KOLAR Document ID: 1713131

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:	Feet from East / West Line of Section			
Contact Person:	Footages Calculated from Nearest Outside Section Corner:			
Phone: ()	□NE □NW □SE □SW			
CONTRACTOR: License #	GPS Location: Lat:, Long:			
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxx)			
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84			
Purchaser:	County:			
Designate Type of Completion:	Lease Name: Well #:			
New Well Re-Entry Workover	Field Name:			
	Producing Formation:			
☐ Oil ☐ WSW ☐ SWD	Elevation: Ground: Kelly Bushing:			
☐ Gas ☐ DH ☐ EOR	Total Vertical Depth: Plug Back Total Depth:			
☐ OG ☐ GSW	Amount of Surface Pipe Set and Cemented at: Feet			
CM (Coal Bed Methane)	Multiple Stage Cementing Collar Used? Yes No			
Cathodic Other (Core, Expl., etc.):				
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: sx cmt.			
Original Comp. Date: Original Total Depth:				
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD	Drilling Fluid Management Plan			
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)			
Commingled Permit #:	Chloride content:ppm Fluid volume:bbls			
Dual Completion Permit #:	Dewatering method used:			
SWD Permit #:	Location of fluid disposal if hauled offsite:			
EOR Permit #:	Location of fluid disposal if fladica offsite.			
GSW Permit #:	Operator Name:			
_	Lease Name: License #:			
Spud Date or Date Reached TD Completion Date or	QuarterSecTwpS. R East West			
Recompletion Date Recompletion Date	County: Permit #:			

#### **AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

**Submitted Electronically** 

KCC Office Use ONLY
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received Drill Stem Tests Received
Geologist Report / Mud Logs Received
UIC Distribution
ALT I II Approved by: Date:

KOLAR Document ID: 1713131

#### Page Two

Operator Name: _				Lease Name:			Well #:	
Sec Twp.	S. R.	E	ast West	County:				
	flowing and shu	ut-in pressures, v	vhether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,
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 Strir		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					
Perforate Protect Casi Plug Back T								
Plug Off Zor								
Did you perform a     Does the volume     Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,
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:			DN INTERVAL: Bottom
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT
,	,			B.11 B1				
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid,	Fracture, Shot, Cer (Amount and Kind	menting Squeeze I of Material Used)	Record
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:				
TODING RECORD:	. 3126.	Set	n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	Satchell Creek Petroleum, LLC
Well Name	CATHEDRAL A-1
Doc ID	1713131

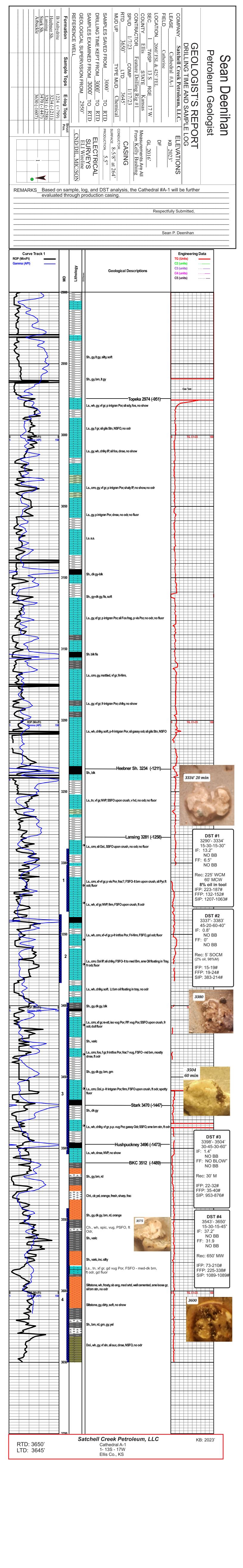
# All Electric Logs Run

DI	
Sonic PE	
PE	
Micro	

Form	ACO1 - Well Completion
Operator	Satchell Creek Petroleum, LLC
Well Name	CATHEDRAL A-1
Doc ID	1713131

# Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	220	class H- 325	225	3% Ch, 2% gel, .25% sf
Production	7.875	5.5	15.5	3640	class H- BT	225	50% F, .1% FL, 3% salt





Operation:

Well Complete

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Job Number: 635 API #: 15-051-27057

**DATE** 

January 13

2023

Formation: Lans "B-

Test Interval: 3290 -

Total Depth: 3334'

3334'

Time Off: 14:32 01/13 Time On: 05:45 01/13

Time On Bottom: 10:18 01/13 Time Off Bottom: 11:48 01/13

Electronic Volume Estimate:

223'

1st Open Minutes: 15 **Current Reading:** 

**DST #1** 

13.2" at 15 min

Max Reading: 13.2"

1st Close Minutes: 30 **Current Reading:** 

0" at 30 min

Max Reading: 0"

2nd Open Minutes: 15

**Current Reading:** 

6.5" at 15 min

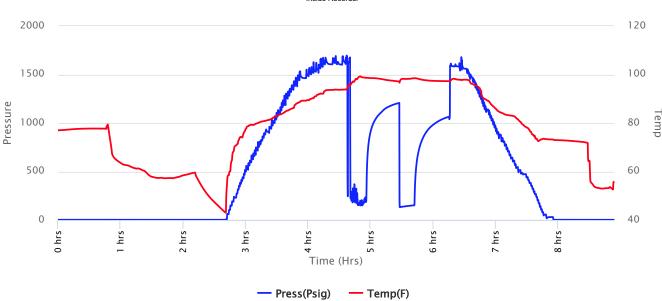
Max Reading: 6.5"

2nd Close Minutes: 30 **Current Reading:** 

0" at 30 min

Max Reading: 0"

Inside Recorder





Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

County: ELLIS State: Kansas

Drilling Contractor: Feature Drilling

SEC: 1 TWN: 13S RNG: 17W

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** January

> 13 2023

DST #1 Test Interval: 3290 -Formation: Lans "B-Total Depth: 3334' 3334'

Time On: 05:45 01/13 Time Off: 14:32 01/13

Time On Bottom: 10:18 01/13 Time Off Bottom: 11:48 01/13

#### Recovered

<u>Foot</u>	<u>BBLS</u>	Description of Fluid	<u>Gas %</u>	<u>Oil %</u>	Water %	Mud %
35	0.49805	WCM	0	0	20	80
190	2.4454406	WCM	0	0	20	80
60	0.2952	HMCW	0	0	55	45

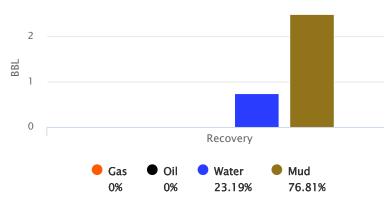
Total Recovered: 285 ft

Total Barrels Recovered: 3.2386906

Reverse	d Out
NC	)

Initial Hydrostatic Pressure	1677	PSI
Initial Flow	223 to 187	PSI
<b>Initial Closed in Pressure</b>	1207	PSI
Final Flow Pressure	132 to 152	PSI
Final Closed in Pressure	1063	PSI
Final Hydrostatic Pressure	1593	PSI
Temperature	99	°F
Pressure Change Initial	11.9	%
Close / Final Close		

#### Recovery at a glance



GIP cubic foot volume: 0



**Company: Satchell Creek** Petroleum, LLC Lease: Cathedral #A-1

Operation:

Well Complete

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

January

13 2023 **DST #1** Formation: Lans "B- Test Interval: 3290 -

Total Depth: 3334'

3334'

Time On: 05:45 01/13

Time Off: 14:32 01/13

Time On Bottom: 10:18 01/13 Time Off Bottom: 11:48 01/13

#### **BUCKET MEASUREMENT:**

1st Open: 3 1/2 in. blow building. BOB in 11 mins. 15 secs.

1st Close: No blow back.

2nd Open: 1 in. blow building to 6 ins.

2nd Close: No blow back.

**REMARKS:** Tool slid 10 ft.

Tool Sample: 0% Gas 8% Oil 82% Water 10% Mud

Ph: 7

Measured RW: .38 @ 58 degrees °F

RW at Formation Temp: 0.233 @ 99 °F

Chlorides: 21,000 ppm



**Company: Satchell Creek** Petroleum, LLC Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W County: ELLIS

State: Kansas **Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

Operation:

Well Complete

**DATE** 

January

13

2023

**DST #1** 

Formation: Lans "B-

Test Interval: 3290 -

Total Depth: 3334'

3334'

Time On: 05:45 01/13

Time Off: 14:32 01/13

Time On Bottom: 10:18 01/13 Time Off Bottom: 11:48 01/13

#### **Down Hole Makeup**

**Heads Up:** 19.53 FT Packer 1: 3284.5 FT

**Drill Pipe:** 3188.22 FT Packer 2: 3290 FT

ID-3 1/2 Top Recorder: 3273.42 FT

Weight Pipe: FT **Bottom Recorder:** 3292 FT

Collars: 87.74 FT

Well Bore Size: 7 7/8 ID-2 1/4

**Surface Choke:** 1" **Test Tool:** 34.57 FT

**Bottom Choke:** 5/8" ID-3 1/2-FH

Jars Safety Joint

**Total Anchor:** 44

**Anchor Makeup** 

Packer Sub:

Perforations: (top): FT

4 1/2-FH

Change Over: FT

Drill Pipe: (in anchor): FT

ID-3 1/2

Change Over: FT

Perforations: (below): 43 FT

4 1/2-FH



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

**DST #1** 

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

January 13 2023

Formation: Lans "B-

Test Interval: 3290 -

Total Depth: 3334'

3334'

Time On: 05:45 01/13

Time Off: 14:32 01/13

Time On Bottom: 10:18 01/13 Time Off Bottom: 11:48 01/13

## **Mud Properties**

Mud Type: Chemical Weight: 9.4 Viscosity: 45 Filtrate: 12.8 Chlorides: 12,000 ppm



Well Complete

Company: Satchell Creek Petroleum, LLC

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE**January

13 2023 DST #1 Formation: Lans "B- Test Interval: 3290 - Total Depth: 3334'

Time On Bottom: 10:18 01/13 Time Off Bottom: 11:48 01/13

# **Gas Volume Report**

1st Open 2nd Open

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



Operation:

Well Complete

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Job Number: 635 API #: 15-051-27057

DATE

January

**14** 2023

Formation: Lans "E- Test Into

Test Interval: 3337 -

Total Depth: 3383'

3383'

Time On: 01:13 01/14 Time Off: 11:29 01/14

Time On Bottom: 07:01 01/14 Time Off Bottom: 09:01 01/14

Electronic Volume Estimate:

20'

1st Open Minutes: 30 Current Reading:

**DST #2** 

0" at 30 min

Max Reading: .8"

1st Close Minutes: 30 Current Reading:

0" at 30 min

Max Reading: 0"

2nd Open Minutes: 30 Current Reading:

0" at 30 min

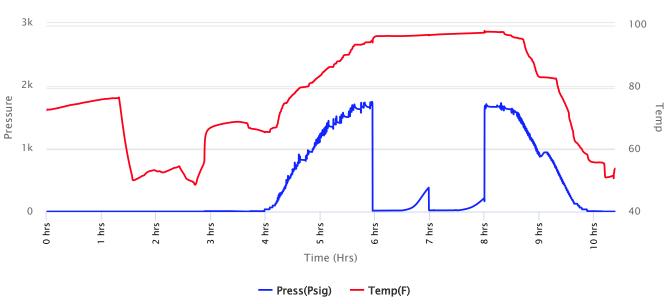
Max Reading: 0"

2nd Close Minutes: 30 Current Reading:

0" at 30 min

Max Reading: 0"

Inside Recorder





Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext Job Number: 635

API #: 15-051-27057

Operation: Well Complete

> **DATE** January

**DST #2** Formation: Lans "E-G"

Test Interval: 3337 -

Total Depth: 3383'

3383'

Time On: 01:13 01/14

Time Off: 11:29 01/14

2

Time On Bottom: 07:01 01/14 Time Off Bottom: 09:01 01/14

Recovered

**BBLS Foot** 5 0.0246 **Description of Fluid** SLOCM

Oil % Gas %

0

Water % 0

Mud % 98

Total Recovered: 5 ft

14

2023

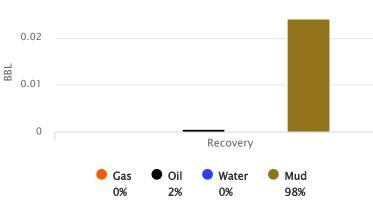
Total Barrels Recovered: 0.0246

Reversed Out NO

Initial Hydrostatic Pressure	1749	PSI
Initial Flow	15 to 19	PSI
Initial Closed in Pressure	383	PSI
Final Flow Pressure	19 to 214	PSI
Final Closed in Pressure	214	PSI
Final Hydrostatic Pressure	1667	PSI
Temperature	98	°F
Pressure Change Initial	44.2	%

Close / Final Close

# Recovery at a glance



GIP cubic foot volume: 0



Operation:

Well Complete

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W County: ELLIS

State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

January

14 2023 Formation: Lans "E-

Test Interval: 3337 -

Total Depth: 3383'

3383'

Time On: 01:13 01/14

Time Off: 11:29 01/14

Time On Bottom: 07:01 01/14 Time Off Bottom: 09:01 01/14

#### **BUCKET MEASUREMENT:**

1st Open: Surface blow building to 1/2 in. Died in 22 mins.

DST #2

1st Close: No blow back. 2nd Open: No blow. 2nd Close: No blow back.

REMARKS:

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



Well Complete

Company: Satchell Creek Petroleum, LLC

Lease: Cathedral #A-1

**DST #2** 

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

Drilling Contractor: Feature Drilling

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

January

**14** 2023

Formation: Lans "E-

Test Interval: 3337 -

Total Depth: 3383'

3383'

Time On: 01:13 01/14

Time Off: 11:29 01/14

Time On Bottom: 07:01 01/14 Time Off Bottom: 09:01 01/14

#### **Down Hole Makeup**

**Heads Up:** 12.58 FT **Packer 1:** 3331.5 FT

**Drill Pipe:** 3228.27 FT **Packer 2:** 3337 FT

ID-3 1/2 **Top Recorder:** 3320.42 FT

Weight Pipe: FT Bottom Recorder: 3339 FT

Collars: 87.74 FT .......

ID-2 1/4 Well Bore Size: 7 7/8

Test Tool: 34.57 FT

ID-3 1/2-FH Bottom Choke: 5/8"

Jars Safety Joint

**Total Anchor:** 46

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): FT

4 1/2-FH

Change Over: FT

Drill Pipe: (in anchor): FT

ID-3 1/2

Change Over: FT

Perforations: (below): 45 FT

4 1/2-FH



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

14 2023

January

DST #2 Formation: Lans "E- Test Interval: 3337 -

Total Depth: 3383'

3383'

Time Off: 11:29 01/14 Time On: 01:13 01/14

Time On Bottom: 07:01 01/14 Time Off Bottom: 09:01 01/14

## **Mud Properties**

Mud Type: Chemical Weight: 9.3 Viscosity: 47 Filtrate: 12.8 Chlorides: 12,000 ppm



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

State: Kansas

County: ELLIS

**Drilling Contractor: Feature Drilling** 

SEC: 1 TWN: 13S RNG: 17W

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

January 14 2023

DST #2 Formation: Lans "E-

Test Interval: 3337 -

Total Depth: 3383'

3383'

Time On: 01:13 01/14

Time Off: 11:29 01/14

Time On Bottom: 07:01 01/14 Time Off Bottom: 09:01 01/14

#### **Gas Volume Report**

1st Open 2nd Open



Operation:

Well Complete

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext Job Number: 635

API #: 15-051-27057

**DATE** 

January

15 2023 **DST #3** Formation: Lans "I- Test Interval: 3398 -

Total Depth: 3504'

3504'

Time Off: 01:19 01/16 Time On: 09:30 01/15

Time On Bottom: 17:39 01/15 Time Off Bottom: 20:24 01/15

Electronic Volume Estimate:

36'

1st Open Minutes: 30 **Current Reading:** 

1" at 30 min

Max Reading: 1.4"

1st Close Minutes: 45 **Current Reading:** 

0" at 45 min

Max Reading: 0"

2nd Open Minutes: 30

**Current Reading:** 

0" at 30 min

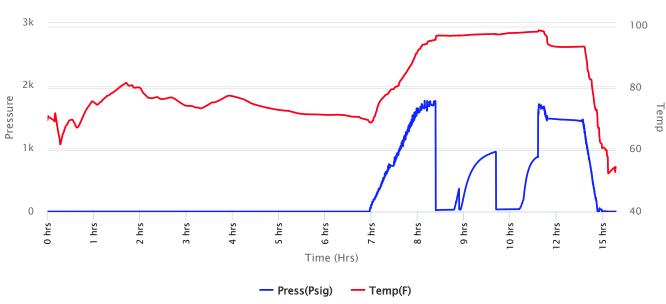
Max Reading: 0"

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

0" at 60 min

Max Reading: 0"

Inside Recorder





Well Complete

Company: Satchell Creek Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** January

**15** 2023

DST #3 Formation: Lans "I- Test Interval: 3398 - Total Depth: 3504"

Time On: 09:30 01/15 Time Off: 01:19 01/16

Time On Bottom: 17:39 01/15 Time Off Bottom: 20:24 01/15

#### Recovered

 Foot
 BBLS
 Description of Fluid
 Gas %
 Oil %
 Water %
 Mud %

 30
 0.1476
 M
 0
 0
 0
 100

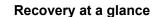
Total Recovered: 30 ft

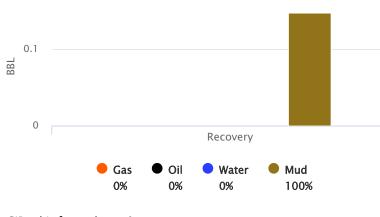
Total Barrels Recovered: 0.1476

Reversed Out
NO

1716	PSI
22 to 32	PSI
953	PSI
35 to 40	PSI
876	PSI
1671	PSI
99	°F
8.0	%
	22 to 32 953 35 to 40 876 1671 99

Close / Final Close GIP cubic foot volume: 0







Operation:

Well Complete

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

Drilling Contractor: Feature Drilling

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

DATE

January

**15** 2023

Formation: Lans "I-L"

Test Interval: 3398 -

Total Depth: 3504'

3504'

Time On: 09:30 01/15

Time Off: 01:19 01/16

Time On Bottom: 17:39 01/15 Time Off Bottom: 20:24 01/15

#### **BUCKET MEASUREMENT:**

1st Open: 3/4 in. blow building to 1 1/4 ins. Died back to 3/4 in.

**DST #3** 

1st Close: No blow back. 2nd Open: No blow. 2nd Close: No blow back.

**REMARKS:** 

Tool Sample: 0% Gas 0% Oil 0% Water 100% Mud



SEC: 1 TWN: 13S RNG: 17W County: ELLIS

State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

Operation:

Well Complete

**DATE** January

15

2023

**DST #3** Formation: Lans "I-

Test Interval: 3398 -

Total Depth: 3504'

3504'

Time On: 09:30 01/15

Time Off: 01:19 01/16

Time On Bottom: 17:39 01/15 Time Off Bottom: 20:24 01/15

## **Down Hole Makeup**

Heads Up: 10.07 FT Packer 1: 3392.5 FT

**Drill Pipe:** 3286.76 FT Packer 2: 3398 FT

5/8"

ID-3 1/2

Top Recorder: 3381.42 FT

Weight Pipe: FT **Bottom Recorder:** 3502 FT

Collars: 87.74 FT Well Bore Size: 7 7/8

ID-2 1/4

**Bottom Choke:** 

**Test Tool:** 34.57 FT **Surface Choke:** 1"

ID-3 1/2-FH

Jars

Safety Joint

**Total Anchor:** 106

**Anchor Makeup** 

Packer Sub:

Perforations: (top): 38 FT

4 1/2-FH

**Change Over:** .5 FT

Drill Pipe: (in anchor): 63 FT

ID-3 1/2

**Change Over:** .5 FT

Perforations: (below): 3 FT

4 1/2-FH



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

**DST #3** 

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** 

January 15 2023

Formation: Lans "I-L"

Test Interval: 3398 -

Total Depth: 3504'

3504'

Time On: 09:30 01/15

Time Off: 01:19 01/16

Time On Bottom: 17:39 01/15 Time Off Bottom: 20:24 01/15

#### **Mud Properties**

Mud Type: Chemical Weight: 9.3 Viscosity: 42 Filtrate: 12.8 Chlorides: 18,000 ppm



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Job Number: 635 API #: 15-051-27057

**DATE** 

January 15 2023

Formation: Lans "I-L" **DST #3** 

Test Interval: 3398 -

Total Depth: 3504'

3504'

Time On: 09:30 01/15 Time Off: 01:19 01/16

Time On Bottom: 17:39 01/15 Time Off Bottom: 20:24 01/15

# **Gas Volume Report**

1st Open 2nd Open

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



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Job Number: 635 API#: 15-051-27057

**DATE** January

17 2023 **DST #4** Formation: Conglomerate Test Interval: 3543 -

Total Depth: 3650'

3650'

Time On: 00:49 01/17

Time Off: 08:41 01/17

Time On Bottom: 03:52 01/17 Time Off Bottom: 05:37 01/17

Electronic Volume Estimate: 664'

1st Open Minutes: 15 **Current Reading:** 37.2" at 15 min

**Current Reading:** 0" at 30 min

1st Close

Minutes: 30

31.9" at 15 min

2nd Open

Minutes: 15

**Current Reading:** 

2nd Close Minutes: 45 **Current Reading:** 

0" at 45 min

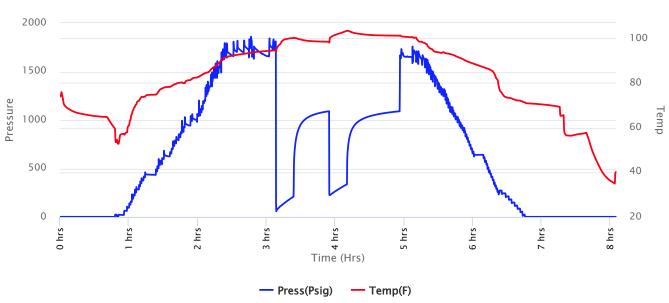
Max Reading: 37.2"

Max Reading: 0"

Max Reading: 31.9"

Max Reading: 0"







Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine Pool: Pool Ext

Job Number: 635 API #: 15-051-27057

**DATE** January 17 2023

**DST #4** Formation: Conglomerate Test Interval: 3543 -

Total Depth: 3650'

Water %

Mud %

3650'

Time On: 00:49 01/17

Time Off: 08:41 01/17

Oil %

Time On Bottom: 03:52 01/17 Time Off Bottom: 05:37 01/17

Gas %

#### Recovered

<u>Foot</u>	<u>BBLS</u>	Description of Fluid
73	1.03879	HWCM
514	7.0838906	SLMCW
63	0.30996	HMCW

0	0	45	55
0	0	95	5
0	0	65	35

Total Recovered: 650 ft

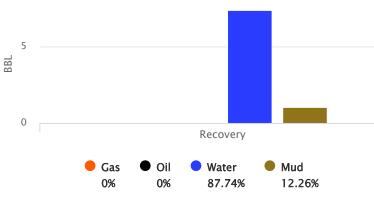
Total Barrels Recovered: 8.4326406

Close / Final Close

Reversed Out
NO

Initial Hydrostatic Pressure	1808	PSI
Initial Flow	73 to 210	PSI
Initial Closed in Pressure	1089	PSI
Final Flow Pressure	225 to 338	PSI
Final Closed in Pressure	1089	PSI
Final Hydrostatic Pressure	1733	PSI
Temperature	104	°F
Pressure Change Initial	0.0	%

#### Recovery at a glance



GIP cubic foot volume: 0



Lease: Cathedral #A-1 Operation:

Well Complete

DST #4

Formation: Conglomerate Test Interval: 3543 -

Total Depth: 3650'

SEC: 1 TWN: 13S RNG: 17W

**Drilling Contractor: Feature Drilling** 

County: ELLIS State: Kansas

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

Elevation: 2016 GL

Field Name: Catharine

LLC - Rig 1

3650'

Time On: 00:49 01/17

Time Off: 08:41 01/17

Time On Bottom: 03:52 01/17 Time Off Bottom: 05:37 01/17

#### **BUCKET MEASUREMENT:**

**DATE** 

January

17

2023

1st Open: BOB in 3 mins. 6 secs.

1st Close: No blow back.

2nd Open: BOB in 4 mins. 8 secs.

2nd Close: No blow back.

**REMARKS:** 

Tool Sample: 0% Gas 0% Oil 100% Water 0% Mud

Ph: 7

Measured RW: .69 @ 32 degrees °F

RW at Formation Temp: 0.242 @ 104 °F

Chlorides: 19,100 ppm



Well Complete

**Company: Satchell Creek** Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API#: 15-051-27057

**DATE** 

January

17 2023 **DST #4** 

Formation: Conglomerate Test Interval: 3543 -

Total Depth: 3650'

3650'

Time On: 00:49 01/17

Time Off: 08:41 01/17

Time On Bottom: 03:52 01/17 Time Off Bottom: 05:37 01/17

## **Down Hole Makeup**

Heads Up: 21.2 FT Packer 1: 3537.5 FT

**Drill Pipe:** 3442.89 FT Packer 2: 3543 FT

5/8"

ID-3 1/2

Top Recorder: 3526.42 FT

Weight Pipe: FT

**Bottom Recorder:** 3648 FT

Collars: 87.74 FT

Well Bore Size: 7 7/8

ID-2 1/4

34.57 FT

**Surface Choke:** 1"

**Bottom Choke:** 

**Test Tool:** ID-3 1/2-FH

Jars

Safety Joint

**Total Anchor:** 

107

Anchor Makeup

Packer Sub:

Perforations: (top):

**Change Over:** 

39 FT

4 1/2-FH

.5 FT

Drill Pipe: (in anchor):

63 FT

ID-3 1/2

.5 FT

Perforations: (below):

3 FT

4 1/2-FH

**Change Over:** 



Well Complete

Company: Satchell Creek Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

Drilling Contractor: Feature Drilling

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE**January

**17** 2023

DST #4

Formation: Conglomerate

Test Interval: 3543 -

Total Depth: 3650'

3650'

Time Off: 08:41 01/17

Time On Bottom: 03:52 01/17 Time Off Bottom: 05:37 01/17

## **Mud Properties**

Mud Type: Chemical Weight: 9.3 Viscosity: 47 Filtrate: 12.8 Chlorides: 18,000 ppm

\_



Well Complete

Company: Satchell Creek Petroleum, LLC

Lease: Cathedral #A-1

SEC: 1 TWN: 13S RNG: 17W

County: ELLIS State: Kansas

**Drilling Contractor: Feature Drilling** 

LLC - Rig 1

Elevation: 2016 GL Field Name: Catharine

Pool: Pool Ext Job Number: 635 API #: 15-051-27057

**DATE** January

January **17** 2023 **DST #4** 

Formation: Conglomerate

Test Interval: 3543 -

Total Depth: 3650'

3650'

Time On: 00:49 01/17

Time Off: 08:41 01/17

Time On Bottom: 03:52 01/17 Time Off Bottom: 05:37 01/17

#### **Gas Volume Report**

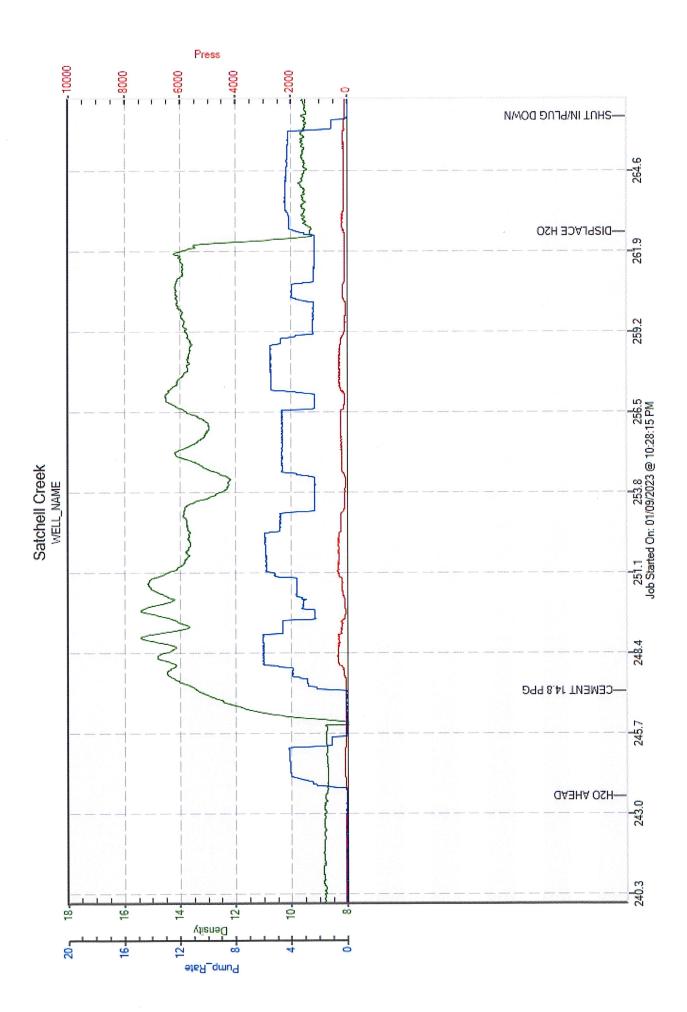
1st Open 2nd Open

Time Orifice PSI MCF/D	Time		Orifice	PSI	MCF/D
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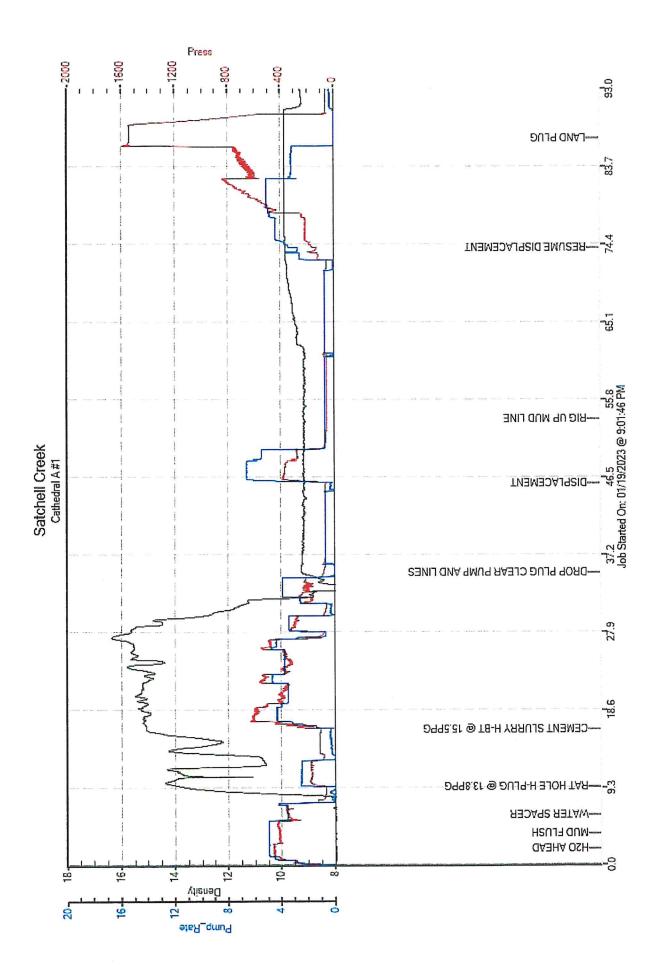
Custo	omer:	Satchell	Creek F	Petroleum	Well:	Cathedral A #1	Ticket:	WP 3808			
City, S	State:	Victoria	KS		County:	Ellis KS	Date:	1/7/2023			
Field	Rep:	Randy			S-T-R:	1-13S-17W	Service:	Surface			
Down	ihole li	nformatio	n		Calculated SI	urry - Lead	Calcu	lated Slurry - Tail			
Hole	Size:	12 1/4	in		Blend:	H-325					
Hole D	epth:	221	ft		Weight:	14.8 ppg	Weight:	ppg			
Casing	Size:	8 5/8	in		Water / Sx:	6.9 gal / sx	Water / Sx:	gal / sx			
asing D	epth:	220	ft		Yield:	1.41 ft <sup>3</sup> / sx	Yield:	ft³/sx			
ıbing / I	Liner:		in		Annular Bbls / Ft.:	0.0735 bbs / ft.	Annular Bbls / Ft.:	bbs / ft.			
	epth:		ft		Depth:	220 ft	Depth:	ft			
ool / Pa	A MANAGEMENT				Annular Volume:	16.2 bbls	Annular Volume:	0 bbls			
Tool D			ft		Excess:	1900g (1900g 13	Excess:	0.0 1112			
isplace	ment:	12.7	A.		Total Slurry:	56.5 bbls	Total Sacks	0.0 bbls 0 sx			
IME	RATE	PSI	STAGE BBLs	TOTAL BBLs	Total Sacks:	225 sx	Total Sacks:	A SY			
8:00 AM		Parl barret			200 - 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ing was on bottom and rig was cit	rculating on arrival				
8:10 AM					Safety meeting						
8:20 AM					Rigged up						
9:00 AM	4.0	70.0	5.0	5.0	Water ahead						
9:04 AM		270.0	56.5	61.5	Mixed 225 sacks H-325	cement @ 14.8 ppg					
9:20 AM	4.2	120.0	12.7	74.2	Begin displacement						
9:23 AM		100.0		74.2	Plug down and shut in	Plug down and shut in with 5 bbls/20 sacks cement circulated to pit					
9:25 AM				74.2	Washed up and rigged	Washed up and rigged down					
10:00 AM				74.2	Left location						
				74.2							
				74.2							
	_	_									
			-								
		_									
		1 Jugaren		er e cellesto	Control of the Control		CHMMAD				
		CREW		SET SEE	UNIT		SUMMARY	Maria de Servicio de la compansión de la			
	nenter:	John	1810		73	Average Rate	Average Pressure	Total Fluid 74 bbls			
Pump Op	TO SERVICE	Jose			528-520	4.6 bpm	140 psi	74 DDIS			
	ulk #1: ulk #2:	Kale			205						







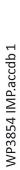
EMENT T	REA	TMEN	T REPO	ORT			<b>阿特马特里</b>		经通用商品的数据
Custom	er: S	atchell	Creek		Well:	(	Cathedral A #1	Ticket:	WP3854
City, Sta	te:				County:		Ellis, KS	Date:	1/19/2023
Field Ro					S-T-R:		1-13S-17W	Service:	Longstring
	NEC 1 F	gasimus er	Mary Mary W				*Alcogorum		
Downho	100				Calculated Slu	ırry - Lead	77.48	Calcu	ılated Slurry - Tail
Hole Siz	254	7 7/8			Blend:	н-вт		Blend:	H-Plug
Hole Dep		3650			Weight:	15.5 ppg		Weight:	13.8 ppg
Casing Siz	-	5 1/2			Water / Sx:	3.8 gal		Water / Sx:	6.9 gal / sx
Casing Dep		3640			Yield:	1.04 ft <sup>3</sup> /		Yield:	1.42 ft <sup>3</sup> / sx
Tubing / Lin	ms -		in		Annular Bbls / Ft.:	bbs	/ ft.	Annular Bbls / Ft.:	bbs / ft.
Dep Tool / Pack	- 10	Port C	ft		Depth:	ft		Depth:	ft
Tool Dep	No.	THE SECRET SAN	-4		Annular Volume:	0.0 bbls	·	Annular Volume:	0 bbls
i doi Dep Displaceme		1195 85.6			Excess:	41.6 bbls		Excess: Total Slurry:	7.6 bbls
and and		STATE OF THE STATE	STAGE	TOTAL	Total Slurry: Total Sacks:	225 sx	<u> </u>	Total Sacks:	30 sx
TIME RA	TE	PSI	BBLs	BBLs	REMARKS	220 2X		Total Sacks:	
545pm			-	-	Arive on Location			, and the second se	
600pm				-	Rig Started Running Cas	sing			
900pm					Casing On Bottom Start (	Circulation			
1045pm				-	Rig Up For Cement				
				-					
1121pm 4.5		400.0	10.0	10.0	H20 Ahead				
1124pm 4.9		420.0	12.0	22.0	Mudd Flush				
1126pm 3.5		350.0	10.0	32.0	H2O Spacer				
1133pm 2.4		150.0	7.6	39.6	Rat Hole H-Plug @ 13.8p	pg 30 Sacks			
1137pm 4.7		420.0	41.6	81.2	Cement Slurry H-BT @ 1	5.5ppg			
1150pm				81.2	Drop Plug and Clear Pun	mp and Lines			
1207am 5.5		670.0	33.0		Begin Displacement with	1 2% KCL In the	first 20bbls		
1213am		-			Rig ran Out of Water Hoo	oked Up To Mu	d Pump to Finish Disp	placement	
1230am 5.0		700.0			Resume Displacement				
1248am 3.0	-	750.0	85.6		Land Plug Bump to 1540				
	-				Bleed off pressure Plug I	Held			
1250am	-				Wash Up				
1am	+				Rig Down				
140am	+				Leave Location				
	+				Ç.25				
	+						7		
	$\dashv$								
	$\dashv$				N. 5-14-1		-		
	$\neg$								-
	$\dashv$								
40.00		CREW			UNIT	A STATE OF THE STA		SUMMARY	
Cemen	ter:	Spen	cer		943		Average Rate	Average Pressure	Total Fluid
Pump Operat		Mich			230		4.2 bpm	483 psi	200 bbls
Bulk	1000	Kale			194/250				'R
Bulk	1000000								

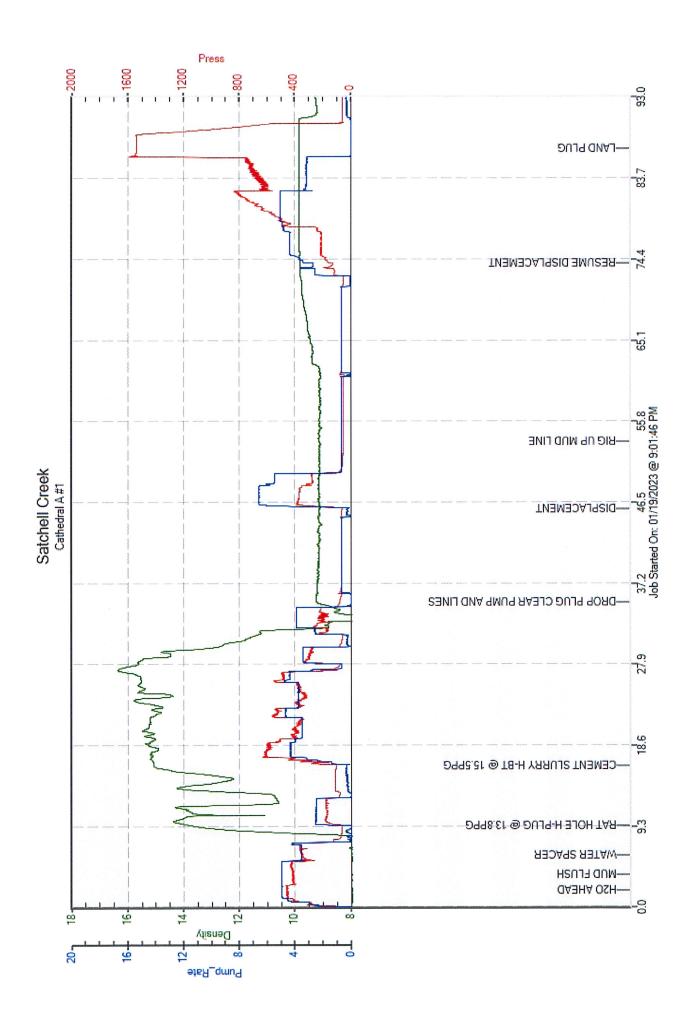




CEMENT	TRE	ATMEN	T REP	ORT					15. 在第二次,并是一个
Cust	tomer:	Satchell	Creek Well: Cathedral A #1 Ticket						WP3854
City,	State:				County:	County: Ellis, KS Da			1/19/2023
Field	d Rep:	,			S-T-R:		1-13S-17W	Port Collar	
		nformatio	on		Calculated S	Slurry - Lea	d	Calc	ulated Slurry - Tail
	Size:				Blend:		ВТ	Blend:	H-Plug
Hole I					Weight:		ppg	Weight:	13.8 ppg
Casing I	Size:				Water / Sx:		gal / sx	Water / Sx:	6.9 gal / sx 1.42 ft³ / sx
Tubing /		3040	in		Yield: Annular Bbls / Ft.:	1.04	bbs / ft.	Yield: Annular Bbls / Ft.:	bbs / ft.
	Depth:		ft		Depth:		ft ft	Depth:	ft ft
Tool / Pa		Port C			Annular Volume:	0.0	bbls	Annular Volume:	0 bbls
Tool I	Depth:	1195	ft		Excess:			Excess:	
Displace	ment:	85.6	bbls		Total Slurry:	41.6	bbls	Total Slurry:	7.6 bbls
			STAGE	TOTAL	Total Sacks:	225	sx	Total Sacks:	30 sx
TIME	RATE	PSI	BBLs	BBLs	REMARKS	300			
545pm			-	-	Arive on Location				
600pm				-	Rig Started Running C				
900pm				-	Casing On Bottom Sta	rt Circulatio	n		
1045pm				-	Rig Up For Cement				
4404	4.5	400.0	40.0	- 40.0	LIOO Abaad				
1121pm 1124pm		400.0 420.0	10.0 12.0	10.0	H20 Ahead Mudd Flush				
1124piii 1126pm		350.0	10.0	32.0	H2O Spacer				
1133pm		150.0	7.6	39.6	Rat Hole H-Plug @ 13.	8ppg 30 Sac	ks		
1137pm		420.0	41.6	81.2	Cement Slurry H-BT @				
1150pm				81.2	Drop Plug and Clear P		es		
1207am	5.5	670.0	33.0		Begin Displacement w	ith 2% KCL	n the first 20bbls		
1213am					Rig ran Out of Water H	looked Up T	o Mud Pump to Finish Dis	placement	
1230am	5.0	700.0			Resume Displacement	t			
1248am	3.0	750.0	85.6		Land Plug Bump to 1	540psi			
					Bleed off pressure Plu	ıg Held			
1250am					Wash Up				
1am					Rig Down				
140am	11				Leave Location				
,									
		CREW			UNIT		TASK AMERICA	SUMMAR	
	nenter:	Spen			943		Average Rate	Average Pressure	Total Fluid
Pump Op		Mich	eal		230		4.2 bpm	483 psi	200 bbls
	ulk #1: ulk #2:	Kale			194/250				

ftv: 13-2021/01/19 mplv: 350-2023/01/16







CEMENT TREATMENT REPORT  Customer: Satchell Creek					Cathedral A #1	Ticket:	WP 4532						
				County:	Ellis KS		7/19/2023						
City, State: Victoria KS Field Rep: Taylor Lieker					1-13S-17W	Date:	7/19/2023 PTA						
Field Kep:	Taylor L	ieker		S-T-R:	1-135-1744	Service:	PIA						
Downhole I	nformatio	on		Calculated S	lurry - Lead	Calcu	ılated Slurry - Tail						
Hole Size:		in		Blend:	H-Plug A	Blend:							
Hole Depth:				Weight:	13.8 ppg	Weight:	ppg						
Casing Size: 5 1/2 in			Water / Sx:	6.9 gal / sx	gal / sx								
Casing Depth: 1650 ft			Yield:	1.42 ft <sup>3</sup> / sx	Yield:	ft <sup>3</sup> / sx							
Tubing / Liner: in			Annular Bbls / Ft.:	0.0309 bbs / ft.	Annular Bbls / Ft.:	bbs / ft.							
Depth: ft			Depth:	1650 ft	Depth:	ft							
Tool / Packer:  Tool Depth:			Annular Volume:	51.0 bbls	Annular Volume:	0 bbls							
Tool Depth:		bbls		Excess: Total Slurry:	82.1 bbls	Excess: Total Slurry:	0.0 bbls						
		STAGE			325 sx	Total Sacks:	0.0 bbis						
IME RATE	PSI	BBLs		REMARKS			BANKE STATE						
3:20 AM		-	-	Arrived on location		:							
3:30 AM			-	Safety meeting			4						
3:40 AM			-	Rigged up									
9:24 AM 4.0	550.0	21.0	21.0	Water ahead									
9:33 AM 3.7	550.0	30.0	51.0	Mixed 10 sacks gel 3.0	Mixed 10 sacks gel 3.0 ppg @ 1650'								
9:47 AM 3.7	250.0	18.9	69.9	Mixed 75 sacks H-Plug	A cement 13.8 ppg with 200# hulls	@ 1650'							
9:53 AM 5.7	250.0	23.0	92.9	Begin displacement	.,								
			92.9										
0:37 AM 3.0	50.0	3.0	95.9	Water ahead									
0:39 AM 4.5	300.0	12.6	108.5	Mixed 50 sacks H-Plug A cement 13.8 ppg with 100# hulls @ 1193'									
0:42 AM 4.0	250.0	5.0	113.5	Begin displacement									
1:15 AM 3.0	100.0	3.0		Water ahead									
				Mixed 175 sacks H-Plug	g A cement 13.8 ppg with 100# hulls	s @ 700' cement did not circul	ate to surface						
11:25 AM 2.5 200.0 2.0				Begin displacement									
2:00 PM													
2:30 PM				Left location									
				<u></u>	<del></del>								
	CREW			UNIT		SUMMARY							
Cementer:	Johr	1		947	Average Rate	Average Pressure	Total Fluid						
ump Operator:	T		208	3.9 bpm	290 psi	169 bbls							
Bulk #1:	Edw			180-530									
Bulk #2: Edward				242									

ftv: 15-2021/01/25 mplv: 401-2023/06/29



CEMENT	TRE	ATMEN	T REP	ORT					COLUMN TO THE WAR OWN TO				
Customer: Satchell Creek					Well: Cathedral A #1			Ticket:	WP4548				
City, State:				County:		Ellis,KS	Date:	7/25/2023					
Field Rep:				S-T-R:	1-13S-17W		Service:	PTA					
Downhole Information			Calculated SI				culated Slurry - Tail						
	Hole Size: in			Blend:	H-Con		Blend:						
Hole Depth: ft				Weight:	12.0		Weight:	ppg					
Casing Size:		5 1/2 in			Water / Sx:		gal / sx	Water / Sx:	gal / sx ft³ / sx				
Casing Depth: Tubing / Liner:		ft in			Yield: Annular Bbls / Ft.:	2.56	hbs / ft.	Yield: Annular Bbls / Ft.:	bbs / ft.				
Depth:			ft		Depth:		ft	Depth:	ft ft				
Tool / Packer:					Annular Volume:		bbls	Annular Volume:	0 bbls				
Tool Depth:		ft			Excess:			Excess:					
Displacement:		bbls			Total Slurry:			Total Slurry:	0.0 bbls				
		STAGE		TOTAL	Total Sacks:	80	sx	Total Sacks:	0 sx				
TIME	RATE	PSI	BBLs	BBLs	REMARKS								
830am			-	-	Arrive On Location								
845am				-	Safety Meeting								
900am				-	Rig Up								
912am	2.0	150.0	18.2	18.2	Coment Slurry H Con 40	neke @ 12n	ng to Fill 5 1/2 to Surface		,				
941am		100.0	18.2	36.4	Cement Slurry H-Con 40sks @ 12ppg to Fill 5 1/2 to Surface  Cement Slurry H-Con 40sks @ 12ppg to Fill 8 5/8 to Surface								
0414111	2.0	100.0	10.2	36.4	Contont Granty 11-Cont 40000 @ 12ppg to 1 iii 0 0/0 to Gartage								
950am				36.4	Wash Up								
1000am				36.4	Rig Down								
1010am				36.4	Leave Location								
				36.4									
								*					
		CREW			UNIT			SUMMAR	YY				
Cementer:		Spencer			945		Average Rate	Average Pressure	Total Fluid				
Pump Op		Riley			529/522		2.5 bpm	125 psi	36 bbls				
Bulk #1: Mich					194/235								
Bulk #2:													