAY SHALE NO VIS. POR. NSO LST: CRM - TAN - BRN FXTAL DNSE BLOCKY RARE FOSS BASE/IKC 4084 ( - 1850 ) TRC BLK SHALE NO VIS. POR. NSO 4100 -LST: TAN - BRN FXTAL DNSE RARE FOSS. FR AMT RED -BRN SHALE NSO LST: CRM - TAN - BRN FXTAL DNSE BLOCKY FR AMT BRN SHALE NO VIS. POR. NSO LST: CRM - TAN - BRN FXTAL DNSE BLOCKY ABUND BRN SHALE NSO 4150 MUD CHECK @ 4150 VIS: 50 WT: 9.0 LST: CRM - GRAY FXTAL SUBCHKY - DNSE FOSS IN PART MINOR - FR AMT RED -BRN SHALE NO VIS. POR. NSO LST: CRM - GRAY MASSIVE BLOCKY DNSE MICRITIC RARE FOSS. NO VIS. POR. NSO 4200 A.A. NSO LST: WHT - CRM - GRAY **FXTAL DNSE HARD BLOCKY** RARE FOSS NO VIS. POR. NSO SHALE: BLACK CARB. LST: CRM - TAN - BRN FXTAL T. SCOTT 4250 ( - 2016 ) DNSE HARD MINOR 4250 -**OOLITES MICRITIC IN PART** MUD CHECK @ 4250 ABUNDANT BLACK CARB. VIS: 52 SHALE PR INTRPRT POR. WT: 9.2 $\Diamond$ $\Diamond$ SHALE: BLACK CARB. $\Diamond$ LST: GRAY FXTAL DNSE HARD ABUNDANT BLACK CARB. - DRK GRAY CALC. SHALE NO VIS. POR. NSO 4300 DST # 1 ( 4270 - 4355 ) LST: A. A. WITH ABUNDANT REC: 131'OCM 17%O DRK GRAY SHALE NO VIS. IFP:15 - 26# POR. NSO ISIP: 1331# FFP: 29 - 69# CGL: WEATHERED CHERT VARI COL - TRANSL. MINOR FFP: 1340# AMOUNT LOOSE SAND ABUND VC SHALE NSO CGL: A. A. MOST GRAY SHALE NSO A.A. NSO SAND: FN GRND WELL SORTED ANGULAR -SUBROUNDED TIGHT 4350 CLUST. FEW COARSE GRNS MUD CHECK @ 4350 SSFO FR ODOR SCATT. - FR VIS: 54 AMT SUBSAT - SAT STN FR WT: 9.2 INTRGRAN. POR. DST # 2 ( 4295 - 4365 ) REC: 3806' SLI MCO 98%O SAND A. A. FR AMT LOOSE IFP: 410 - 574# **GRAINS MINOR CHERT** ISIP: 1362# SHOW A. A. FFP: 593 - 1339# FSIP: 1364# SAND A. A. ABUND CHERT FR AMT VARI COL. SHALE 4400 SAND: VERY CHERTY SHOW GONE MISSISSIPPI 4415 ( - 2181 ) DOLO: WHITE - CRM FXTAL SUCROSIC TIGHT DNSE ABUND. FRESH WHITE CHERT NO VIS. POR. NSO DOLO: A. A. SUCROSIC DNSE VERY CHERTY NO VIS. POR. NSO 4450 MUD CHECK @ 4450 VIS: 55 WT: 9.2 DOLO: A. A. VERY CHERTY MINOR AMT DNSE DOLOMITIC LST. FR. AMT CHERT A. A. NO VIS. POR. RTD = 4475 LTD = 4476 NSO **COMMENTS:** 5 1/2" PRODUCTION CASING WAS SET TO FURTHER TEST THE PRODUCTIVITY OF THIS WELL **KEVIN L. KESSLER**

**KEVIN L. KESSLER** 

(316) 522-7338

**CONSULTING PETROLEUM GEOLOGIST**