

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

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: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East 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 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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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RITCHIE

EXPLORATION, INC.
Wichita, Kansas

#1 Stucky-Dirks

290' FNL & 1,502' FEL

60' N & 148' E of NE NW NE Section 33-19S-30W

Lane County, Kansas

API# 15-101-22657-0000

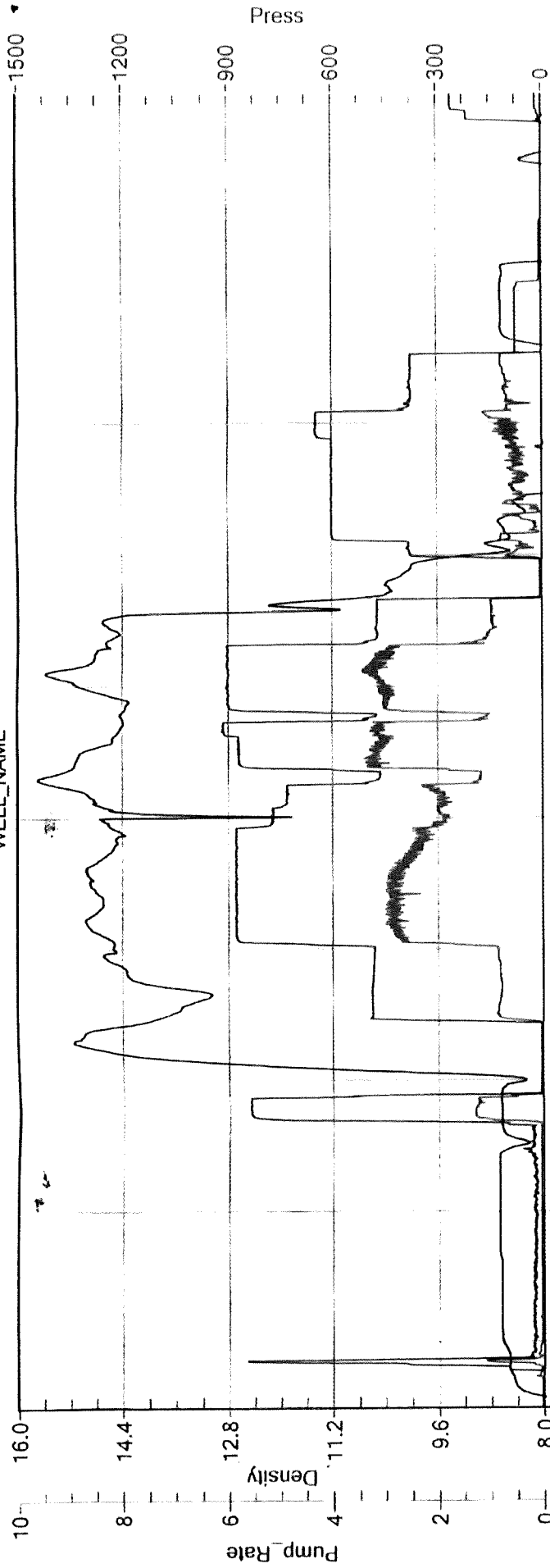
Elevation: GL: 2,905', KB: 2,910'

Sample Tops

Anhydrite	2229	+681
B/Anhydrite	2247	+663
Stotler	3560	-650
Heebner	3938	-1028
Toronto	3952	-1042
Lansing	3984	-1074
Muncie	4164	-1254
Stark	4270	-1360
Hushpuckney	4306	-1396
BKC	4347	-1437
Marmaton	4381	-1471
Altamont	4395	-1485
Pawnee	4474	-1564
Myrick	4503	-1593
Ft Scott	4517	-1607
Cherokee	4536	-1626
Johnson	4574	-1664
Mississippi	4600	-1690
Spergen	4641	-1731
RTD	4740	-1830

Ritchie

WELL_NAME



H2O AHEAD
CEMENT 14.8 PPG

DISPLACE H2O

SHUT IN

12 16 20 24 28 32 36 40 44 48

Job Started On: 09/13/2021 @ 8:20:45 AM



785-953-0222

TICKET NUMBER 1345 K-C
LOCATION Hypocenter 143
FOREMAN Walt Dirks
Jason Amusson

FIELD TICKET & TREATMENT REPORT CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
9-23-21		Stucky-Dirks #1	3.3	195	30W	Lama	
CUSTOMER		Awy		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS		8-South		802-8520			
CITY		1-West		801-8520	JONAS		
STATE		Si S			Cory D.		
ZIP CODE							

JOB TYPE Production HOLE SIZE 7 7/8 HOLE DEPTH 4940' CASING SIZE & WEIGHT 5 1/2 15.5
 CASING DEPTH 417.37 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 14.2 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 21'
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety Meeting, Rig up on Martin #104, run casing to Bottom
Circ Hr, Pump 500gal Mud Flush, mix 175 sks class A, 10% salt 5# Kalsol
15% CDI-26, 2% bel, clear Pump & Lines, release Plug & Displace 113' BPL's to
@ 750 #, Landcol Plug @ 1300#, released Pressure, Float Hckl

30 sks in R.H.

Thank You
Walt & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
	1	PUMP CHARGE	2,800.00	2,800.00
	45	MILEAGE	7.15	321.75
	9.52	Ton Mileage Delivery	79.00	749.70
	175 sks	Class A	20.00	3,500.00
	30 sks	high weight Blend Y	16.00	480.00
	850 #	Salt	.75	637.50
	875 #	Kalsol	.50	437.50
	300 #	bel	.50	150.00
	82 #	CDI-26	9.00	738.00
	500gal	Mud Flush	.65	325.00
	1	5 1/2" RFV Float Valve	585.00	585.00
	1	5 1/2" Latch down assembly	400.00	400.00
	7	5 1/2" Torque Centralizers	110.00	770.00
	3	5 1/2" Baskets	385.00	1,155.00
	1	5 1/2" Port Collar	2,850.00	2,850.00
		15,899.45		
		Less 25% - 3,974.86		
		11,924.59		
		SALES TAX		
		ESTIMATED TOTAL		

AUTHORIZATION [Signature] TITLE _____ DATE _____

I acknowledge that the payments 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.



CHARGE TO: RECHARGE EXPANSION
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET 33912

PAGE 1 OF 1

SERVICE LOCATIONS
 1. NESS GSY, KS
 2.
 3.
 4.

WELL/PROJECT NO. #1
 TICKET TYPE SERVICE SALES
 CONTRACTOR HSZ
 WELL TYPE Oil
 WELL CATEGORY DEVELOPMENT
 JOB PURPOSE CEMENT FOOT COLLAR

LEASE Stucky Drills
 COUNTY/PARISH LANE
 RIG NAME/NO.
 STATE KS
 SHIPPED VIA CT
 DELIVERED TO LOCATED
 DATE 9-29-2021
 ORDER NO.
 OWNER Same

WELL LOCATION S/Any, KS

INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/PART NUMBER	ACCOUNTING		DESCRIPTION	QTY.		UNIT PRICE		AMOUNT
		LOC	ACCT		U/M	U/M	QTY.	U/M	
575		1		MILEAGE # 115	45	mi		6.00	270.00
576D		1		PUMP CHARGE - FOOT COLLAR	1	JOB	2183 FT	1500.00	1500.00
275		1		CONDENSED HOUS	2	SYS		35.00	70.00
329-8		1		60/40 PEZMAX (8" STEEL)	365	SYS		12.00	4380.00
276		1		FLOCCLE	125	lbs		3.00	375.00
290		1		D-ADR	5	GAL		42.00	210.00
581		1		SERVICE CHARGE CEMENT	470	lbs		2.00	940.00
583		1		DRAINAGE	4105	ft	923.72 TM	1.00	923.72

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to: **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.
 X.

DATE SIGNED 9-29-2021 TIME SIGNED 1330 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY
 OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?
 WE UNDERSTOOD AND MET YOUR NEEDS?
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?
 ARE YOU SATISFIED WITH OUR SERVICE?
 YES NO
 CUSTOMER DID NOT WISH TO RESPOND

AGREE
 YES NO

UNDISCORDED
 YES NO

DISAGREE
 YES NO

PAGE TOTAL 8668.72

TOTAL 9246.35

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 SWIFT OPERATOR Wayne Wilson APPROVAL
 Thank You!

SWIFT Services, Inc.

JOB LOG

CUSTOMER: Ritchie Exploration

WELL NO. #1

LEASE: STUCKY DEEPS

JOB TYPE: Cement
Part course

TICKET NO. 33912

DATE

9-29-2021

PAGE NO. 1

CHART NO.	TIME	RATE (BPM)	VOLUME (BBU/GAL)	PUMPS	T	C	TUBING	CASING	PRESSURE (PSI)	DESCRIPTION OF OPERATION AND MATERIALS	
										ON LOCATION	
1330										ON LOCATION	
										TUBING - 2 3/8	
										CASING - 5 1/2	
										Part course @ 2183	
1425										Part Test - HELL	
1430	3		3					350		Open Port Course - Int Rate	
1435	4		120					400		Max Cement 365 SPS 60/40 Pz2mix 8% Cel	
1505	4		7 1/2					550		Displace Cement	
1515								1000		Close Port Course - Part Test - HELL	
1530	4		25					400		Displaced 20 SPS Cement to Part	
										RUN 5 SPS - COMPLETE CLEAN	
										WASH TRUCK	
										Pull Tubing	
1630										Part Course - HELL - SHUT IN	
1700										JOB COMPLETE	

Thank You
Wade, Preston, Isaac



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
16
2021

DST #1 **Formation: Lansing "J&K"** **Test Interval: 4259 - 4304'** **Total Depth: 4304'**
Time On: 02:39 09/16 Time Off: 12:55 09/16
Time On Bottom: 07:45 09/16 Time Off Bottom: 10:45 09/16

Electronic Volume Estimate:
391'

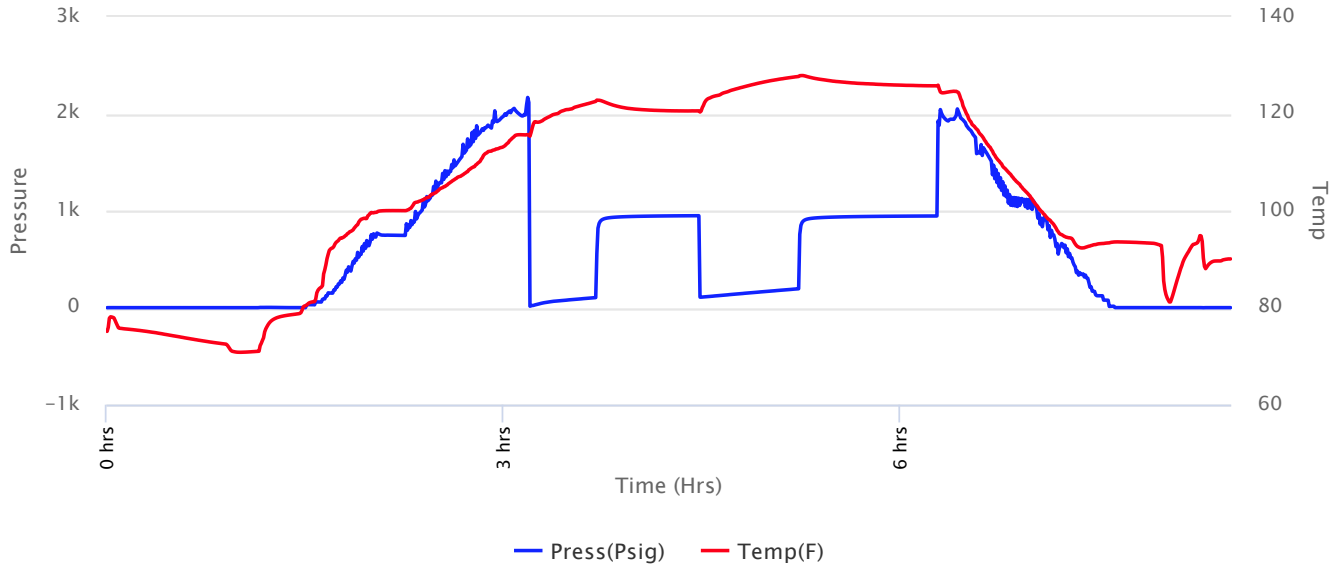
1st Open
Minutes: 30
Current Reading: 12.2" at 30 min
Max Reading: 12.2"

1st Close
Minutes: 45
Current Reading: 0" at 45 min
Max Reading: 0"

2nd Open
Minutes: 45
Current Reading: 16.1" at 45 min
Max Reading: 16.1"

2nd Close
Minutes: 60
Current Reading: 0" at 60 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
16
2021

DST #1 **Formation: Lansing "J&K"** **Test Interval: 4259 - 4304'** **Total Depth: 4304'**
Time On: 02:39 09/16 Time Off: 12:55 09/16
Time On Bottom: 07:45 09/16 Time Off Bottom: 10:45 09/16

Recovered

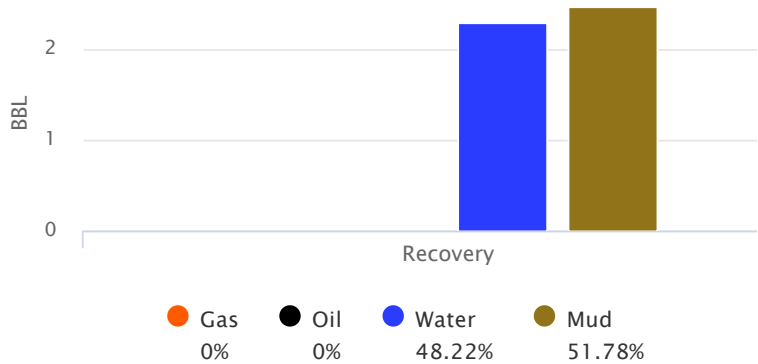
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
105	1.49415	SLWCM	0	0	9	91
120	1.7076	HWCM	0	0	39	61
185	1.5562209	SLMCW	0	0	96	4

Total Recovered: 410 ft
Total Barrels Recovered: 4.7579709

Reversed Out
NO

Initial Hydrostatic Pressure	1988	PSI
Initial Flow	16 to 105	PSI
Initial Closed in Pressure	949	PSI
Final Flow Pressure	109 to 196	PSI
Final Closed in Pressure	946	PSI
Final Hydrostatic Pressure	1981	PSI
Temperature	128	°F
Pressure Change Initial Close / Final Close	0.3	%

Recovery at a glance



GIP cubic foot volume: 0



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
16
2021

DST #1 **Formation: Lansing "J&K"** **Test Interval: 4259 - 4304'** **Total Depth: 4304'**
Time On: 02:39 09/16 Time Off: 12:55 09/16
Time On Bottom: 07:45 09/16 Time Off Bottom: 10:45 09/16

Down Hole Makeup

Heads Up: 7.12999999999999 FT	Packer 1: 4253.81 FT
Drill Pipe: 4117.76 FT <i>ID-3 1/2</i>	Packer 2: 4258.81 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4243.23 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4297 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 45.19	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.19 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 8 FT <i>4 1/2-FH</i>	



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
16
2021

DST #1 Formation: Lansing "J&K" Test Interval: 4259 - 4304' Total Depth: 4304'
Time On: 02:39 09/16 Time Off: 12:55 09/16
Time On Bottom: 07:45 09/16 Time Off Bottom: 10:45 09/16

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
17
2021

DST #2 **Formation: Altamont "B"** **Test Interval: 4413 - 4444'** **Total Depth: 4444'**
Time On: 06:20 09/17 Time Off: 14:07 09/17
Time On Bottom: 08:16 09/17 Time Off Bottom: 11:16 09/17

Electronic Volume Estimate:
1817'

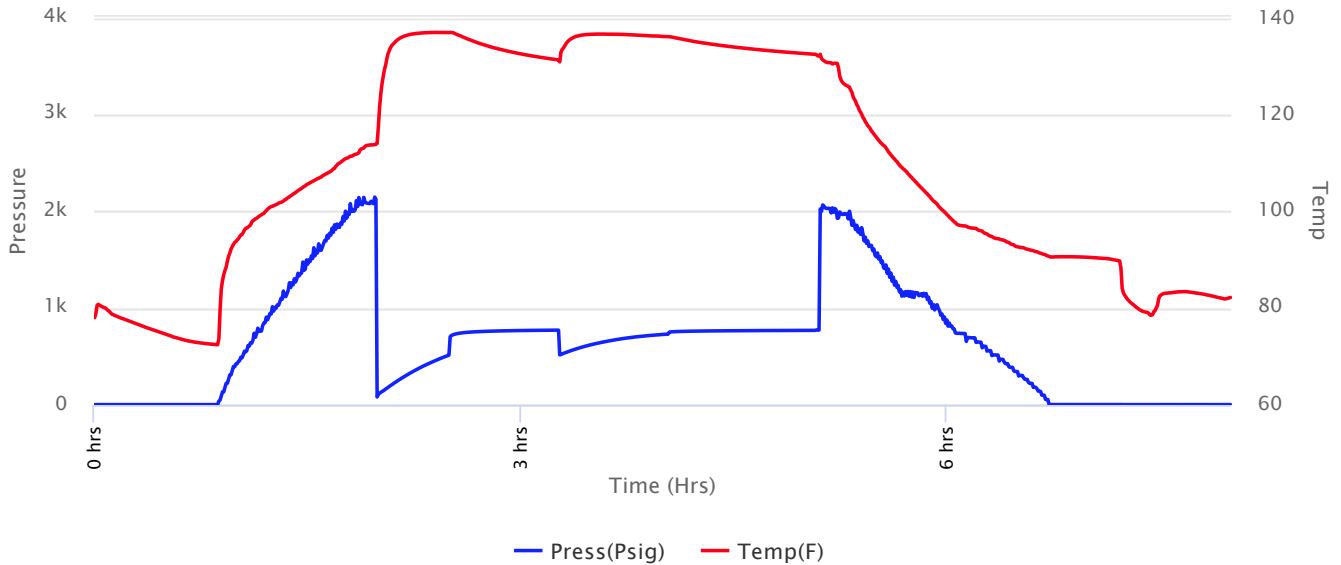
1st Open
Minutes: 30
Current Reading: 106.3" at 30 min
Max Reading: 106.3"

1st Close
Minutes: 45
Current Reading: 0" at 45 min
Max Reading: 0"

2nd Open
Minutes: 45
Current Reading: 58.2" at 45 min
Max Reading: 58.2"

2nd Close
Minutes: 60
Current Reading: 0" at 60 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
 County: LANE
 State: Kansas
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
 Elevation: 2907 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 512
 API #: 15-101-22657

Operation:
 Uploading recovery & pressures

DATE
 September
17
 2021

DST #2 Formation: Altamont "B" Test Interval: 4413 - 4444' Total Depth: 4444'
 Time On: 06:20 09/17 Time Off: 14:07 09/17
 Time On Bottom: 08:16 09/17 Time Off Bottom: 11:16 09/17

Recovered

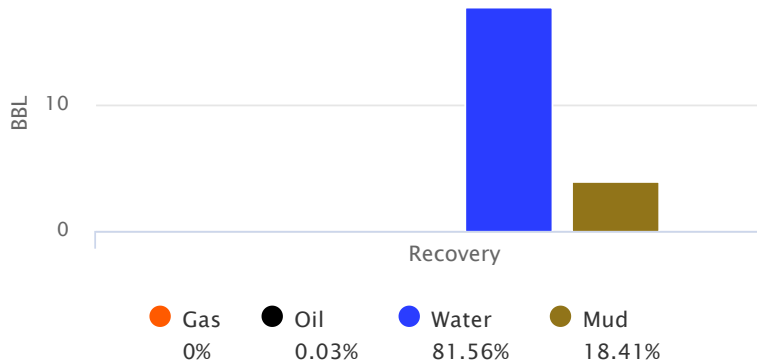
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
475	6.75925	HWCM (trace O)	0	.1	43.9	56
820	11.6686	SLMCW	0	0	99	1
245	2.9686209	W	0	0	100	0
60	0.2952	HMCW	0	0	69	31

Total Recovered: 1600 ft
 Total Barrels Recovered: 21.6916709

**Reversed Out
 NO**

Initial Hydrostatic Pressure	2074	PSI
Initial Flow	80 to 511	PSI
Initial Closed in Pressure	769	PSI
Final Flow Pressure	514 to 728	PSI
Final Closed in Pressure	769	PSI
Final Hydrostatic Pressure	2060	PSI
Temperature	138	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
17
2021

DST #2 **Formation: Altamont "B"** **Test Interval: 4413 - 4444'** **Total Depth: 4444'**
Time On: 06:20 09/17 Time Off: 14:07 09/17
Time On Bottom: 08:16 09/17 Time Off Bottom: 11:16 09/17

Down Hole Makeup

Heads Up: 9.85000000000004 FT	Packer 1: 4408 FT
Drill Pipe: 4274.67 FT <i>ID-3 1/2</i>	Packer 2: 4413 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4397.42 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4415 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 31	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 30 FT <i>4 1/2-FH</i>	



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
17
2021

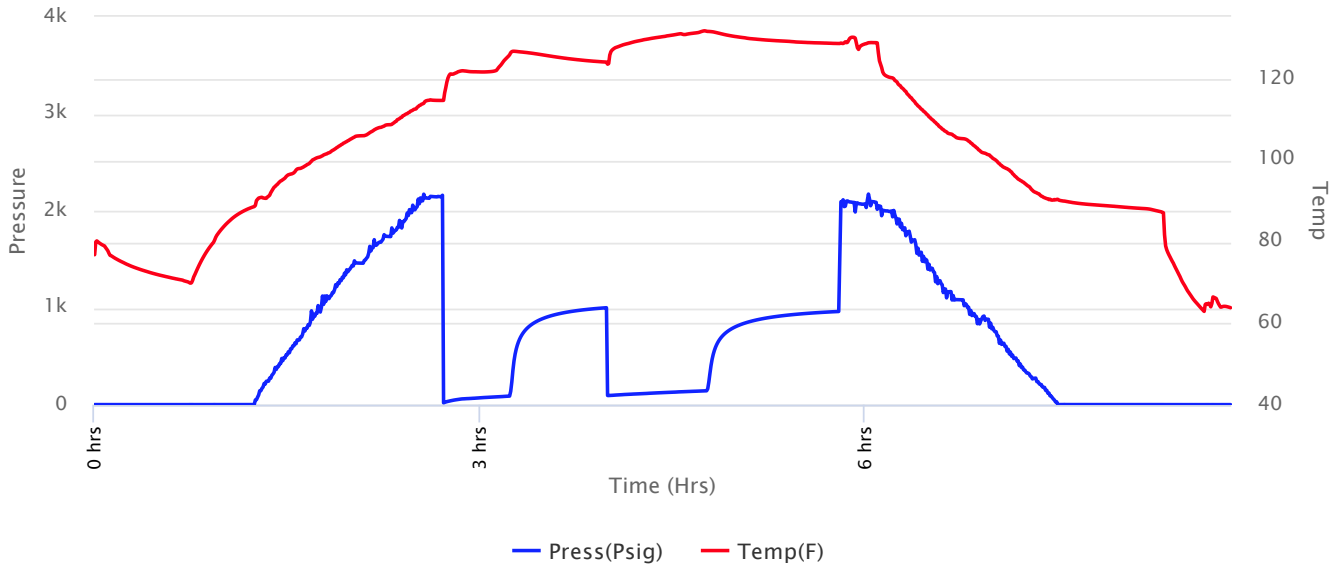
DST #3 Formation: Pawnee Test Interval: 4463 - 4494' Total Depth: 4494'

Time On: 22:51 09/17 Time Off: 07:29 09/18
Time On Bottom: 01:30 09/18 Time Off Bottom: 04:30 09/18

Electronic Volume Estimate:
351'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 45	Minutes: 60
Current Reading: 12.9" at 30 min	Current Reading: 0" at 45 min	Current Reading: 10.5" at 45 min	Current Reading: 0" at 60 min
Max Reading: 12.9"	Max Reading: 0"	Max Reading: 10.5"	Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
 County: LANE
 State: Kansas
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
 Elevation: 2907 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 512
 API #: 15-101-22657

Operation:
 Uploading recovery & pressures

DATE
 September
17
 2021

DST #3 **Formation: Pawnee** **Test Interval: 4463 - 4494'** **Total Depth: 4494'**
 Time On: 22:51 09/17 Time Off: 07:29 09/18
 Time On Bottom: 01:30 09/18 Time Off Bottom: 04:30 09/18

Recovered

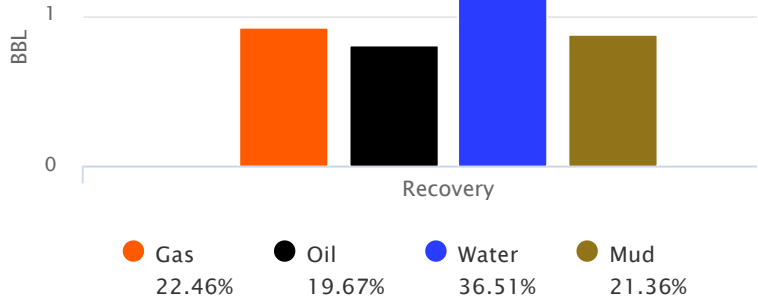
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
65	0.92495	G	100	0	0	0
10	0.1423	O	0	100	0	0
110	1.5653	WCHOCM	0	36	23	41
180	1.4850709	SLOCSLMCW	0	7	77	16

Total Recovered: 365 ft
 Total Barrels Recovered: 4.1176209

Reversed Out
 NO

Initial Hydrostatic Pressure	2143	PSI
Initial Flow	20 to 89	PSI
Initial Closed in Pressure	1000	PSI
Final Flow Pressure	95 to 144	PSI
Final Closed in Pressure	961	PSI
Final Hydrostatic Pressure	2113	PSI
Temperature	132	°F
Pressure Change Initial Close / Final Close	3.9	%

Recovery at a glance



GIP cubic foot volume: 5.19313



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
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DST #3 Formation: Pawnee Test Interval: 4463 - Total Depth: 4494'
4494'
Time On: 22:51 09/17 Time Off: 07:29 09/18
Time On Bottom: 01:30 09/18 Time Off Bottom: 04:30 09/18

BUCKET MEASUREMENT:

1st Open: 3/4" blow building to BOB 27 min.
1st Close: 1/4" BB
2nd Open: Surface blow building to 10 1/2"
2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 5% Oil 84% Water 11% Mud
Ph: 7.0
Measured RW: .43 @ 60 degrees °F
RW at Formation Temp: 0.207 @ 132 °F
Chlorides: 18,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
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17
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DST #3 Formation: Pawnee Test Interval: 4463 - 4494' Total Depth: 4494'
Time On: 22:51 09/17 Time Off: 07:29 09/18
Time On Bottom: 01:30 09/18 Time Off Bottom: 04:30 09/18

Down Hole Makeup

Heads Up: 23.14 FT	Packer 1: 4458 FT
Drill Pipe: 4337.96 FT <i>ID-3 1/2</i>	Packer 2: 4463 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4447.42 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4465 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 31	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 30 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
17
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DST #3 Formation: Pawnee Test Interval: 4463 - Total Depth: 4494'
4494'

Time On: 22:51 09/17 Time Off: 07:29 09/18
Time On Bottom: 01:30 09/18 Time Off Bottom: 04:30 09/18

Mud Properties

Mud Type: Chemical **Weight:** 9.1 **Viscosity:** 54 **Filtrate:** 8.0 **Chlorides:** 3,400 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
17
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DST #3 Formation: Pawnee Test Interval: 4463 - 4494' Total Depth: 4494'
Time On: 22:51 09/17 Time Off: 07:29 09/18
Time On Bottom: 01:30 09/18 Time Off Bottom: 04:30 09/18

Gas Volume Report

1st Open

2nd Open

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



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
18
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DST #4 **Formation: Myrick Station/Ft. Scott** **Test Interval: 4492 - 4536'** **Total Depth: 4536'**
Time On: 18:41 09/18 Time Off: 23:21 09/18
Time On Bottom: 20:35 09/18 Time Off Bottom: 00:00 01/01

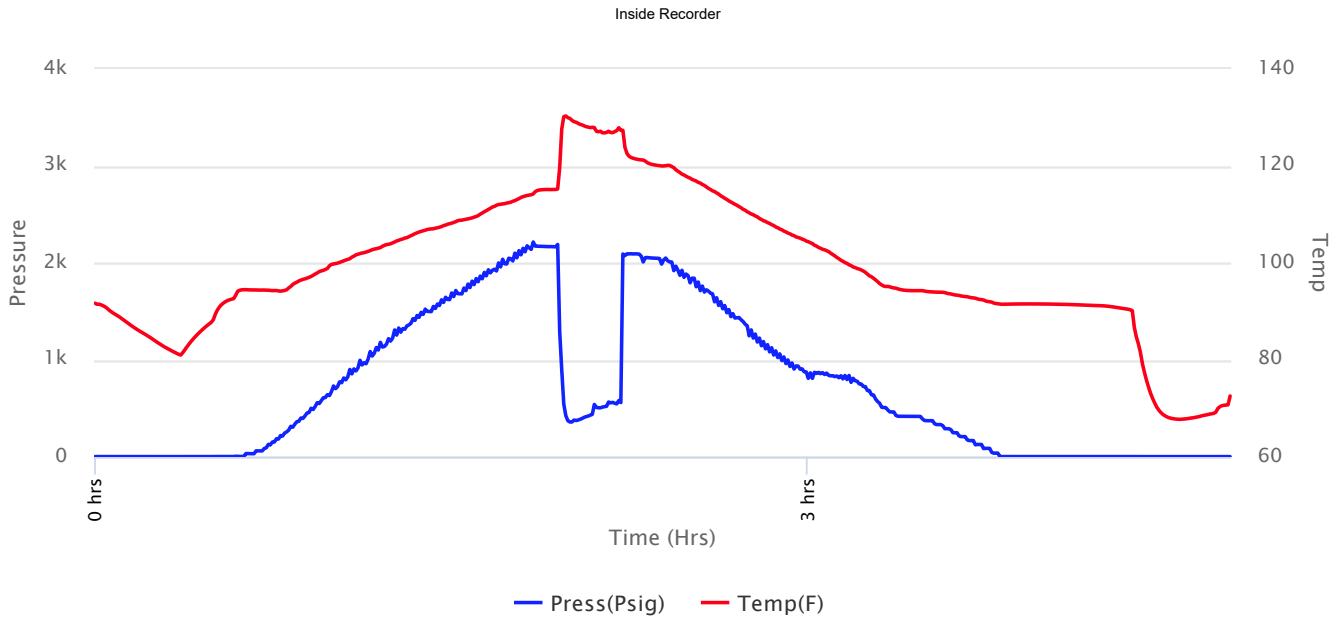
Electronic Volume Estimate:
801'

1st Open
Minutes: 5
Current Reading:
60.2" at 5 min
Max Reading: 60.2"

1st Close
N/A

2nd Open
N/A

2nd Close
N/A





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
 County: LANE
 State: Kansas
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
 Elevation: 2907 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 512
 API #: 15-101-22657

Operation:
 Uploading recovery & pressures

DATE
 September
18
 2021

DST #4 **Formation: Myrick Station/Ft. Scott** **Test Interval: 4492 - 4536'** **Total Depth: 4536'**
 Time On: 18:41 09/18 Time Off: 23:21 09/18
 Time On Bottom: 20:35 09/18 Time Off Bottom: 00:00 01/01

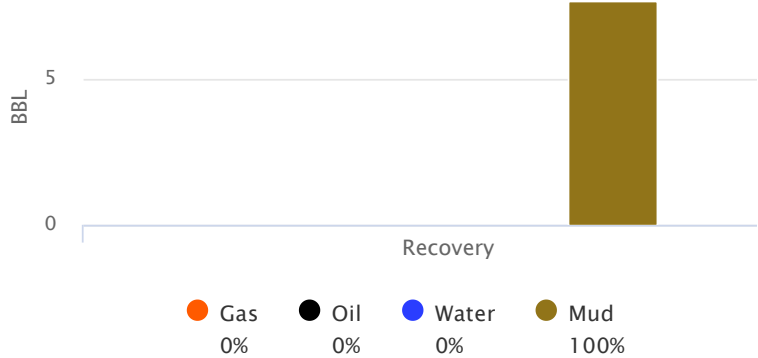
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
615	7.6751209	M	0	0	0	100

Total Recovered: 615 ft
 Total Barrels Recovered: 7.6751209

Reversed Out
NO

Recovery at a glance



Initial Hydrostatic Pressure	0	PSI
Initial Flow	0	PSI
Initial Closed in Pressure	0	PSI
Final Flow Pressure	0	PSI
Final Closed in Pressure	0	PSI
Final Hydrostatic Pressure	0	PSI
Temperature	0	°F
Pressure Change Initial Close / Final Close	0.0	%

GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
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DST #4	Formation: Myrick Station/Ft. Scott	Test Interval: 4492 - 4536'	Total Depth: 4536'
	Time On: 18:41 09/18	Time Off: 23:21 09/18	
	Time On Bottom: 20:35 09/18	Time Off Bottom: 00:00 01/01	

BUCKET MEASUREMENT:

1st Open: 8" blow building to BOB 30 sec.

REMARKS:

PACKER FAILURE



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
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DST #4 **Formation: Myrick Station/Ft. Scott** **Test Interval: 4492 - 4536'** **Total Depth: 4536'**
Time On: 18:41 09/18 Time Off: 23:21 09/18
Time On Bottom: 20:35 09/18 Time Off Bottom: 00:00 01/01

Down Hole Makeup

Heads Up: 25.94 FT	Packer 1: 4486.67 FT
Drill Pipe: 4369.43 FT <i>ID-3 1/2</i>	Packer 2: 4491.67 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4476.09 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4529 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 44.33	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 2 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.33 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 8 FT <i>4 1/2-FH</i>	



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
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2021

DST #4 **Formation: Myrick Station/Ft. Scott** **Test Interval: 4492 - 4536'** **Total Depth: 4536'**
Time On: 18:41 09/18 Time Off: 23:21 09/18
Time On Bottom: 20:35 09/18 Time Off Bottom: 00:00 01/01

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
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DST #5 **Formation: Myrick/Ft. Scott** **Test Interval: 4490 - 4536'** **Total Depth: 4536'**
Time On: 23:58 09/19 Time Off: 07:44 09/19
Time On Bottom: 02:13 09/19 Time Off Bottom: 04:13 09/19

Electronic Volume Estimate:
1754'

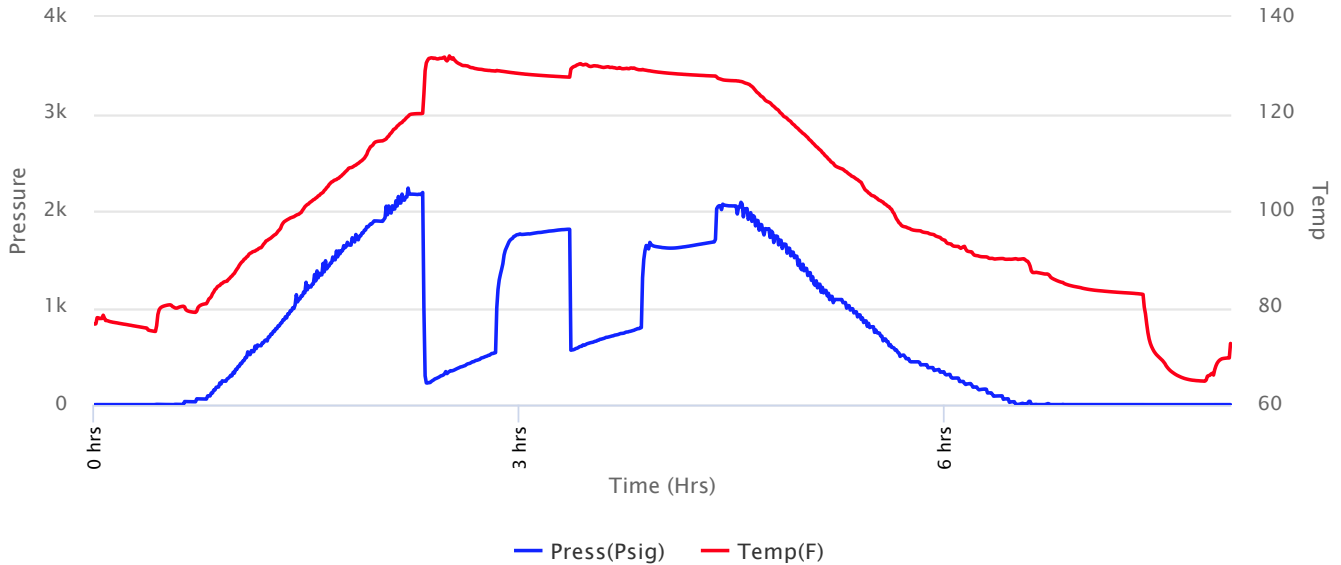
1st Open
Minutes: 30
Current Reading: 95.1" at 30 min
Max Reading: 95.1"

1st Close
Minutes: 30
Current Reading: 0" at 30 min
Max Reading: 0"

2nd Open
Minutes: 30
Current Reading: 59.6" at 30 min
Max Reading: 59.6"

2nd Close
Minutes: 30
Current Reading: 0" at 30 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
19
2021

DST #5 **Formation: Myrick/Ft. Scott** **Test Interval: 4490 - 4536'** **Total Depth: 4536'**
Time On: 23:58 09/19 Time Off: 07:44 09/19
Time On Bottom: 02:13 09/19 Time Off Bottom: 04:13 09/19

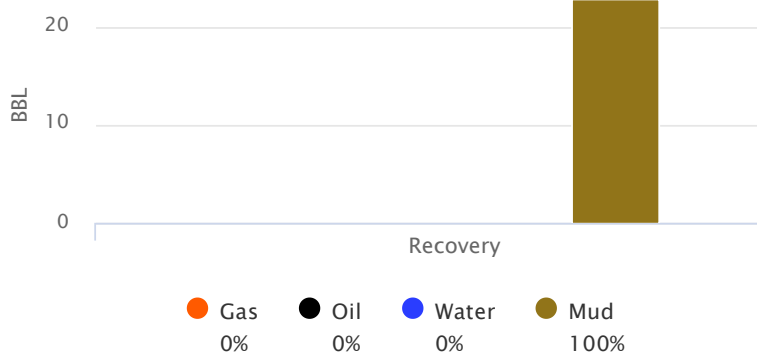
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
1675	22.7589209	M	0	0	0	100

Total Recovered: 1675 ft
Total Barrels Recovered: 22.7589209

Reversed Out
NO

Recovery at a glance



Initial Hydrostatic Pressure	2168	PSI
Initial Flow	224 to 537	PSI
Initial Closed in Pressure	1809	PSI
Final Flow Pressure	562 to 796	PSI
Final Closed in Pressure	1679	PSI
Final Hydrostatic Pressure	2088	PSI
Temperature	132	°F
Pressure Change Initial Close / Final Close	7.2	%

GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
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DST #5 **Formation:** **Test Interval: 4490 -** **Total Depth: 4536'**
Myrick/Ft. Scott **4536'**
Time On: 23:58 09/19 Time Off: 07:44 09/19
Time On Bottom: 02:13 09/19 Time Off Bottom: 04:13 09/19

BUCKET MEASUREMENT:

1st Open: 8" blow building to BOB 30 sec.
1st Close: No BB
2nd Open: 3" blow building to BOB 5 min.
2nd Close: No BB

REMARKS:

When setting packers, we lost weight a couple of times and slid a little.

Tool Sample: 0% Gas 2% Oil 0% Water 98% Mud



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
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DST #5 **Formation:** Myrick/Ft. Scott **Test Interval: 4490 - 4536'** **Total Depth: 4536'**
Time On: 23:58 09/19 Time Off: 07:44 09/19
Time On Bottom: 02:13 09/19 Time Off Bottom: 04:13 09/19

Down Hole Makeup

Heads Up: 28.94 FT	Packer 1: 4484.67 FT
Drill Pipe: 4370.43 FT <i>ID-3 1/2</i>	Packer 2: 4489.67 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4474.09 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4527 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 47.33	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 2 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.33 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 11 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
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DST #5 **Formation:** **Test Interval: 4490 -** **Total Depth: 4536'**
Myrick/Ft. Scott **4536'**
Time On: 23:58 09/19 Time Off: 07:44 09/19
Time On Bottom: 02:13 09/19 Time Off Bottom: 04:13 09/19

Mud Properties

Mud Type: Chemical **Weight:** 9.3 **Viscosity:** 49 **Filtrate:** 8.8 **Chlorides:** 3,600 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
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19
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DST #5 **Formation: Myrick/Ft. Scott** **Test Interval: 4490 - 4536'** **Total Depth: 4536'**
Time On: 23:58 09/19 Time Off: 07:44 09/19
Time On Bottom: 02:13 09/19 Time Off Bottom: 04:13 09/19

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping in hole with test tool

DATE
September
19
2021

DST #6 **Formation:** Myrick/Ft. Scott/Cherokee **Test Interval:** 4504 - 4561' **Total Depth:** 4561'
Time On: 15:42 09/19 Time Off: 20:19 09/20
Time On Bottom: 00:00 01/01 Time Off Bottom: 00:00 01/01

Electronic Volume Estimate:
0'

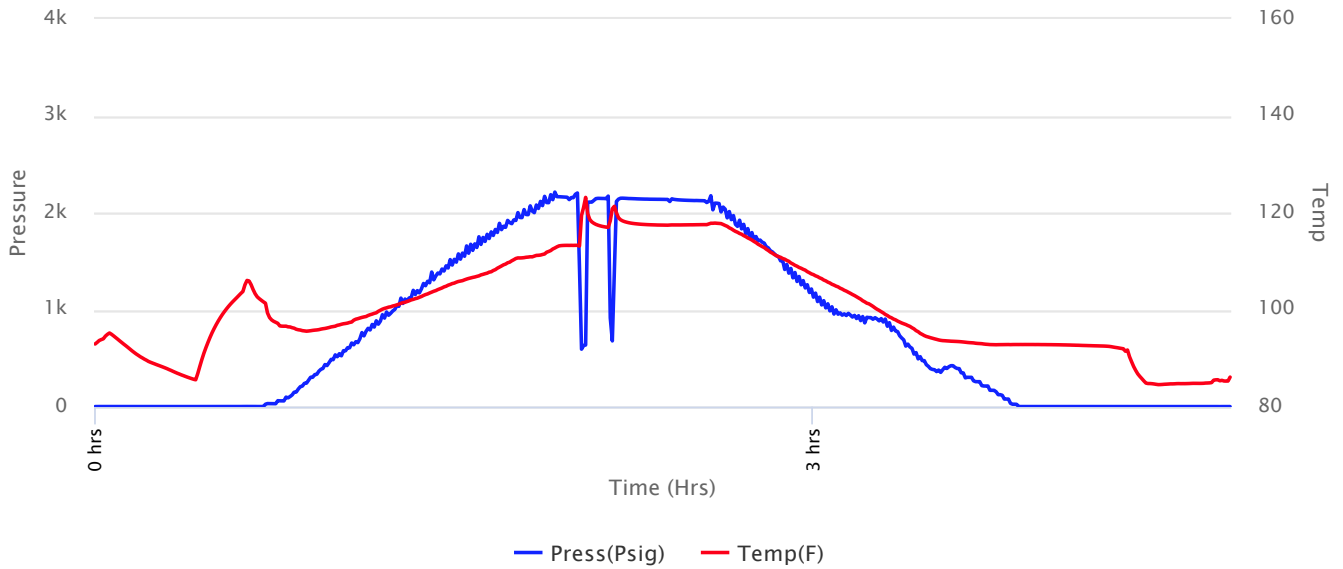
1st Open
N/A

1st Close
N/A

2nd Open
N/A

2nd Close
N/A

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping in hole with test tool

DATE
September
19
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DST #6 **Formation:** Myrick/Ft. Scott/Cherokee
Time On: 15:42 09/19 Time Off: 20:19 09/20
Time On Bottom: 00:00 01/01 Time Off Bottom: 00:00 01/01

Recovered

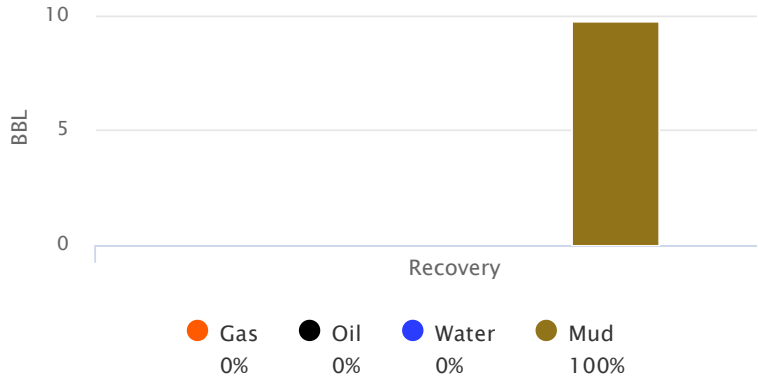
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
760	9.7384709	M	0	0	0	100

Total Recovered: 760 ft
Total Barrels Recovered: 9.7384709

Reversed Out
NO

Initial Hydrostatic Pressure	0	PSI
Initial Flow	0	PSI
Initial Closed in Pressure	0	PSI
Final Flow Pressure	0	PSI
Final Closed in Pressure	0	PSI
Final Hydrostatic Pressure	0	PSI
Temperature	0	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping in hole with test
tool

DATE
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DST #6 **Formation:**
Myrick/Ft.
Scott/Cherokee **Test Interval: 4504 -**
4561' **Total Depth: 4561'**

Time On: 15:42 09/19 Time Off: 20:19 09/20
Time On Bottom: 00:00 01/01 Time Off Bottom: 00:00 01/01

BUCKET MEASUREMENT:

REMARKS:

PACKER FAILURE



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping in hole with test tool

DATE
September
19
2021

DST #6 **Formation:** Myrick/Ft. Scott/Cherokee
Test Interval: 4504 - 4561'
Total Depth: 4561'
Time On: 15:42 09/19 Time Off: 20:19 09/20
Time On Bottom: 00:00 01/01 Time Off Bottom: 00:00 01/01

Down Hole Makeup

Heads Up: 13.94 FT	Packer 1: 4498.67 FT
Drill Pipe: 4369.43 FT <i>ID-3 1/2</i>	Packer 2: 4503.67 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4488.09 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4544 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 57.33	Surface Choke: 1"
<u>Anchor Makeup</u>	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 5 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.33 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 18 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping in hole with test
tool

DATE
September
19
2021

DST #6 **Formation:** **Test Interval: 4504 -** **Total Depth: 4561'**
Myrick/Ft. **4561'**
Scott/Cherokee
Time On: 15:42 09/19 Time Off: 20:19 09/20
Time On Bottom: 00:00 01/01 Time Off Bottom: 00:00 01/01

Mud Properties

Mud Type: Chemical **Weight:** 9.1 **Viscosity:** 52 **Filtrate:** 8.0 **Chlorides:** 4,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping in hole with test tool

DATE
September
19
2021

DST #6 **Formation:** Myrick/Ft. Scott/Cherokee
Test Interval: 4504 - 4561' **Total Depth:** 4561'
Time On: 15:42 09/19 Time Off: 20:19 09/20
Time On Bottom: 00:00 01/01 Time Off Bottom: 00:00 01/01

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
19
2021

DST #7 **Formation: Cherokee** **Test Interval: 4534 - 4561'** **Total Depth: 4561'**
Time On: 20:54 09/19 Time Off: 04:47 09/20
Time On Bottom: 22:41 09/19 Time Off Bottom: 01:41 09/20

Electronic Volume Estimate:
42'

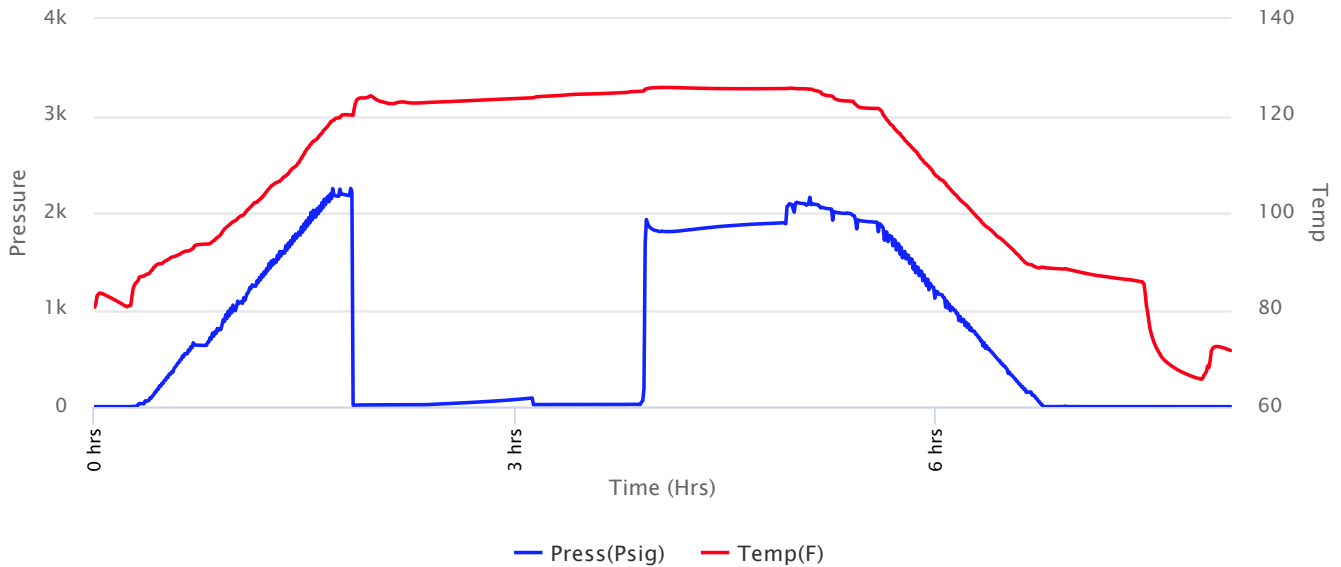
1st Open
Minutes: 30
Current Reading: 1.2" at 30 min
Max Reading: 1.2"

1st Close
Minutes: 45
Current Reading: 0" at 45 min
Max Reading: 0"

2nd Open
Minutes: 45
Current Reading: 0" at 45 min
Max Reading: 0"

2nd Close
Minutes: 60
Current Reading: 0" at 60 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
19
2021

DST #7 **Formation: Cherokee** **Test Interval: 4534 - 4561'** **Total Depth: 4561'**
Time On: 20:54 09/19 Time Off: 04:47 09/20
Time On Bottom: 22:41 09/19 Time Off Bottom: 01:41 09/20

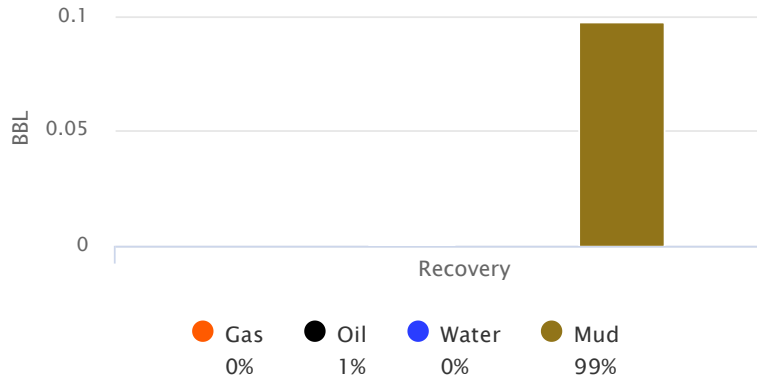
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
20	0.0984	SLOCM	0	1	0	99

Total Recovered: 20 ft
Total Barrels Recovered: 0.0984

Reversed Out
NO

Initial Hydrostatic Pressure	2178	PSI
Initial Flow	16 to 21	PSI
Initial Closed in Pressure	90	PSI
Final Flow Pressure	22 to 25	PSI
Final Closed in Pressure	0	PSI
Final Hydrostatic Pressure	2160	PSI
Temperature	126	°F
Pressure Change Initial Close / Final Close	100.0	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
19
2021

DST #7 **Formation:**
Cherokee **Test Interval: 4534 -**
 4561' **Total Depth: 4561'**

Time On: 20:54 09/19 Time Off: 04:47 09/20
Time On Bottom: 22:41 09/19 Time Off Bottom: 01:41 09/20

BUCKET MEASUREMENT:

1st Open: 1/4" blow building to 1"
1st Close: No BB
2nd Open: Surface blow
2nd Close: Surface blow

REMARKS:

There was no final shut-in pressure because the tool must have slid down a little and the slips kept the hydrostatic tool to stay shut.

Tool Sample: 0% Gas 4% Oil 0% Water 96% Mud



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
19
2021

DST #7 **Formation: Cherokee** **Test Interval: 4534 - 4561'** **Total Depth: 4561'**
Time On: 20:54 09/19 Time Off: 04:47 09/20
Time On Bottom: 22:41 09/19 Time Off Bottom: 01:41 09/20

Down Hole Makeup

Heads Up: 14.94 FT	Packer 1: 4529 FT
Drill Pipe: 4400.76 FT <i>ID-3 1/2</i>	Packer 2: 4534 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4518.42 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4536 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 27	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 26 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
19
2021

DST #7 **Formation:**
Cherokee **Test Interval: 4534 -**
4561' **Total Depth: 4561'**

Time On: 20:54 09/19 Time Off: 04:47 09/20
Time On Bottom: 22:41 09/19 Time Off Bottom: 01:41 09/20

Mud Properties

Mud Type: Chemical **Weight:** 9.1 **Viscosity:** 52 **Filtrate:** 8.0 **Chlorides:** 4,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
19
2021

DST #7 **Formation: Cherokee** **Test Interval: 4534 - 4561'** **Total Depth: 4561'**
Time On: 20:54 09/19 Time Off: 04:47 09/20
Time On Bottom: 22:41 09/19 Time Off Bottom: 01:41 09/20

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
20
2021

DST #8 **Formation: Mississippian** **Test Interval: 4587 - 4612'** **Total Depth: 4612'**
Time On: 17:03 09/20 Time Off: 02:01 09/21
Time On Bottom: 20:01 09/20 Time Off Bottom: 23:01 09/20

Electronic Volume Estimate:
256'

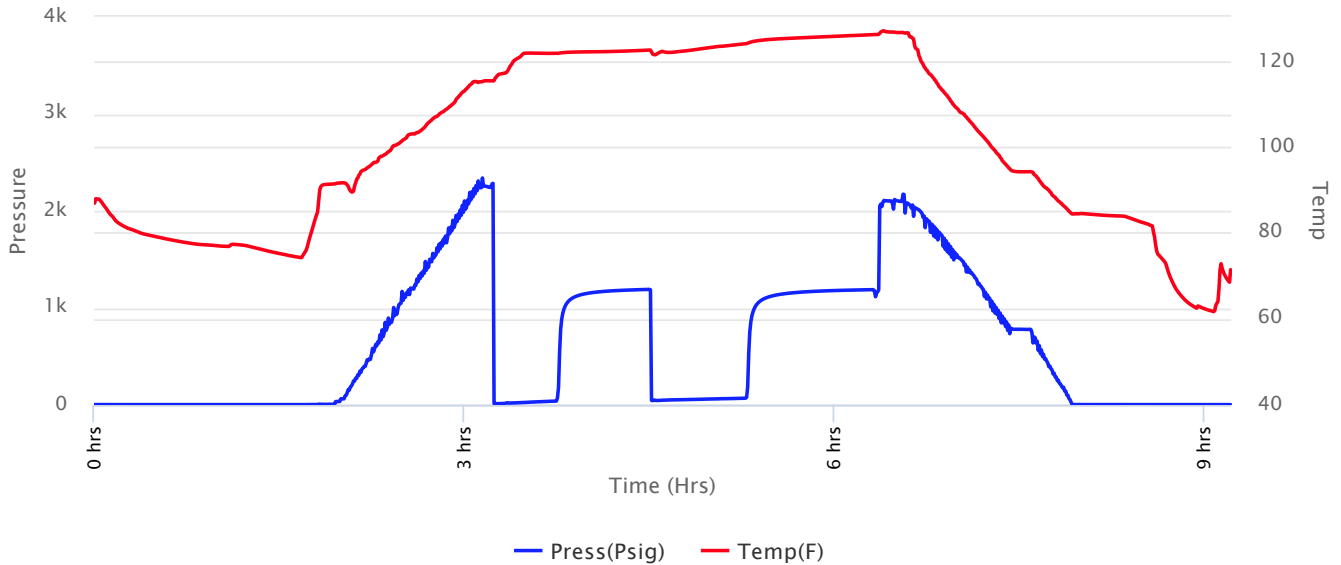
1st Open
Minutes: 30
Current Reading: 5.3" at 30 min
Max Reading: 5.3"

1st Close
Minutes: 45
Current Reading: 0" at 45 min
Max Reading: 0"

2nd Open
Minutes: 45
Current Reading: 9.5" at 45 min
Max Reading: 9.5"

2nd Close
Minutes: 60
Current Reading: 0" at 60 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
 County: LANE
 State: Kansas
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
 Elevation: 2907 EGL
 Field Name: Wildcat
 Pool: WILDCAT
 Job Number: 512
 API #: 15-101-22657

Operation:
 Uploading recovery & pressures

DATE
 September
20
 2021

DST #8 **Formation: Mississippian** **Test Interval: 4587 - 4612'** **Total Depth: 4612'**
 Time On: 17:03 09/20 Time Off: 02:01 09/21
 Time On Bottom: 20:01 09/20 Time Off Bottom: 23:01 09/20

Recovered

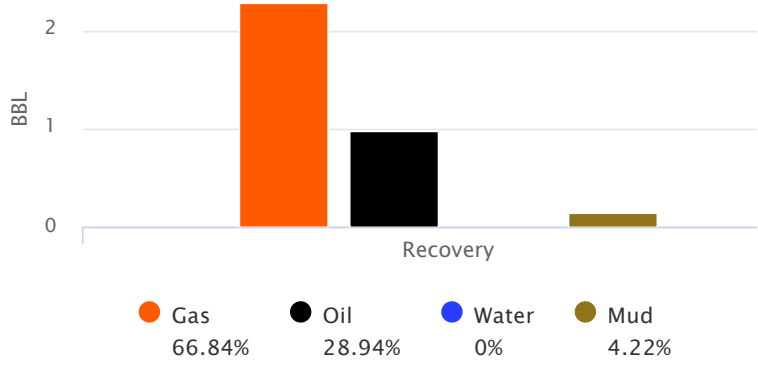
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
160	2.2768	G	100	0	0	0
115	0.9325209	O	0	100	0	0
40	0.1968	OCM	0	27	0	73

Total Recovered: 315 ft
 Total Barrels Recovered: 3.4061209

Reversed Out
 NO

Initial Hydrostatic Pressure	2241	PSI
Initial Flow	11 to 37	PSI
Initial Closed in Pressure	1185	PSI
Final Flow Pressure	42 to 67	PSI
Final Closed in Pressure	1187	PSI
Final Hydrostatic Pressure	2171	PSI
Temperature	127	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



GIP cubic foot volume: 12.78309



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
20
2021

DST #8 **Formation:**
Mississippian **Test Interval: 4587 -**
4612' **Total Depth: 4612'**

Time On: 17:03 09/20 Time Off: 02:01 09/21
Time On Bottom: 20:01 09/20 Time Off Bottom: 23:01 09/20

BUCKET MEASUREMENT:

1st Open: Surface blow building 5 1/2"
1st Close: No BB
2nd Open: Surface blow building to 9 1/4"
2nd Close: Surface BB

REMARKS:

Tool Sample: 0% Gas 34% Oil 0% Water 66% Mud

Gravity: 32.1 @ 60 °F



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
20
2021

DST #8 **Formation: Mississippian** **Test Interval: 4587 - 4612'** **Total Depth: 4612'**
Time On: 17:03 09/20 Time Off: 02:01 09/21
Time On Bottom: 20:01 09/20 Time Off Bottom: 23:01 09/20

Down Hole Makeup

Heads Up: 24.46 FT	Packer 1: 4582 FT
Drill Pipe: 4463.28 FT <i>ID-3 1/2</i>	Packer 2: 4587 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4571.42 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4589 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 25	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 24 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery &
pressures

DATE
September
20
2021

DST #8 **Formation:**
Mississippian **Test Interval: 4587 -**
4612' **Total Depth: 4612'**
Time On: 17:03 09/20 Time Off: 02:01 09/21
Time On Bottom: 20:01 09/20 Time Off Bottom: 23:01 09/20

Mud Properties

Mud Type: Chemical **Weight:** 9.1 **Viscosity:** 57 **Filtrate:** 8.8 **Chlorides:** 4,200 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Uploading recovery & pressures

DATE
September
20
2021

DST #8 **Formation: Mississippian** **Test Interval: 4587 - 4612'** **Total Depth: 4612'**
Time On: 17:03 09/20 Time Off: 02:01 09/21
Time On Bottom: 20:01 09/20 Time Off Bottom: 23:01 09/20

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping out of hole with test tool

DATE
September
21
2021

DST #9 **Formation: Spergen** **Test Interval: 4631 - 4660'** **Total Depth: 4660'**

Time On: 15:39 09/21 Time Off: 23:06 09/22
Time On Bottom: 17:40 09/21 Time Off Bottom: 20:40 09/21

Electronic Volume Estimate:
271'

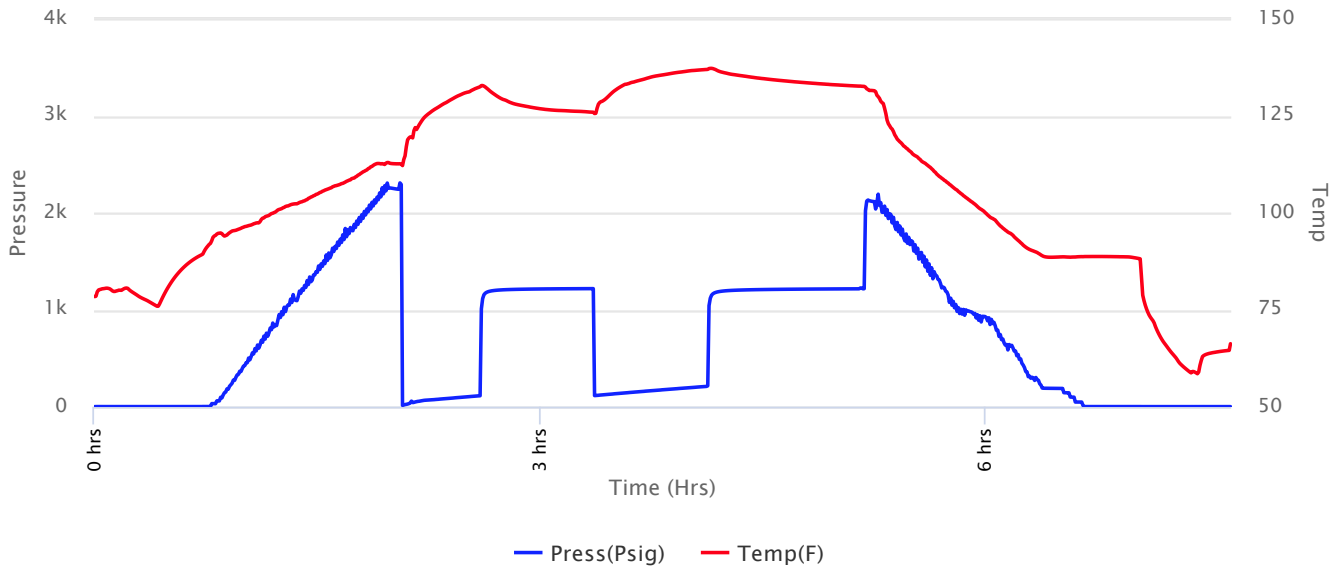
1st Open
Minutes: 30
Current Reading:
5.1" at 30 min
Max Reading: 5.1"

1st Close
Minutes: 45
Current Reading:
0" at 45 min
Max Reading: 0"

2nd Open
Minutes: 45
Current Reading:
10.8" at 45 min
Max Reading: 10.8"

2nd Close
Minutes: 60
Current Reading:
0" at 60 min
Max Reading: 0"

Inside Recorder





Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping out of hole with test tool

DATE
September
21
2021

DST #9 **Formation: Spergen** **Test Interval: 4631 - 4660'** **Total Depth: 4660'**
Time On: 15:39 09/21 Time Off: 23:06 09/22
Time On Bottom: 17:40 09/21 Time Off Bottom: 20:40 09/21

Recovered

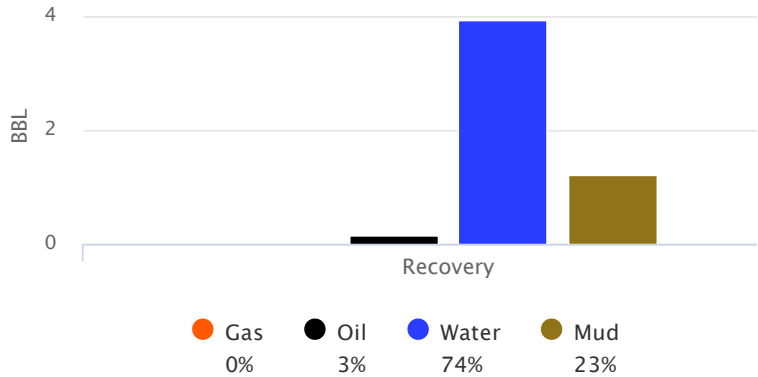
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
450	5.3271709	SLOCMCW	0	3	74	23

Total Recovered: 450 ft
Total Barrels Recovered: 5.3271709

Reversed Out
NO

Initial Hydrostatic Pressure	2242	PSI
Initial Flow	14 to 113	PSI
Initial Closed in Pressure	1218	PSI
Final Flow Pressure	115 to 216	PSI
Final Closed in Pressure	1217	PSI
Final Hydrostatic Pressure	2192	PSI
Temperature	138	°F
Pressure Change Initial Close / Final Close	0.1	%

Recovery at a glance



GIP cubic foot volume: 0



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping out of hole with
test tool

DATE
September
21
2021

DST #9 Formation: Spergen Test Interval: 4631 - Total Depth: 4660'
4660'
Time On: 15:39 09/21 Time Off: 23:06 09/22
Time On Bottom: 17:40 09/21 Time Off Bottom: 20:40 09/21

BUCKET MEASUREMENT:

1st Open: 1/4" blow building to 4 3/4"
1st Close: No BB
2nd Open: Surface blow building to 11"
2nd Close: No BB

REMARKS:

Tool Sample: 0% Gas 10% Oil 40% Water 50% Mud
Ph: 7.0
Measured RW: .47 @ 68 degrees °F
RW at Formation Temp: 0.243 @ 138 °F
Chlorides: 13,000 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping out of hole with test tool

DATE
September
21
2021

DST #9 Formation: Spergen Test Interval: 4631 - 4660' Total Depth: 4660'
Time On: 15:39 09/21 Time Off: 23:06 09/22
Time On Bottom: 17:40 09/21 Time Off Bottom: 20:40 09/21

Down Hole Makeup

Heads Up: 11.79 FT	Packer 1: 4626 FT
Drill Pipe: 4494.61 FT <i>ID-3 1/2</i>	Packer 2: 4631 FT
Weight Pipe: 0 FT <i>ID-2 7/8</i>	Top Recorder: 4615.42 FT
Collars: 115.61 FT <i>ID-2 1/4</i>	Bottom Recorder: 4633 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 29	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 28 FT <i>4 1/2-FH</i>	



**Company: Ritchie Exploration,
Inc.**

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling
Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping out of hole with
test tool

DATE
September
21
2021

DST #9 Formation: Spergen Test Interval: 4631 - Total Depth: 4660'
4660'

Time On: 15:39 09/21 Time Off: 23:06 09/22
Time On Bottom: 17:40 09/21 Time Off Bottom: 20:40 09/21

Mud Properties

Mud Type: Chemical **Weight:** 9.2 **Viscosity:** 54 **Filtrate:** 9.6 **Chlorides:** 4,400 ppm



Company: Ritchie Exploration, Inc.

Lease: Stucky-Dirks #1

SEC: 33 TWN: 19S RNG: 30W
County: LANE
State: Kansas
Drilling Contractor: Murfin Drilling Company, Inc - Rig 102
Elevation: 2907 EGL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 512
API #: 15-101-22657

Operation:
Tripping out of hole with test tool

DATE
September
21
2021

DST #9 Formation: Spergen Test Interval: 4631 - 4660' Total Depth: 4660'
Time On: 15:39 09/21 Time Off: 23:06 09/22
Time On Bottom: 17:40 09/21 Time Off Bottom: 20:40 09/21

Gas Volume Report

1st Open			
Time	Orifice	PSI	MCF/D

2nd Open			
Time	Orifice	PSI	MCF/D

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY **Richie Exploration**

LEAS #1 **Stucky-Dirks**

FIELD **Wildcat**

LOCATION **290 FNL. 1.502 FEE**

SEC **33** T19P **19** R3E **30W**

COUNTY **Lane** STATE **KS**

CONTRACTOR **Murfin Rig #102**

SPUD **9-1-21** COMP **9-22-21**

RID **4730** LID **4740**

MUD UP **3471** TYPE **MUD Chem**

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION **ANYHYDRITE** TOR **2229** L2226 **684** 671

ANYHYDRITE **2246** 2244 **666** 652

Basal ANYHYDRITE **3560** 3554 **-824** -622 **-636**

Healdner **3938** 3931 **1021** 1041 **1012** -081

Leander **3984** 3974 **1004** 1095 **1059** -068

Muncie **4164** 4158 **1248** 1426 **1426** -1438

Buckner **4367** 4366 **1490** 1570 **1474** -1484

Stark **4472** 4472 **1562** 1588 **1552** -1582

Plummer **4517** 4515 **1605** 1630 **1595** -1605

FT. SCOTT **4536** 4536 **1626** 1651 **1618** -1626

Johnson **4574** 4580 **1670** 1694 **1657** -1694

Mississippian **4600** 4602 **1692** 1716 **1684** -1694

Steger **4641** 4638 **1728** 1750 **1715** -1728

REFERENCE WELLS FOR STRUCTURE

A Linsagencesence #1 Jacob Stucky 1980 FNL. 1.986 FEE. 33-19-30W

B Hitchie #1 Space 28D 2261 FNL. 2129 FEE. 28-19-30W

C Hitchie #1 Moonway 28A 1309 FNL. 723 FEE. 29-19-30W

ELEVATIONS

KB 2910
DF 2905
GL 2905
Measurements are All From KB
CASING
Production 2 1/2" 5.5"
Surface 3 1/2" 5.5"
Production 2 1/2" 5.5"
Surface 3 1/2" 5.5"
Production 2 1/2" 5.5"
Surface 3 1/2" 5.5"
Production 2 1/2" 5.5"
Surface 3 1/2" 5.5"
Production 2 1/2" 5.5"
Surface 3 1/2" 5.5"

STRUCTURAL POSITION

A	B	C
2229	2226	684
2246	2244	666
3560	3554	-824
3938	3931	1021
3984	3974	1004
4164	4158	1248
4367	4366	1490
4472	4472	1562
4517	4515	1605
4536	4536	1626
4574	4580	1670
4600	4602	1692
4641	4638	1728

REMARKS

LEGEND

Anhydrite	Salt	Sandstone	Shale	Carb sh	Limestone	Ool. Lime	Chert	Dolomite

DEPTH	SAMPLE DESCRIPTIONS	REMARKS
2229-2246	ANYHYDRITE	
2246-2244	BASE ANYHYDRITE	
2300-3560	STOTLER	
3560-3554	DEV 1/2	7:AM 9-14-21 BIT TRIP @ 3588' STRAP: 3586.88 BOARD: 3588.45 SHORT 1.57'
3554-3552	LS, GRAY, FXTLN, ABUN FOSS FRAGS, HARD, VP, P, NS	
3552-3550	LS, TAN, FXTLN, DNS, V HRD, NO VIS P, NS	
3550-3548	LS, WHT, VFXTLN, DNS, M HRD, TITE, NS	
3548-3546	SH, GRN, GRAY	
3546-3544	SH, BRN, BURG	
3544-3542	LS, TAN, BRN, GRAY	
3542-3540	FXTLN, SCT MXTLN Pcs + SOFT, NS	
3540-3538	LS, GRAY, LT GRAY, FXTLN, M HRD, DNS, TITE, NS	
3538-3536	SH, GRAY, RED	
3536-3534	LS, CRM, WHT, FXTLN, S-M HRD, NO VIS P, NS	
3534-3532	LS, GRAY, BK GRAY, FXTLN, SL HRD, BRILL, NO VIS P, NS	
3532-3530	SH, GRNISH GRAY	
3530-3528	LS, GRAY, MHRD, MXTLN, PXTLN, P, NS	
3528-3526	A.A.	
3526-3524	LS, TAN, BRN, SOFT, CHALK, NS	
3524-3522	LS, LT-MED GRAY, F-MXTLN, HRD, P, NS	
3522-3520	LS, TAN, VFXTLN, DNS, V HRD, TITE, NS	
3520-3518	A.A.	
3518-3516	LS, GRAY, TAN, F-MXTLN, DNS, HRD, NS	
3516-3514	LS, TAN, FXTLN, SL ATY, V HRD, P, NS	
3514-3512	SH, BLK	
3512-3510	LS, TAN, MXTLN, MED HRD, SL FOSS, VPXTLN, P, NS	
3510-3508	SH, BK GRAY	
3508-3506	LS, CRM, TAN, ATY, HRD, SCT FOSS CASTS, P, NS	
3506-3504	LS, TAN, LT GRAY, VFXTLN, DNS, V HRD, TITE, NS	
3504-3502	LS, TAN, LT GRAY, A.A. CHALK	
3502-3500	CHALK	
3500-3498	CHALK FLOOD	
3498-3496	CHALK	
3496-3494	CHALK FLOOD	
3494-3492	LS, BRN, WHT, CHALK, SOFT	
3492-3490	NO VIS P, NS	
3490-3488	SH, RED, GRN	
3488-3486	SH, BLK	
3486-3484	LS, WHT, FXTLN, MHRD, PLS VUGY + DOC P, NS	
3484-3482	LS, TAN, BRN, VFXTLN, MHRD, FOSS + FRAGS, NO VIS P, NS	
3482-3480	A.A.	
3480-3478	CHT, WHT, TAN, Pcs FOSS, Pcs SL TRIP, NS	
3478-3476	A.A.	
3476-3474	LS, CRM, VFXTLN, DNS, HRD, SCT FOSS, NO VIS P, NS	
3474-3472	CHT, WHT, ABUN FOSS, Pcs LAY	
3472-3470	LS, TAN, FXTLN, BRILL, SOFT, Pcs "SOFT", FAIR P, NS	
3470-3468	LS, GRAY, VFXTLN, DNS, HRD -> V HRD, TITE, NS	
3468-3466	LS, LT GRAY, VFXTLN, DNS, VHRD, TITE, NS	
3466-3464	LS, TAN, GRAY, VFXTLN, DNS, TITE, Pcs FRAC'D, NS	7:AM 9-15-21 DRILL @ 4064'
3464-3462	SH, GRN, GRAY, BURG	
3462-3460	LS, TAN, BRN, F-MXTLN, HRD, DNS, FEW FOSS, NS	
3460-3458	DOLO, WHT, VFXTLN, MED HRD, MHRD, P, NS	
3458-3456	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3456-3454	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3454-3452	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3452-3450	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3450-3448	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3448-3446	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3446-3444	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3444-3442	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3442-3440	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3440-3438	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3438-3436	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3436-3434	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3434-3432	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3432-3430	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3430-3428	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3428-3426	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3426-3424	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3424-3422	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3422-3420	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3420-3418	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3418-3416	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3416-3414	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3414-3412	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3412-3410	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3410-3408	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3408-3406	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3406-3404	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3404-3402	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3402-3400	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3400-3398	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3398-3396	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3396-3394	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3394-3392	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3392-3390	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3390-3388	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3388-3386	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3386-3384	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3384-3382	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3382-3380	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3380-3378	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3378-3376	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3376-3374	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3374-3372	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3372-3370	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3370-3368	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3368-3366	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3366-3364	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3364-3362	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3362-3360	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3360-3358	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3358-3356	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3356-3354	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3354-3352	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3352-3350	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3350-3348	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3348-3346	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3346-3344	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3344-3342	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3342-3340	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3340-3338	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3338-3336	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3336-3334	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3334-3332	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3332-3330	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3330-3328	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3328-3326	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3326-3324	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3324-3322	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3322-3320	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3320-3318	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3318-3316	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3316-3314	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3314-3312	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3312-3310	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3310-3308	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3308-3306	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3306-3304	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3304-3302	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3302-3300	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3300-3298	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3298-3296	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3296-3294	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3294-3292	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3292-3290	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3290-3288	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3288-3286	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3286-3284	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3284-3282	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3282-3280	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3280-3278	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3278-3276	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3276-3274	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3274-3272	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3272-3270	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3270-3268	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3268-3266	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3266-3264	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3264-3262	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3262-3260	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3260-3258	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3258-3256	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3256-3254	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3254-3252	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3252-3250	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3250-3248	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3248-3246	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	
3246-3244	LS, BRN, F-MXTLN, HRD, SCT FOSS + FRAGS, FAIR FOSS, NO VIS P, NS	

