KOLAR Document ID: 1432558

Confidentiality 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
Contact Person:	_ Footages Calculated from Nearest Outside Section Corner:
Phone: ()	_ NE NW SE SW
CONTRACTOR: License #	
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	
Purchaser:	
Designate Type of Completion:	Lease Name: Well #:
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:
☐ Oil ☐ WSW ☐ SWD	Producing Formation:
Gas DH EOR	Elevation: Ground: Kelly Bushing:
	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 Produce	(Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
	Dewatering method used:
Dual Completion Permit #:	
EOR Permit #:	
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
Recompletion Date 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 Drill Stem Tests Received							
Geologist Report / Mud Logs Received							
UIC Distribution							
ALT I II Approved by: Date:							

KOLAR Document ID: 1432558

Page Two

Operator Name: _				Lease Name:			Well #:					
Sec Twp.	S. R.	E	ast West	County:								
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 files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	v. Digital electronic log				
Drill Stem Tests Ta			Yes No			on (Top), Depth ar		Sample				
Samples Sent to 0	Geological Surv	/ey	Yes No	Na	me		Тор	Datum				
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No									
		B	CASING eport all strings set-c		New Used	ion, etc.						
Purpose of String		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives				
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD							
Purpose:		epth T Bottom	ype of Cement	# Sacks Used	d Type and Percent Additives							
Perforate Protect Casi Plug Back T												
Plug Off Zor												
1. Did you perform a hydraulic fracturing treatment on this well? 2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? 3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No (If No, skip questions 2 and 3) No (If No, skip question 3) No (If No, skip question 3)												
Date of first Product Injection:	tion/Injection or R	esumed Production	Producing Meth	nod:	Gas Lift 0	Other (Explain)						
Estimated Production Per 24 Hours	on	Oil Bbls.					Gas-Oil Ratio	Gravity				
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:		PRODUCTION INTERVAL:					
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Top Bottom					
,	,			B.11 B1								
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record (Amount and Kind of Material Used)							
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:								
TODING RECORD:	. 3126.	Set	n.	i donei Al.								

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	COBERLY-BEOUGHER UNIT 1-29
Doc ID	1432558

All Electric Logs Run

CDL/CNL/PE	
DIL	
MEL	
SONIC	

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	COBERLY-BEOUGHER UNIT 1-29
Doc ID	1432558

Tops

Name	Тор	Datum				
Anhydrite	2150	+ 533				
B/Anhydrite	2185	+ 498				
Heebner	3829	- 1146				
Lansing	3868	- 1185				
Stark	4095	- 1412				
Marmaton	4218	- 1535				
Pawnee	4293	- 1610				
Ft. Scott	4350	- 1667				
Cherokee	4376	- 1693				
Mississippian	4442	- 1759				

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	COBERLY-BEOUGHER UNIT 1-29
Doc ID	1432558

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.250	8.625	23	220	Common		2% gel, 3% cc
Production	7.875	5.5	15.5	4512	EA-2	180	1000 gal Flocheck



			1100000
(ADDRESS
Po.	Drilling	mull	CHARGE TO:

								 -					•									
10-1-2018	DATE SIGNED	MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.	LIMITED WARRANTY provisions	the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and	LEGAL TERMS: Customer hereby acknowledges and agrees to	583	581		325	06 E	378 876	279	5765	575	PRICE REFERENCE	REFERRAL LOCATION	4,	Ģ	,e C	SERVICE LOCATIONS	Services,	SWI
18		STOMER OR CUS LIVERY OF GOOD	NTY provision	litions on the I	Customer her										SECONDARY PART I	JN N			i	55	, Inc	FI
	TIME SIGNED	TOMER'S AGENT I IS.	IS	reverse side h	eby acknowle										SECONDARY REFERENCE/ PART NUMBER	INVOICE	0,1	WEIL TYPE	TICKET TYPE	WELL/PROJECT NO	•	
☐ P.M.		PRIOR TO	,	ereof which inc	dges and agre	~	_		~	(-	1			<u>5</u>	INVOICE INSTRUCTIONS	r		CONTRACTOR	OJECT NO.		
.M	Š			clude,	es to										ACCOUNTING C ACCT DF		D _{ev}	1 Delling	-	LEASE LEASE	CITY, STATI	CHARGE TO:
-	37	NESS.	SWIFT	Ī	RFMI1	Draviage	Service		Standera	0-Air	Colcium	Bentoni	Pump 1	MILEAGE		•	evelopment	WIEGOBY OF TEGOBY	, B was	ch-Renicher	CITY, STATE, ZIP CODE	m _u /
	785-798-2300	P.O. BOX 466 S CITY, KS 67	SERVI(- раум	\ `	e Chevrez		7			te Gel	hover	7.6 #	DESCRIPTION		Cement		į	6		Or Min
, ,	300 300	P.O. BOX 466 NESS CITY, KS 67560	SWIFT SERVICES, INC	<u>[</u>	REMIT PAYMENT TO:		,		ement				- Shel	IIZ	ON		ement Sintare	BBOSE OF	RIG NAME/NO.	COUNTY/PARISH		y Co.
\ }		,	•				C_{ement}					(ell/200 S				ace Pipe			¥ ¥		
0	ARE YOU SATISFIED WITH OUR SERVICE?	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	OUR SERVICE WAS PERFORMED WITHOUT DELAY?	WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS?	SURVEY EQUIPMENT PERFORM								whice				(6	VIACT	SHIPPED	STATE		
CUSTOMER DID NOT WISH TO RESPOND	H OUR SERVICE?	NIPMENT	DELAY?	. ?		14,152,165		 _		_	3 1%	2/8		-	ату. и/м			Lecation WELL DEBMIT NO	밂	CITY	•	
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RESPOND	ō				UNDECIDED DISAGREE	M1.52h	50/5/5	-	50 5ks	2 00/	7 Ists	3 /s/s	l Job	Dimi	QTY. U/M	Ċ.		5				
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SWIFT OPERATOR

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES

The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You

APPROVAL

DATE PAGE NO. SWIFT Services. Inc. 10-1-2018 JÓB LOG CUSTOMER Drilling LEASE
Coberly-Beougher Unit Surface Pipe
PRESSURE (PS)
DESCRIPTION OF OPERAT WELL NO. 1-29 TICKET NO. RATE (BPM) VOLUME (BBL) (GAL) CHART NO. DESCRIPTION OF OPERATION AND MATERIALS TIME On Location 8% 23 pipe 1100 TD:221 Start 89/8 2316 Casing in Well 1110 11 30 Breek Circulation 1135 200 Pump 5 bbl water Spacer 4/2 6 100 Mix 150 sacks Standard 21/ get 3/100 1140 4/2 36 Start Displacement 1155 4/2 0 Circulate Cement to Surface - 30 sks 4/2 200 Kickoul Pump + Shut in 1200 13 Wash-up Truck Job Complete 1230 Thank You. Gudeon Dave Preston Issaoc

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CITY, STATE, ZIP CODE		_
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TICKET 031820

CUSTOMER A	DATE SIGNED 10/18/3018 TIMES	MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OB-DELIVERY OF GOODS.	LIMITED WARRANTY provisions.	the terms and conditions on the reverse side hereof which include, the terms and conditions on the reverse side hereof which include,	I EGAI TERMS: Customer berehv acknowledges and agrees to		2	110 111	40%	407	40%	60h	570	575	PRICE SECONDARY REFERENCE: REFERENCE PART NUMBER	REFERRAL LOCATION INV	4. WE	Ā	SERVICE LOCATIONS WE	Services, Inc.
CCEPTANCE OF MATERIAL	TIME SIGNED EX A.M.	S AGENT PRIOR TO	בהאסב, וואטבושואוו ו, מוזע	s side hereof which include,	knowledges and agrees to							,		person	HENCE/ ACCOUNTING HENCE/ ACCT DF	INVOICE INSTRUCTIONS	WELL TYPE WEL	SERVICE WITHOUT D	OJECT NO.	כודץ, אדו
CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.	785-798-2300	P.O. BOX 466 NESS CITY, KS 67560	SWIFT SERVICES, INC.	KEMII TAYMEN I C:	_		NOICHTING LICED NOTLEA	Put Latch Vous Plust	P.V. Tool + Plus Set	Insert flest stare in Aut	Cement Basket	70	Charer	MILEAGE TIK # 112	DESCRIPTION	Ċ	LI CATEGORY JOB PURPOSE	Spilling the prising the 1)	Caherly - Benyther Country PARISH Crove	CITY, STATE, ZIP CODE
ledges receipt of the materials and services lis	☐ VES ☐ NO ☐ CUSTOMER DID NOT WISH TO RESPOND	WE OPERATED THE COUPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE?	MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY?	OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? WE UNDERSTOOD AND	SURVEY AGREE UNDECIDED DISAGREE			50 10 100 100 100 100 100 100 100 100 10	0 00 5% 10 00	5/2 10 1 ec	3	5/2 in 10 eg	ic l bb	W. W	ату. и/м ату. и/м		WELL PERMIT NO.	ANSI Tocomo		
sted on this ticket.	TOTAL 20163107	89 112 112.8 125/1 125/2	Landing File	13.787 Sec. 20 13.787	PAGE TOTAL] }		200 00 00C	in	1.32	375	(2) (2)	1800 1800 1800 1800	2 2 20	UNIT AMOUNT		RENTEANS - 34 /9/22 6 mb		DATE OWNER	PAGE OF

SWIFT OPERATOR Miden tucks

APPROVAL

Thank You!



TICKET CONTINUATION

	380 1	376	289 292 1	PRICE SECONDARY REFERENCE AC LOC LOC	PO Box 466 Ness City, KS 67560 Off: 785-798-2300
	Flocheck 21 Liquid KCL D-Air	SMD	Assel A Lad 332	NOLL STATE TO STATE THE STATE OF THE STATE O	x 466 (\$ 67560 CUSTOMER Mall Dalling Co
CUBIC FEET PLUS (1955 77)	1000 ord 3 12 3500 cm	340 (35) 16 35 3400 500 10 300	2 8 0 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6	STO ST UNIT AMOUNT OF STATE OF	MELL Copally Broker Hand DATE NO. O. S18%

JOB LC					SWIF	T Seri	pices. Inc. Date 10-18-18 PAGE NO.
CUSTOMI	ER <u>Drillina</u>	Co	WELL NO.) C1	LEASE	i eı	JOB TYPE TICKET NO
CHART NO.	TIME	RATE	VOLUME (BBL) (GAL)	PUMPS		Decounter JRE (PSI)	DESCRIPTION OF OPERATION AND MATERIALS
<u></u>	7300	(BPM)	(BBL) (GAL)	T C	TUBING	CASING	LESCRIPTION OF OPERATION AND MATERIALS
J <u>=11 10</u>	LIC						on location 51/2 15.5#
							RTD-4515
							TP-4515 ST 1 42
							D.U. #59 2175'
-							Cent #2#3#4#5#7#9#11#13#15#58
	0115						Dasket 57
	233						Steat 51/2 15.5# casing in well
	C202	61/2	15			1100	Drop Dall Circulate * Kotate *
	رىرى	61/2	T			400	Tump 15 Hel 19CL Flush
		6/2	24			400	Pump 1000 gal Flocheck 21
	C515	47)	41			400	Pump 5 bbl KCL Flush
	C313	1/2	71		-	300	mix 180 dis FA-2 @ 15,5 ppg
							wrish out Pump + Lines
	0530	6/2	Ø	/ي		1000	Release Litch Down Plug
		61/2	55	V		100	Start Displacement
		6/2	85	1,/		100	Displace w/ Mud
		6/2	105	1		300	Lift Pressure
	0550	6/2	106,5	1./		1000	Max Lift Press we
		1. 1. Jan	10610	- C		1800	Land Latch Down Plug
**	CHC)						Release Pressure & Plug Hold &
	0630	Ø	Ø	- L		1/200	Drop Bomb / wash up truck
	CSCO	F1/2		1		302	Open D.U. Tool - circulate 11/2 hrs
		6/2	20			10	Plus RH (20sks)
,	08,25	41/2	133	V		2/1/1	My KIT (205ks)
	9929	1.2	167.3			<u>الله</u>	Mix 240 ds SMD 14 Fb @ 11.2 pm
					:		wash out Pump + Lines
	C850	61/2	Ø	V		100	Retage Top Plug Start Displacement
		61/2	Ø 20	V		2000	lift Pressure
		61/2	30			LIM	MAT TRESING
		6117	30 50	1		ファ	Circulate Coment to Surface - *40 sks *
***************************************	0900	612	51.7	· ·		1877	T. DI
	•					1000	max lift Pressure Land Top Plus - Close D.U. Tool Release Pressure ATOP Plus Hold *
							THEGS TESSUE ALOP The Hold A
							wash up track
	C945						717 11
							Job Complete Thank You
	<u> </u>		<u> </u>			<u> </u>	Gideon Person Kirby Dave



Uploading recovery &

pressures

Company Inc.

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October 05

2018

DST #1 Formation: Lan E&F Test Interval: 3940 - Total Depth: 3975'

3975'

Time On: 19:07 10/05 Time Off: 04:01 10/06

Time On Bottom: 21:50 10/05 Time Off Bottom: 01:25 10/06

Electronic Volume Estimate:

677'

<u>1st Open</u> Minutes: 5 Current Reading:

5.1" at 5 min

Max Reading: 5.1"

1st Close Minutes: 30 Current Reading:

0" at 30 min

Max Reading: 0"

<u>2nd Open</u> Minutes: 60

Current Reading:

50" at 60 min

Max Reading: 50"

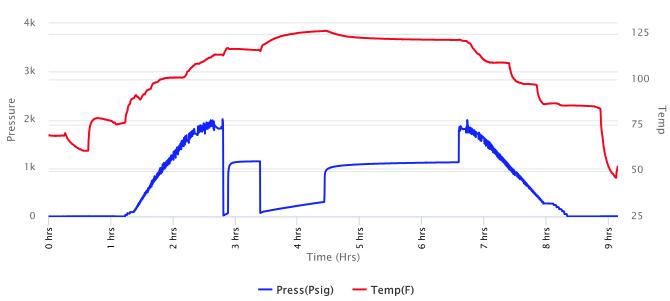
2nd Close Minutes: 120

Current Reading:

0" at 120 min

Max Reading: 0"

Inside Recorder





Uploading recovery &

pressures

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October 05

2018

Formation: Lan E&F Total Depth: 3975' **DST #1** Test Interval: 3940 -

3975'

Time On: 19:07 10/05 Time Off: 04:01 10/06

Time On Bottom: 21:50 10/05 Time Off Bottom: 01:25 10/06

Recovered

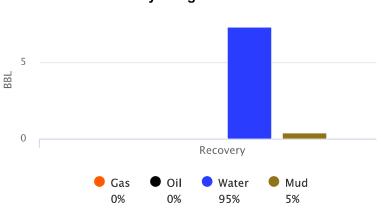
BBLS Description of Fluid Oil % Gas % Mud % <u>Foot</u> Water % 660 7.7205619 SLMCW 0 0 5 95

Total Recovered: 660 ft

Recovery at a glance Reversed Out Total Barrels Recovered: 7.7205619

NO

Initial Hydrostatic Pressure	1821	PSI
Initial Flow	20 to 72	PSI
Initial Closed in Pressure	1143	PSI
Final Flow Pressure	73 to 301	PSI
Final Closed in Pressure	1122	PSI
Final Hydrostatic Pressure	1814	PSI
Temperature	127	°F
Pressure Change Initial	1.8	%
Close / Final Close		





Uploading recovery &

pressures

Company: Mull Drilling Company, Inc

Lease: Coberly-Beougher Unit

#1-29

DST #1

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October

05 2018

Formation: Lan E&F Test Interval: 3940 - Total Depth: 3975' 3975'

Time On: 19:07 10/05 Time Off: 04:01 10/06

Time On Bottom: 21:50 10/05 Time Off Bottom: 01:25 10/06

BUCKET MEASUREMENT:

1st Open: Built to 5.1" 1st Close: No Blow 2nd Open: BOB in 13 min

2nd Close: No Blow

REMARKS:

Tool was plugged with cuttings

Measured RW: .344 @ 50 degrees °F

RW at Formation Temp: 0.146 @ 127 °F

Chlorides: 43,000 ppm



Uploading recovery &

pressures

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE

October 05

2018

Formation: Lan E&F Total Depth: 3975' **DST #1** Test Interval: 3940 -

3975'

Time On: 19:07 10/05 Time Off: 04:01 10/06

Time On Bottom: 21:50 10/05 Time Off Bottom: 01:25 10/06

Down Hole Makeup

Heads Up: 4.99 FT Packer 1: 3935 FT

Drill Pipe: 3732.91 FT Packer 2: 3940 FT

ID-3 1/2 Top Recorder: 3924.42 FT

Weight Pipe: FΤ **Bottom Recorder:** 3942 FT

ID-2 7/8

Well Bore Size: 7 7/8 Collars: 179.51 FT

ID-2 1/4 Surface Choke:

Bottom Choke: 5/8" Test Tool: 33.57 FT

ID-3 1/2-FH

Jars

Safety Joint

Total Anchor: 35

Anchor Makeup

1 FT

Packer Sub:

FT Perforations: (top):

4 1/2-FH

Change Over: FT

Drill Pipe: (in anchor):

ID-3 1/2

Change Over: FT

Perforations: (below): 34 FT

4 1/2-FH



Uploading recovery &

pressures

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

<u>DATE</u> October

05 2018 DST #1 Formation: Lan E&F Test Interval: 3940 - Total Depth: 3975'

3975'

Time On: 19:07 10/05 Time Off: 04:01 10/06

Time On Bottom: 21:50 10/05 Time Off Bottom: 01:25 10/06

Mud Properties

Mud Type: Chemical Weight: 9.0 Viscosity: 60 Filtrate: 6.0 Chlorides: 2000 ppm



Uploading recovery &

pressures

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October 05 2018 DST #1 Formation: Lan E&F Test Interval: 3940 - Total Depth: 3975'

3975'

Time On: 19:07 10/05 Time Off: 04:01 10/06

Time On Bottom: 21:50 10/05 Time Off Bottom: 01:25 10/06

Gas Volume Report

1st Open 2nd Open

Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D
------	---------	-----	-------	--	------	---------	-----	-------



Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October

06 2018

DST #2 Formation

Formation: LAN H,I,J

Test Interval: 4020 -

Total Depth: 4120'

4120'

Time On: 19:24 10/06 Time

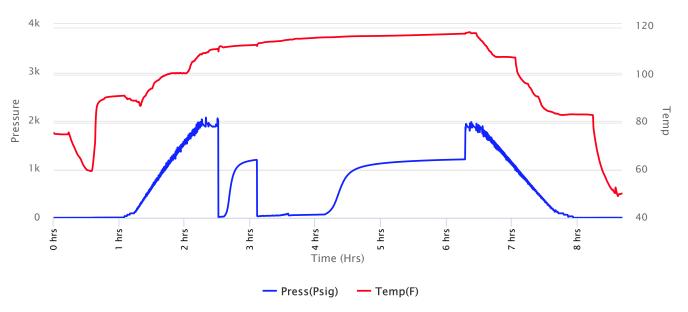
Time Off: 03:51 10/07

Time On Bottom: 21:50 10/06 Time Off Bottom: 01:25 10/07

Electronic Volume Estimate: 295' 1st Open Minutes: 5 Current Reading: 1.7" at 5 min Max Reading: 1.7" 1st Close Minutes: 30 Current Reading: 0" at 30 min Max Reading: 0"

2nd Open Minutes: 60 Current Reading: 14.1" at 60 min Max Reading: 14.1" 2nd Close Minutes: 120 Current Reading: 0" at 120 min Max Reading: 1.2"

Inside Recorder





Company Inc.

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE	
October	
06	
2018	

DST #2	Formation: LAN	Test Interval: 4020 -	Total Depth: 4120'
	H,I,J	4120'	•

Time On: 19:24 10/06 Time Off: 03:51 10/07

Time On Bottom: 21:50 10/06 Time Off Bottom: 01:25 10/07

Recovered

<u>Foot</u>	<u>BBLS</u>	Description of Fluid	<u>Gas %</u>	<u>Oil %</u>	Water %	Mud %
200	2.2919619	G	100	0	0	0
10	0.0492	SLGCO	10	90	0	0
110	0.5412	SLWCSLGCHMCO	10	50	5	35

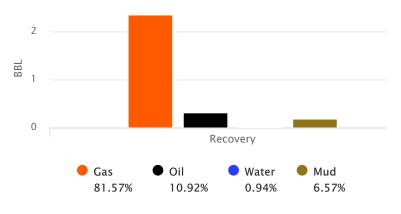
Total Recovered: 320 ft

Total Barrels Recovered: 2.8823619

Reversed Out
NO

Initial Hydrostatic Pressure	1883	PSI
Initial Flow	17 to 29	PSI
Initial Closed in Pressure	1198	PSI
Final Flow Pressure	35 to 69	PSI
Final Closed in Pressure	1207	PSI
Final Hydrostatic Pressure	1872	PSI
Temperature	118	°F
Pressure Change Initial	0.0	%
Close / Final Close		

Recovery at a glance





DATE

October

06

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DST #2 Formation: LAN Test Interval: 4020 - Total Depth: 4120'

H,I,J 4120'

Time On: 19:24 10/06 Time Off: 03:51 10/07

Time On Bottom: 21:50 10/06 Time Off Bottom: 01:25 10/07

2018 BUCKET MEASUREMENT:

1st Open: Built to 1.7" 1st Close: No Blow

2nd Open: BOB in 48 min 2nd Close: Built to 1.2"

REMARKS:

Tool Sample: 5% Gas 65% Oil 5% Water 25% Mud

Gravity: 37.1 @ 60 °F



Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

DST #2

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October 06

2018

Formation: LAN H,I,J

Test Interval: 4020 -

Total Depth: 4120'

4120'

Time On: 19:24 10/06 Time Off: 03:51 10/07

Time On Bottom: 21:50 10/06 Time Off Bottom: 01:25 10/07

Down Hole Makeup

Heads Up: 19.75 FT Packer 1: 4014.5 FT

Drill Pipe: 3827.17 FT Packer 2: 4019.5 FT

1"

ID-3 1/2

Top Recorder: 4003.92 FT

Weight Pipe: FT 4118 FT

Bottom Recorder:

ID-2 7/8

Collars: 179.51 FT Well Bore Size: 7 7/8

ID-2 1/4

Surface Choke:

Test Tool: 33.57 FT **Bottom Choke:** 5/8"

ID-3 1/2-FH

Jars

Safety Joint

Total Anchor: 100.5

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 32 FT

4 1/2-FH

Change Over: 1 FT

Drill Pipe: (in anchor): 62.5 FT

ID-3 1/2

Change Over: 1 FT

3 FT

4 1/2-FH

Perforations: (below):



DATE

October

06

2018

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DST #2 Formation: LAN Test Interval: 4020 - Total Depth: 4120'

H,I,J 4120'

Time On: 19:24 10/06 Time Off: 03:51 10/07

Time On Bottom: 21:50 10/06 Time Off Bottom: 01:25 10/07

Mud Properties

Mud Type: Chemical Weight: 9.1 Viscosity: 60 Filtrate: 6.4 Chlorides: 2000 ppm

10/8



Operation:

Test Complete

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October 07

2018

DST #3 Formation: Lan K&L Test Interval: 4095 -Total Depth: 4165' 4165

Time On: 14:00 10/07 Time Off: 22:47 10/07

Time On Bottom: 16:32 10/07 Time Off Bottom: 20:07 10/07

Electronic Volume Estimate: 1465'

1st Open Minutes: 5 **Current Reading:**

7" at 5 min

Max Reading: 7"

1st Close Minutes: 30 Current Reading:

.5" at 30 min

Max Reading: .5"

2nd Open Minutes: 60 **Current Reading:**

118.4" at 60 min

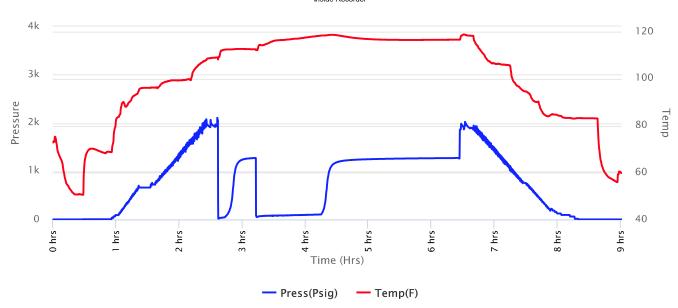
Max Reading: 118.4"

2nd Close Minutes: 120 Current Reading:

3.4" at 120 min

Max Reading: 3.4"

Inside Recorder





Test Complete

Company: Mull Drilling Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October 07 2018

DST #3 Formation: Lan K&L Test Interval: 4095 -Total Depth: 4165'

4165'

Time On: 14:00 10/07 Time Off: 22:47 10/07 Time On Bottom: 16:32 10/07 Time Off Bottom: 20:07 10/07

Recovered

<u>Foot</u>	BBLS	Description of Fluid	<u>Gas %</u>	<u>Oil %</u>	Water %	<u>Mud %</u>
1188	16.90524	G	100	0	0	0
80	1.1384	HGCO	40	60	0	0
180	0.8831892	SLWCMCHGCO	30	40	5	25

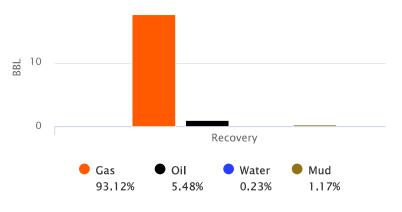
Total Recovered: 1448 ft

Total Barrels Recovered: 18,9268292

Reversed Out
NO

Initial Hydrostatic Pressure	1933	PSI
Initial Flow	18 to 45	PSI
Initial Closed in Pressure	1275	PSI
Final Flow Pressure	51 to 105	PSI
Final Closed in Pressure	1275	PSI
Final Hydrostatic Pressure	1933	PSI
Temperature	119	°F
Pressure Change Initial	0.0	%
Close / Final Close		

Recovery at a glance





Test Complete

Company: Mull Drilling Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October

07

2018

DST #3 Formation: Lan K&L Test Interval: 4095 -Total Depth: 4165' 4165'

Time On: 14:00 10/07 Time Off: 22:47 10/07

Time On Bottom: 16:32 10/07 Time Off Bottom: 20:07 10/07

BUCKET MEASUREMENT:

1st Open: Built to 7" 1st Close: Built to .5" 2nd Open: BOB in 4 min 2nd Close: Built to 3.4"

REMARKS:

Tool Sample: 15% Gas 30% Oil 5% Water 50% Mud

Gravity: 41 @ 60 °F



Test Complete

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

7 7/8

DATE October

07 2018 DST #3 Formation: Lan K&L Test Interval: 4095 - Total Depth: 4165'

4165'

Well Bore Size:

Time On: 14:00 10/07 Time Off: 22:47 10/07

Time On Bottom: 16:32 10/07 Time Off Bottom: 20:07 10/07

Down Hole Makeup

Drill Pipe: 3890.49 FT **Packer 2:** 4094.77 FT

ID-3 1/2 Top Recorder: 4079.19 FT

Weight Pipe: FT Bottom Recorder: 4163 FT

ID-2 7/8

Collars: 179.51 FT

ID-2 1/4

Surface Choke: 1"

Test Tool: 33.57 FT Bottom Choke: 5/8"

ID-3 1/2-FH Jars

Total Anchor: 70.23

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 33 FT

Safety Joint

4 1/2-FH

Change Over: 1 FT

Drill Pipe: (in anchor): 31.23 FT

ID-3 1/2

Change Over: 1 FT

Perforations: (below): 3 FT

4 1/2-FH



Test Complete

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October

07 2018 **DST #3** Formation: Lan K&L Test Interval: 4095 -Total Depth: 4165'

4165'

Time On: 14:00 10/07 Time Off: 22:47 10/07

Time On Bottom: 16:32 10/07 Time Off Bottom: 20:07 10/07

Mud Properties

Mud Type: Chemical Weight: 9.0 Viscosity: 59 Filtrate: 6.2 Chlorides: 2000 ppm



Test Complete

Company: Mull Drilling

Company, Inc

Lease: Coberly-Beougher Unit

#1-29

SEC: 29 TWN: 13S RNG: 27W

County: GOVE State: Kansas

Drilling Contractor: WW Drilling, LLC -

Rig 12

Elevation: 2675 GL Field Name: Wildcat Pool: WILDCAT Job Number: 248

DATE October

October **07** 2018

DST #3 Formation: Lan K&L Test Interval: 4095 - Total Depth: 4165'

4165'

Time On Bottom: 16:32 10/07 Time Off Bottom: 20:07 10/07

Gas Volume Report

1st Open 2nd Open

|--|

KEVIN L. KESSLER CONSULTING PETROLEUM GEOLOGIST (316) 522 - 7338 **ELEVATION** OPERATOR: MULL DRILLING CO. INC. LEASE : COBERLY-BEOUGHER UNIT **KB**: 2683' WELL #: 1-29 LOCATION: 2195' FNL & 3' FWL GL: 2675' TWP: 13 S RGE: 27 W SEC: 29 MEASURMENTS FROM: COUNTY : GOVE STATE : KANSAS KB CONTRACTOR: W W DRILLING RIG #12 CASING RECORD: SURFACE: COMM: 10 - 01 - 2018 COMP: 10 - 16 - 2018 8 5/8" @ 221' LTD: 4515 *** RTD: 4525 PRODUCTION: GEOLOGICAL SUPERVISION FROM: 3600' TO: RTD 5.5" @ 4525' SAMPLES SAVED FROM: 3600' TO: RTD SAMPLE TOP DATUM TOP LOG DATUM COMP. FORMATION: **ELECTRICAL SURVEYS:** DIL 3836 HEEBNER - 1153 + 10 CNL/CDL 3876 LANSING - 1193 +08MICRO +08STARK 4103 - 1420 SONIC BASE/KC 4156 +07- 1473 FORT SCOTT - 1681 4364 + 06 CHEROKEE 4388 - 1705 +08MISSISSIPPI +044460 - 1777 REFERENCE WELL FOR STRUCTURAL COMPARISON: GEAR PET. # 1-29 WAKEFIELD 29-13S-27W GOVE CO. KS. 3600 -LOG MEASURMENTS ARE 10' SHALLOW | ODRILLING MEASURMENTS DUE TO LINE TREICH DIST'S AND STRAP WERE WITHIN TS FEET. AS LOG WAS HULLED UP BRIKON ON SISTANTLY DECREASED TO 0 FEET AT SURFACE PIPE LST: CRM - WHT - TAN FXTAL SUBCHKY -CHKY ARENACEOUS IN PART SLI FOSS FR AMT GRAY SILTY SHALE NO VIS. 3650 -POR. NSO SHALE: GRAY SILTY SANDY NO VIS. POR.NSO LST: CRM - GRAY FXTAL SUBCHKY -DNSE SLI FOSS. MINOR GRAY SHALE NO VIS. POR. NSO 3700 -LST: CRM - GRAY FXTAL ARENACEOUS IN PART SLI FOSS NO VIS. POR. NSO SHALE: BLK CARB. W/ LST. A. A. NO VIS. POR. NSO LST: CRM - TAN - BRN FXTAL SUBCHKY -CHKY AREN. IN PART MINOR FOSS. OOLITIC IN PART PR VIS. INTERPRT. POR. NSO 3750 -LST: CRM - TAN FXTAL SOFT CHKY COLITIC AREN. IN PART NO VIS. POR. NSO LST: CRM - GAY FXTAL SUBCHKY - DNSE SLI FOSS, MINOR OOLITES AREN. IN PART FR AMT. GRAY SILTY SHALE NO VIS. POR. NSO LST; A. A. NSO 3800 -LST: CRM - GRAY A . A ABUND GRAY -DRK GRAY CALC. SHALE NO VIS. POR. NSO LST: CRM - TAN FXTAL SOFT CHKY FLAGGY IN PART SLI FOSS. FR AMT. GRAY SHALE NO VIS. POR. NSO HEEBNER 3836 (- 1 153 SHALE: BLK CARB. W/ DNSE MOTTLED LST. NO VIS. POR. NSO SHALE: GRAY CALC. NO VIS. POR. NSO 3850 -CHECK @ MII 823 VIS WI LST: WHT - CRM FXTAL SUBCHKY -DNSE CHERTY IN PART NO VIS. POR. NSO ANSING 3876 (-1193) LST: WHT - CRM FXTAL MOST DNSE HARD SLI CHERTY W/ WHT - GRAY FRESH CHERT SLI FOSS NO VIS. POR. NSO LST: WHT - CRM FXTAL SUBCHKY -DNSE OOLITIC SLI FOSS. FR INTRPRT. POR. NSO 3900 -SHALE: GRAY CALC. NO VIS. POR. NSO LST: WHT - CRM FXTAL DNSR BLOCKY NO VIS. POR. NSO SHALE: GRAY SILTY NO VIS POR NSO LST: CRM - GRAY FXTAL DNSE SLI FOSS. NO VIS. POR. NSO SHALE: GRAY - DRK GRAY CALC. NO VIS. POR. NSO 3950 MUDICHECK @ 3950 DST LST: CRM - GRAY - WHT FXTAL SUBCHKY - MOSTLY DNSE FOSS. IN PART NO VIS. POR. NSO W # DST # 1 (3940 -975) REC 660. 660! SMCV LST: WHT - CRM FXTAL SUBCHKY FOSS. TSIP 1143# FFP 73 - 301# SSFO FR ODOR SCATT MED BRN SUBSAT - SAT STN PR - FR PINPOINT & F\$IF 1122# VUGGY POR. SHALE: GRAY SILTY W/ FR AMT FLAGGY BRITTLE LST. CRM - GRAY NO VIS. POR. LST: WHT - CRM - GRAY FXTAL SUBCHY - DNSE FOSS. IN PART NO VIS. POR. NSO LST: A. A. NO VIS POR. NSO 4000 -SHALE: GRAY - DRK GRAY NSO SHALE: BLK CARB, NSO LST; CRM - WHT FXTAL SUBCHKY -DST # 2 (4020 - 4120) DNSE DOLOMITIC IN PART NSFO GD REC 2001 GIP ODOR 1 - 2 PCS W/ SPTY - SUBSAT MED 120' SG&WCHMCO 59% BRN STN PR INXTAL POR. 17 - 29# ISIP 1198# FFP 35 - 697 LST: CRM - GRAY FXTAL DNSE BLOCKY SLI FOSS. SSFO FR ODOR FEW PCS W/ SUBSAT LT BRN STN PR VIS. POR. LST: A. A. NO VIS. POR. NSO 4050 MUD CHECK@ 4050 VIS WT LST: CRM - WHITE FXTAL MOST DNSE HARD NO VIS. POR. NSO S LST: WHT - CRM - GRAY FXTAL SUBCHKY - DNSE FOSS. IN PART 1 - 2 PCS W/ SPTY LT BRN STN VRY SLI ODOR NSFO VRY PR. VUGGY POR. LST: CRM - GRAY OOLITIC FR - GD SFO GASSY SCATT MED BRN SAT STN FR INTRPRT. POR. 4100 -STARK 4103 (- 1420) SHALE: GRAY - DRK GRAY CALC. NO VIS. POR. NSO DST # 3 (4095 - 4165) LST: CRM - GRAY FXTAL MOST DNSE 1188 GIF MINOR OOLITES RARE FOSS. SSFO FNT 260' SLIW& GCMO 40%C ODOR FEW PCS W/ SPTY - SUBSAT LT 18 - 44# BRN STN PR - FR VUGGY & INTERPRT. ISIP 1276# POR. FFP 51 - 105# # LST: CRM - WHT FXTAL MOST HARD BRITTLE FOSS IN PART VSSFO FNT ODOR CPL PCS W/ DRK BRN - BLK SUBSAT STN PR VUGGY POR. LST: WHT - CRM FXTAL FOSS IN PART SSFO FNT - FR ODOR SCATT MED BRN -4150 -BLK SAT STN PR INTRPRT. POR. BASE / KC 4156 (-1473) MUL CHECK @ 150 SHALE GRAY NSO W SHALE: GRAY - BRN SILTY NO VIS. POR. LST: CRM - TAN FXTAL DNSE HARD NO VIS. POR. NSO LST: CRM - TAN FXTAL DNSE HARD NO VIS. POR. NSO 4200 SHALE: GRAY - DRK GRAY - BLK CARB. NO VIS. POR. NSO SHALE: A. A. NO VIS. POR. NSO SHALE: DRK GRAY - BLK NSO LST: CRM - TAN - BRN FXTAL SUBCHKY -DNSE RARE FOSS, NO VIS. POR. NSO MII CHECK @ 250' VIS SHALE: BROWN ARGILACEOUS EARTHY WI NO VIS. POR. NSO 4250 -LST: CRM - GRAY FXTAL MOST DNSE MICRITIC IN PART NO VIS. POR. NSO LST: A. A. W/ FR AMT BRN EATHY ARGILACEOUS SHALE NO VIS. POR. NSO LST: CRM - GRAY FXTAL DNSE RARE FOSS BRN SILTY SHALE NO VIS. POR. NSO A. A. MOSTLY DNSE NO VIS. POR. NSO LST: CRM - GRAY DNSE BLOCKY RARE FOSS. MICRITIC IN PART NO VIS. POR. 4300 NSO SHALE: GRAY CALC. NSO LST: CRM - GRAY MOST DNSE SLI FOSS. MINOR OOLITES NO VIS. POR. NSO LST: CRM - GRAY FXTAL SUBCHKY -MOSTLY DNSE SLI FOSS, NO VIS. POR. LST; A. A. NO VIS. POR. NSO 4350 -MUD CHECK@ 350 VIS WI TT 4364 (1681 SHALE: BLK CARB, NO VIS. POR. NSO SC 0 LST: CRM - TAN FXTAL DNSE HARD OOLITIC IN PART NO VIS. POR. NSO LST: CRM - GRAY FXTAL MOST DNSE 0 RARE FOSS. NO VIS. POR. NSO CHEROKEE 4388 1705 LST: CRM - GRAY FXTAL DNSE SLI FOSS. 4400 FR AMT BLK CARB. SHALE NO VIS. POR. NSO SHALE: GRAY - DRK GRAY - BLK W/ INTERBEDDED GRAY FLAGGY DNSE ST, NO VIS. POR. NS A. A. NO VIS. POR. NSO SAND: QTZ. FN GRN WELL SORTED FRIABLE - SUBFRIABLE CLUSTERS SLI MICACEOUS PRINTRGRAN, POR. NSO CONGLOMERATE SHALE: RED - BRN YELLOW ROTTEN INCOMPETENT NO 4450 VIS POR NSO MISSISSIPPLAA607 DOLOMITE: CRM - GRAY FXTAL -MICRXTAL SUCROSIC RARE CHERT NO VIS VIS. POR. NSO WI

MUL CHECK @ 450°
VIS. 53
WF 9.3

STRUCTURAL COMPARISON IS WITH DRILLING MEASURMENTS DUE TO LINE STRETCH DURRING LOGGING

KEVIN L. KESSLER

DOLOMITE: CRM - GRAY FXTAL
SUCROSIC HARD TIGHT NO VIS. POR.
NSO

DOLOMITE: A. A. NO VIS. POR. NSO

DOLOMITE: CRM - GRAY FXTAL DNSE
HARD SUCROSIC NO VIS. POR. NSO

DOLOMITE: A. A. NO VIS. POR. NSO

COMMENTS:

5 1/2" PROD. CASING WAS SET TO FURTHER EVALUATE THIS WELL