

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](mailto: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
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

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
-------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------

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:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	ELIZABETH "A" 1-36
Doc ID	1421091

All Electric Logs Run

DUAL-INDUCTION
NUETRON DENSITY
MICRO
SONIC

Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	ELIZABETH "A" 1-36
Doc ID	1421091

Tops

Name	Top	Datum
ANHY	1674	511
BASE ANH	1708	477
TOPEKA	3137	-952
HEEBNER	3351	-1166
LANSING	3392	-1207
STARK	3567	-1382
BKC	3595	-1410
MARMATON	3628	-1443
ARBUCKLE	3722	-1537





Services, Inc.

CHARGE TO: Debat & Energy  
 ADDRESS  
 CITY, STATE, ZIP CODE

TICKET 27342

PAGE 1 OF 1

1. SERVICE LOCATIONS <u>Hays, KS</u>	WELL/PROJECT NO. <u>1-36</u>	LEASEE <u>Elizabeth A. Graham</u>	COUNTY/PARISH <u>Graham</u>	STATE <u>KS</u>	CITY	DATE <u>7-18-18</u>	OWNER
2. <u>Ness City, KS</u>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>Martin Drilling</u>	RIG NAME NO. <u>Rig #</u>	SHIPPED VIA <u>UT</u>	DELIVERED TO <u>Deathon</u>	ORDER NO.	
3.	WELL TYPE <u>011</u>	WELL CATEGORY <u>development Top to Bottom long string</u>	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
575					1	111	40	mi			5.00	350.00
529					1		1	ea			1800.00	1800.00
290					1		5	ea			42.00	210.00
281					1		500	ea			1.50	750.00
221					1		10	ea			25.00	250.00
403					1		4	ea			275.00	1100.00
406					1		1	ea			250.00	250.00
402					1		1	ea			325.00	325.00
409					1		14	ea			85.00	1190.00

**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 \_\_\_\_\_ TIME SIGNED \_\_\_\_\_  
 A.M.  
 P.M.

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				1	6225.00
WE UNDERSTOOD AND MET YOUR NEEDS?				2	10165.65
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				Total	16390.65
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				STATION	910.88
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO		1510	910.88
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					17301.53

SWIFT OPERATOR Davis Edgerton APPROVAL \_\_\_\_\_

**CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES** The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You!



PO Box 466  
 Mass City, KS 67560  
 Off: 785-798-2300

TICKET CONTINUATION

Customer No. 27322

CUSTOMER: Cobalt Energy  
 WELLS: Elizabeth A' 1-36  
 DATE: 7-18-18  
 PAGE: 1 OF 1

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELLS				UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY	U/M	QTY	U/M		
330						Swift Multi Density	300	sls			16.25	4875.00
325						Standard Ant	150	sls			13.00	1950.00
284						Cal Seal	7	sls			35.00	245.00
283						Salt	800	lbs			.20	160.00
292						Haled - 522	40	lbs			8.00	320.00
276						Flarele	112	lbs			2.50	280.00
581												
583												

SERVICE CHARGE: Cement  
 MILEAGE CHARGE: 439.82  
 CUBIC FEET: 450 sls  
 TON MILES: 1539  
 UNIT PRICE: 1.75  
 AMOUNT: 787.50  
 UNIT PRICE: .85  
 AMOUNT: 1308.15

CONTINUATION TOTAL: 10165.65

JOB LOG

SWIFT Services, Inc.

DATE  
7-18-18

PAGE NO.

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
Cobalt Energy		1-36		Elizabeth 'A'		Top to Bottom		27342	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
									On location
									5 1/2 x 15.5 lbs RTD - 3825 LTD - 3823 Total - 3814.65 baffle @ 3772.32 Centralizers - 3, 4, 5, 7, 8, 1, 10, 11, 12, 13, 14, 37, 51, 65 Baskets - 13, 37, 51, 65
	3:00								Start running Csg
	4:35								Break Circ on Bottom
	5:35	2	16			0			Plug Rat hole - 30 sks
	5:40	2	8			0			Plug Mouse hole - 15 sks
	5:45	7	12			400			pump mud flush - 500 GAL
	5:50	7	20			400			pump Kel Flush
	5:55	7	0			500			start cmt - 255 sks Sand @ 11.2
		7	140			500			switch to EA-2 @ 15.5 ppq
	6:20	5	176			300			End Cmt Drop plug - Wash ptl
	6:30		0			200			Start Disp
			70			500			Circ Cmt
	6:45		89.5			1000			land plug - 11ft psi - 1000 # land psi - 1600 #
									Release Psi - Dry
									Thanks David, Zach, Isaac & Kirby
									⌘ Circulated 35 sks to pit ⌘



# GLOBAL OIL FIELD SERVICES, LLC

3398

REMIT TO 24 S. Lincoln  
Russell, KS 67665

SERVICE POINT: Russell KS

DATE <u>7-9-18</u>	SEC <u>36</u>	TWP. <u>9</u>	RANGE <u>27</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>12:30 PM 9-7</u>
LEASE <u>Elizabeth</u>	WELL # <u>F-36</u>	LOCATION <u>Russell Rd to 350 N 4th</u>			COUNTY <u>Crawford</u>	STATE <u>KS</u>	
OLD OR NEW (CIRCLE ONE) <u>NEW</u>			1 mi W 1/2 W 4th				

CONTRACTOR <u>Mucelin Drilling Rig #16</u>	OWNER <u>Cohalt</u>
TYPE OF JOB <u>Surface</u>	
HOLE SIZE <u>12 1/4</u>	T.D. <u>218'</u>
CASING SIZE <u>8 3/4</u>	DEPTH <u>217'</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX.	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. <u>26'</u>	
PERFS	
DISPLACEMENT <u>12 bbl</u>	
EQUIPMENT	
PUMP TRUCK # <u>409</u>	CEMENTER <u>Cody</u>
	HELPER <u>Paul</u>
BULK TRUCK # <u>411</u>	DRIVER <u>Tony</u>
BULK TRUCK #	DRIVER

CEMENT AMOUNT ORDERED <u>1500 Com 3% CC</u>	
<u>2% Gel</u>	
COMMON	@
POZMIX	@
GEL	@
CHLORIDE	@
ASC	@
	@
	@
	@
	@
	@
	@
	@
	@
	@
HANDLING	@
MILEAGE	@
TOTAL	

REMARKS:

Losses of cement casing & casing added to rig. Back circulation needed to pump cement. Pumped 1500 of cement and displaced 12 bbl of H2O and slurry.

Cement did circulate to surface

CHARGE TO: Cohalt  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Global Oil Field Services, LLC  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME AFO  
SIGNATURE [Signature]

SERVICE

DEPTH OF JOB	
PUMP TRUCK CHARGE	
EXTRA FOOTAGE	@
MILEAGE	@
MANIFOLD	@
	@
	@
TOTAL	

PLUG & FLOAT EQUIPMENT

	@
	@
	@
	@
TOTAL	

SALES TAX (If Any) \_\_\_\_\_  
TOTAL CHARGES \_\_\_\_\_  
DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**12**  
 2018

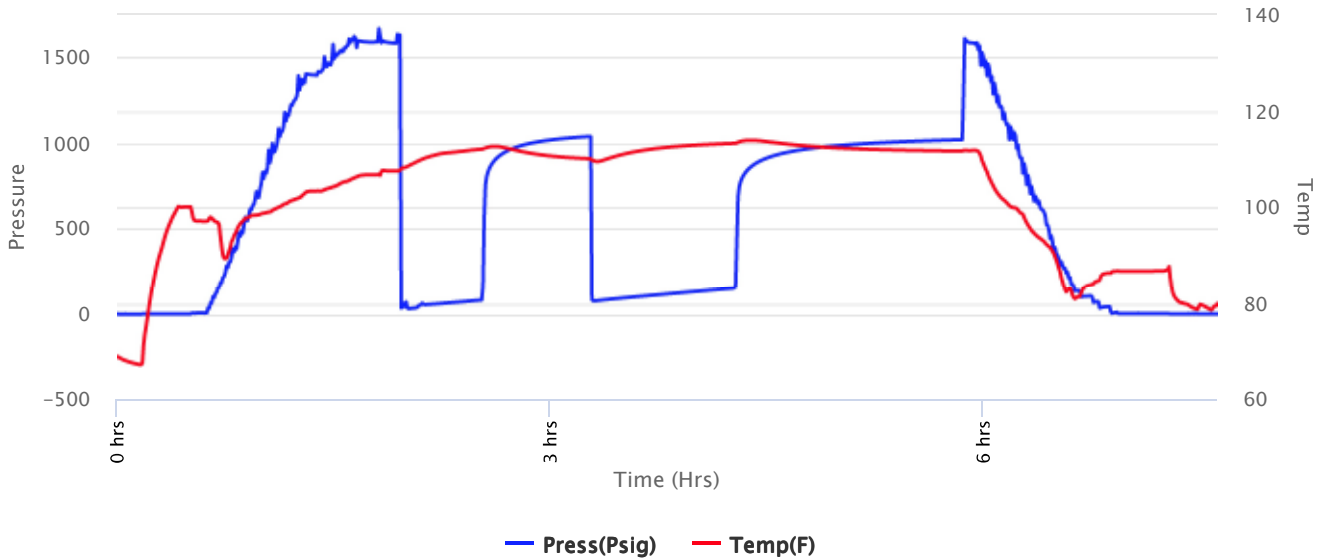
**DST #1 Formation: Lans "A" Test Interval: 3387 - Total Depth: 3410'**  
**3410'**

Time On: 18:36 07/12 Time Off: 02:03 07/13  
 Time On Bottom: 20:34 07/12 Time Off Bottom: 00:20 07/13

Electronic Volume Estimate:  
 1078'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 60	Minutes: 90
Current Reading: 53" at 30 min	Current Reading: 0" at 45 min	Current Reading: 60.3" at 60 min	Current Reading: 18.3" at 90 min
Max Reading: 53"	Max Reading: 0"	Max Reading: 60.3"	Max Reading: 18.3"

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**12**  
 2018

**DST #1 Formation: Lans "A" Test Interval: 3387 - Total Depth: 3410'**  
**3410'**

Time On: 18:36 07/12 Time Off: 02:03 07/13  
 Time On Bottom: 20:34 07/12 Time Off Bottom: 00:20 07/13

Recovered

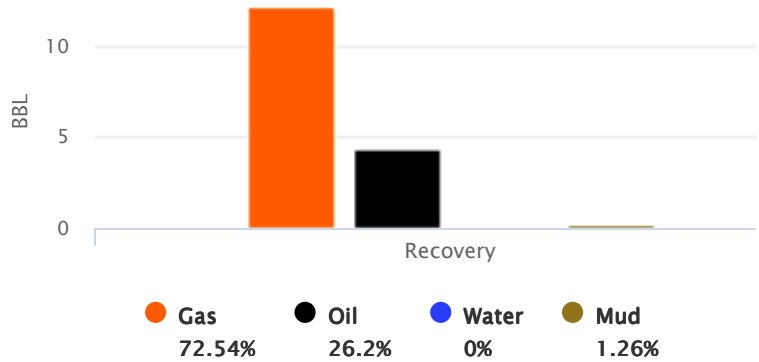
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
819	11.65437	G	100	0	0	0
300	4.269	SLGCO	10	90	0	0
78	0.8482359	SLGCMCO	10	65	0	25

Total Recovered: 1197 ft  
 Total Barrels Recovered:  
 16.7716059

**Reversed Out**  
 NO

Initial Hydrostatic Pressure	1586	PSI
Initial Flow	34 to 80	PSI
<b>Initial Closed in Pressure</b>	<b>1038</b>	<b>PSI</b>
Final Flow Pressure	76 to 148	PSI
<b>Final Closed in Pressure</b>	<b>1020</b>	<b>PSI</b>
Final Hydrostatic Pressure	1584	PSI
Temperature	114	°F
Pressure Change Initial Close / Final Close	1.7	%

**Recovery at a glance**





**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**DATE**

July

**12**

2018

**DST #1      Formation: Lans "A"      Test Interval: 3387 -      Total Depth: 3410'**  
**3410'**

Time On: 18:36 07/12      Time Off: 02:03 07/13

Time On Bottom: 20:34 07/12      Time Off Bottom: 00:20 07/13

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Blow increasing. BOB in 8 mins.

Initial Shut-in: VOID

Final Flow: Blow increasing. BOB in 12 mins.

Final Shut-in: BOB blow back in 25 mins.

Tool Sample: 90% oil, 10% mud

As per Geo request, no bleed off after first open. First shut-in is VOID due to improper procedure instructions from the Geo.

Had several issues getting the slips to hold in order to turn the tool due to it landing with the tool joint in the table.

Gravity: 33.9 @ 60 °F





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**12**  
2018

**DST #1      Formation: Lans "A"      Test Interval: 3387 - 3410'      Total Depth: 3410'**

Time On: 18:36 07/12      Time Off: 02:03 07/13  
Time On Bottom: 20:34 07/12      Time Off Bottom: 00:20 07/13

**Down Hole Makeup**

**Heads Up:** 37.62 FT

**Packer 1:** 3382 FT

**Drill Pipe:** 3363.44 FT

**Packer 2:** 3387 FT

*ID-3 1/2*

**Top Recorder:** 3370.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3408 FT

*ID-2 7/8*

**Well Bore Size:** 7 7/8

**Collars:** 28.11 FT

**Surface Choke:** 1"

*ID-2 1/4*

**Test Tool:** 34.07 FT

**Bottom Choke:** 5/8"

*ID-3 1/2-FH*

*Jars*

*Safety Joint*

**Total Anchor:** 23

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** 19 FT

*4 1/2-FH*

**Change Over:** FT

**Drill Pipe: (in anchor):** FT

*ID-3 1/2*

**Change Over:** FT

**Perforations: (below):** 3 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**12**

2018

**DST #1      Formation: Lans "A"      Test Interval: 3387 -      Total Depth: 3410'**  
**3410'**

Time On: 18:36 07/12

Time Off: 02:03 07/13

Time On Bottom: 20:34 07/12      Time Off Bottom: 00:20 07/13

**Mud Properties****Mud Type:** Chemical**Weight:** 8.8**Viscosity:** 56**Filtrate:** 6.0**Chlorides:** 1,900 ppm**Company: Cobalt Energy, LLC****Lease: Elizabeth A #1-36****Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**12**

2018

**DST #1      Formation: Lans "A"      Test Interval: 3387 -      Total Depth: 3410'**  
**3410'**

Time On: 18:36 07/12

Time Off: 02:03 07/13

Time On Bottom: 20:34 07/12

Time Off Bottom: 00:20 07/13

### Gas Volume Report

1st Open

2nd Open

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

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





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

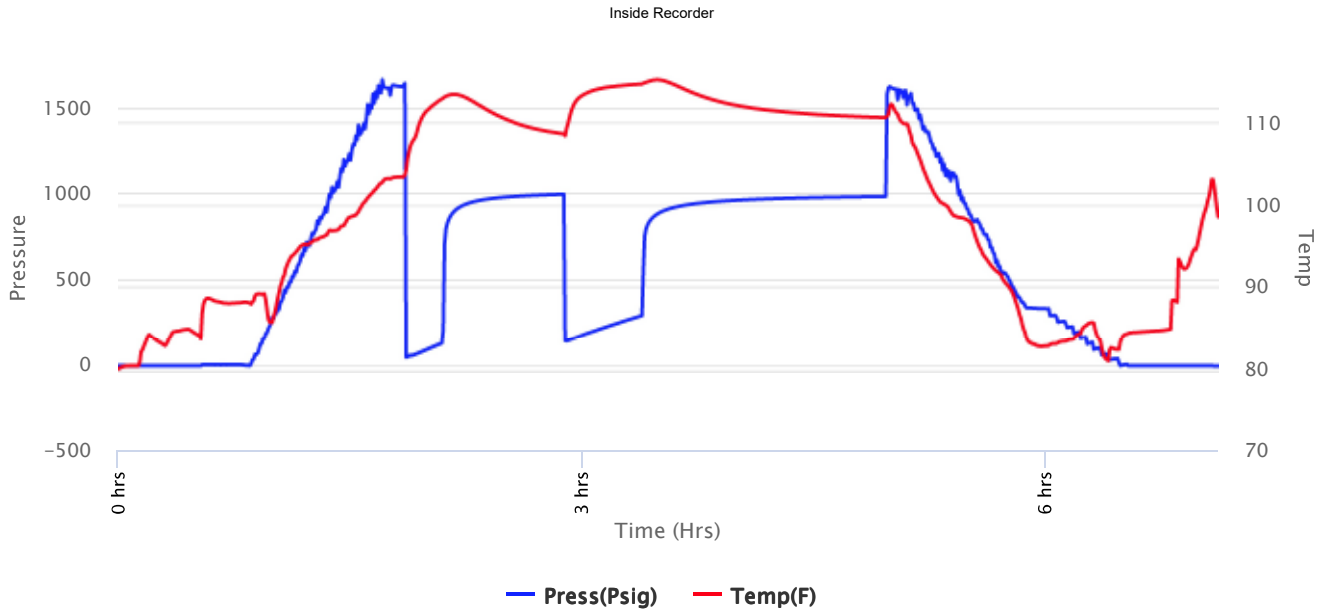
**DATE**  
 July  
**13**  
 2018

**DST #2    Formation: Lans "C"    Test Interval: 3420 - 3448'    Total Depth: 3448'**

Time On: 08:34 07/13    Time Off: 15:30 07/13  
 Time On Bottom: 10:23 07/13    Time Off Bottom: 13:23 07/13

Electronic Volume Estimate:  
 1721'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 15	Minutes: 45	Minutes: 30	Minutes: 90
Current Reading: 73.0" at 15 min	Current Reading: 27.6" at 45 min	Current Reading: 93.7" at 30 min	Current Reading: 40.4" at 90 min
Max Reading: 73.0"	Max Reading: 27.6"	Max Reading: 93.7"	Max Reading: 40.4"





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**13**  
 2018

**DST #2 Formation: Lans "C" Test Interval: 3420 - Total Depth: 3448'**  
**3448'**

Time On: 08:34 07/13 Time Off: 15:30 07/13  
 Time On Bottom: 10:23 07/13 Time Off Bottom: 13:23 07/13

Recovered

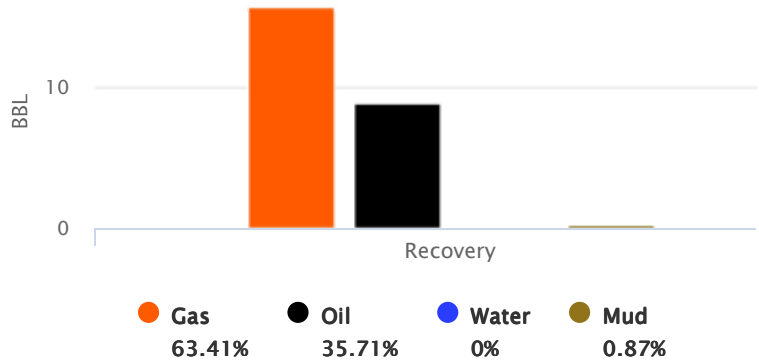
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
960	13.6608	G	100	0	0	0
684	9.73332	GCO	20	80	0	0
120	1.4458959	SLGCSLMCO	10	75	0	15

Total Recovered: 1764 ft  
 Total Barrels Recovered:  
 24.8400159

**Reversed Out**  
 NO

Initial Hydrostatic Pressure	1625	PSI
Initial Flow	48 to 126	PSI
<b>Initial Closed in Pressure</b>	<b>995</b>	<b>PSI</b>
Final Flow Pressure	141 to 288	PSI
<b>Final Closed in Pressure</b>	<b>983</b>	<b>PSI</b>
Final Hydrostatic Pressure	1610	PSI
Temperature	116	°F
Pressure Change Initial Close / Final Close	1.2	%

**Recovery at a glance**





**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**DATE**

July

**13**

2018

**DST #2      Formation: Lans "C"      Test Interval: 3420 -      Total Depth: 3448'**  
**3448'**

Time On: 08:34 07/13

Time Off: 15:30 07/13

Time On Bottom: 10:23 07/13

Time Off Bottom: 13:23 07/13

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Blow increasing. BOB in 3 mins.

Initial Shut-in: BOB blow back in 14 mins.

Final Flow: Blow increasing. BOB in 7 mins.

Final Shut-in: BOB blow back in 17 mins.

Tool Sample: 95% oil, 5% mud

Gravity: 33 @ 60 °F





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**13**  
2018

**DST #2      Formation: Lans "C"      Test Interval: 3420 -      Total Depth: 3448'**  
**3448'**

Time On: 08:34 07/13      Time Off: 15:30 07/13  
Time On Bottom: 10:23 07/13      Time Off Bottom: 13:23 07/13

**Down Hole Makeup**

**Heads Up:** 36.39 FT

**Packer 1:** 3415 FT

**Drill Pipe:** 3395.21 FT

**Packer 2:** 3420 FT

*ID-3 1/2*

**Top Recorder:** 3403.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3446 FT

*ID-2 7/8*

**Well Bore Size:** 7 7/8

**Collars:** 28.11 FT

**Surface Choke:** 1"

*ID-2 1/4*

**Test Tool:** 34.07 FT

**Bottom Choke:** 5/8"

*ID-3 1/2-FH*

*Jars*

*Safety Joint*

**Total Anchor:** 28

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** 24 FT

*4 1/2-FH*

**Change Over:** FT

**Drill Pipe: (in anchor):** FT

*ID-3 1/2*

**Change Over:** FT

**Perforations: (below):** 3 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**13**

2018

**DST #2      Formation: Lans "C"      Test Interval: 3420 -      Total Depth: 3448'**  
**3448'**

Time On: 08:34 07/13

Time Off: 15:30 07/13

Time On Bottom: 10:23 07/13

Time Off Bottom: 13:23 07/13

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 8.9

**Viscosity:** 56

**Filtrate:** 6.0

**Chlorides:** 1,900 ppm



**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**13**

2018

**DST #2    Formation: Lans "C"    Test Interval: 3420 -    Total Depth: 3448'**  
**3448'**

Time On: 08:34 07/13

Time Off: 15:30 07/13

Time On Bottom: 10:23 07/13

Time Off Bottom: 13:23 07/13

### Gas Volume Report

1st Open

2nd Open

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

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



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**13**  
 2018

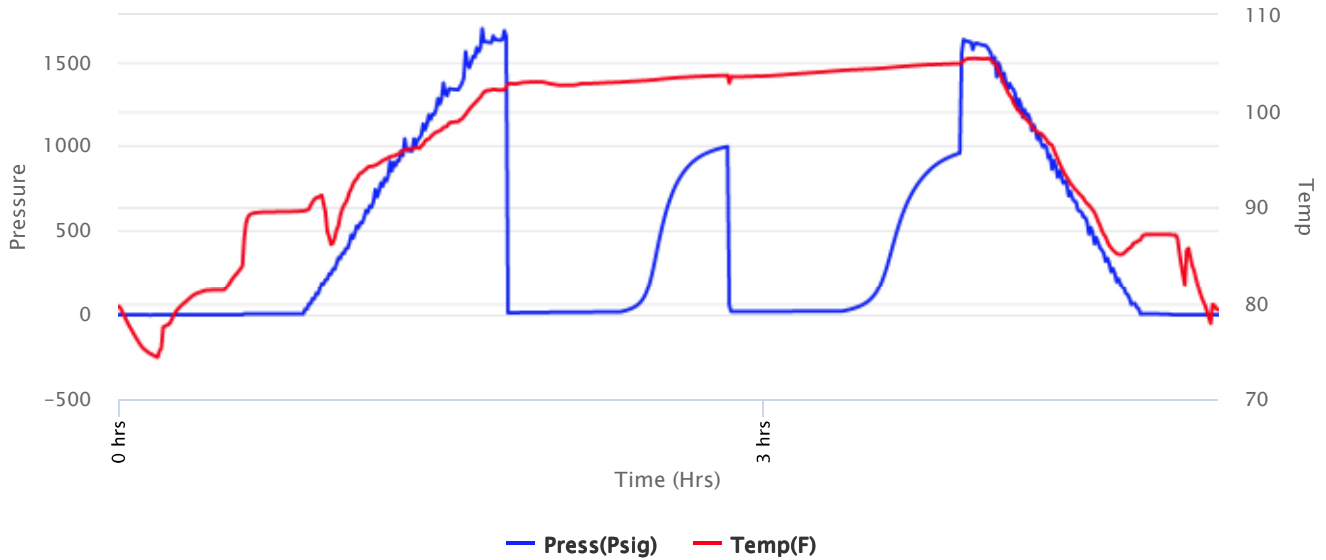
**DST #3 Formation: Lans "D" Test Interval: 3443 - Total Depth: 3465'**  
**3465'**

Time On: 20:57 07/13 Time Off: 01:57 07/14  
 Time On Bottom: 22:43 07/13 Time Off Bottom: 00:43 07/14

Electronic Volume Estimate:  
 3'

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

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**13**  
 2018

**DST #3 Formation: Lans "D" Test Interval: 3443 - Total Depth: 3465'**  
**3465'**

Time On: 20:57 07/13 Time Off: 01:57 07/14  
 Time On Bottom: 22:43 07/13 Time Off Bottom: 00:43 07/14

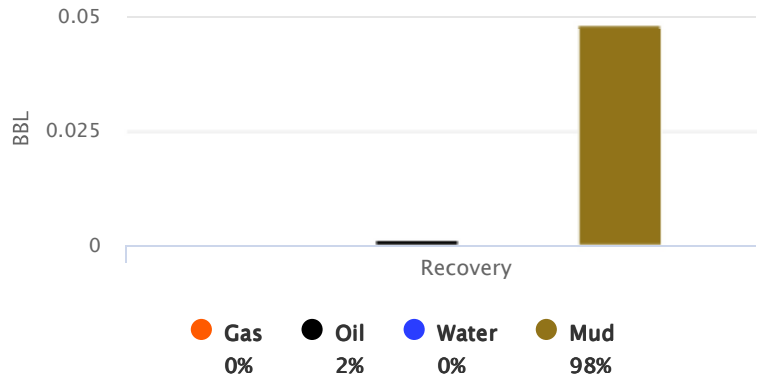
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
10	0.0492	SLOCM	0	2	0	98

Total Recovered: 10 ft  
 Total Barrels Recovered: 0.0492

**Reversed Out**  
 NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1628	PSI
Initial Flow	12 to 18	PSI
<b>Initial Closed in Pressure</b>	<b>998</b>	<b>PSI</b>
Final Flow Pressure	19 to 22	PSI
<b>Final Closed in Pressure</b>	<b>959</b>	<b>PSI</b>
Final Hydrostatic Pressure	1624	PSI
Temperature	105	°F
Pressure Change Initial Close / Final Close	3.9	%







**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**DATE**

July

**13**

2018

**DST #3      Formation: Lans "D"      Test Interval: 3443 -      Total Depth: 3465'**  
**3465'**

Time On: 20:57 07/13

Time Off: 01:57 07/14

Time On Bottom: 22:43 07/13

Time Off Bottom: 00:43 07/14

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Weak, surface blow.

Initial Shut-in: No blow back.

Final Flow: No blow.

Final Shut-in: No blow back.

Tool Sample: Mud w/oil spots





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**13**

2018

**DST #3      Formation: Lans "D"      Test Interval: 3443 -      Total Depth: 3465'**  
**3465'**

Time On: 20:57 07/13      Time Off: 01:57 07/14  
Time On Bottom: 22:43 07/13      Time Off Bottom: 00:43 07/14

**Down Hole Makeup**

**Heads Up:** 7.97000000000002 FT

**Packer 1:** 3438 FT

**Drill Pipe:** 3389.79 FT

**Packer 2:** 3443 FT

*ID-3 1/2*

**Top Recorder:** 3426.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3445 FT

*ID-2 7/8*

**Well Bore Size:** 7 7/8

**Collars:** 28.11 FT

**Surface Choke:** 1"

*ID-2 1/4*

**Bottom Choke:** 5/8"

**Test Tool:** 34.07 FT

*ID-3 1/2-FH*

*Jars*

*Safety Joint*

**Total Anchor:** 22

**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):** 21 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**DATE**

July

**13**

2018

**DST #3      Formation: Lans "D"      Test Interval: 3443 -      Total Depth: 3465'**  
**3465'**

Time On: 20:57 07/13

Time Off: 01:57 07/14

Time On Bottom: 22:43 07/13

Time Off Bottom: 00:43 07/14

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 8.9

**Viscosity:** 56

**Filtrate:** 6.0

**Chlorides:** 1,900 ppm



**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**13**

2018

**DST #3    Formation: Lans "D"    Test Interval: 3443 -    Total Depth: 3465'**  
**3465'**

Time On: 20:57 07/13

Time Off: 01:57 07/14

Time On Bottom: 22:43 07/13

Time Off Bottom: 00:43 07/14

### Gas Volume Report

1st Open

2nd Open

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

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



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

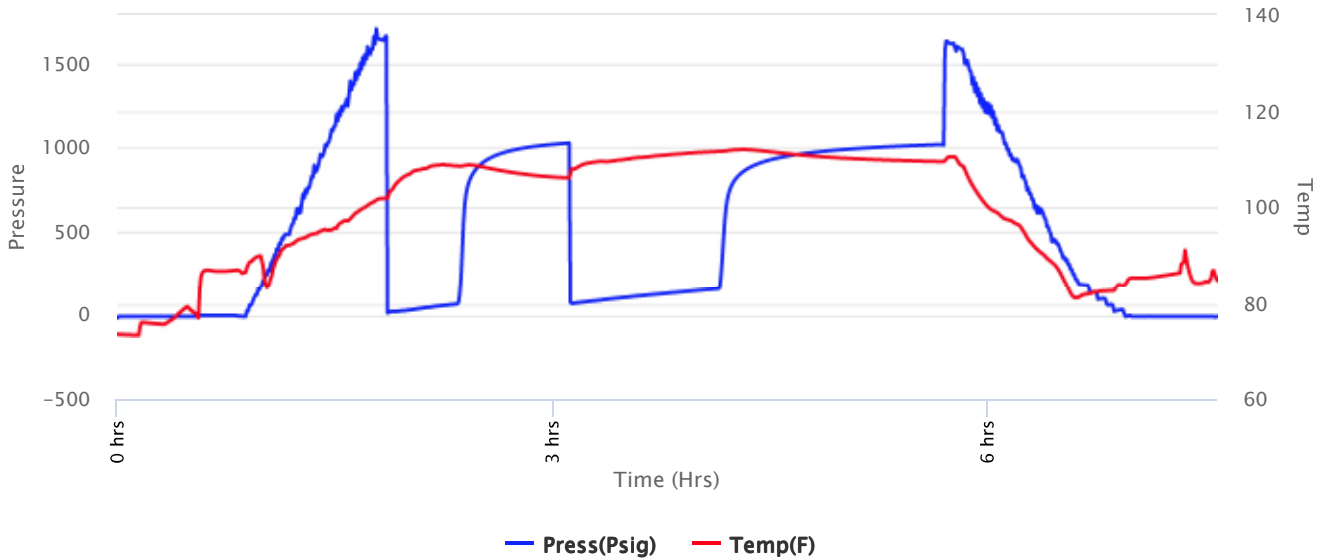
**DATE**  
 July  
**14**  
 2018

**DST #4**      **Formation: Lans "E&F"**      **Test Interval: 3463 - 3488'**      **Total Depth: 3488'**  
 Time On: 07:29 07/14      Time Off: 14:53 07/14  
 Time On Bottom: 09:18 07/14      Time Off Bottom: 13:03 07/14

Electronic Volume Estimate:  
 1102'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 60	Minutes: 90
Current Reading: 44.4" at 30 min	Current Reading: 1.1" at 45 min	Current Reading: 73.6" at 60 min	Current Reading: 4.1" at 90 min
Max Reading: 44.4"	Max Reading: 9"	Max Reading: 73.6"	Max Reading: 4.1"

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**14**  
 2018

**DST #4**      **Formation: Lans "E&F"**      **Test Interval: 3463 - 3488'**      **Total Depth: 3488'**  
 Time On: 07:29 07/14      Time Off: 14:53 07/14  
 Time On Bottom: 09:18 07/14      Time Off Bottom: 13:03 07/14

Recovered

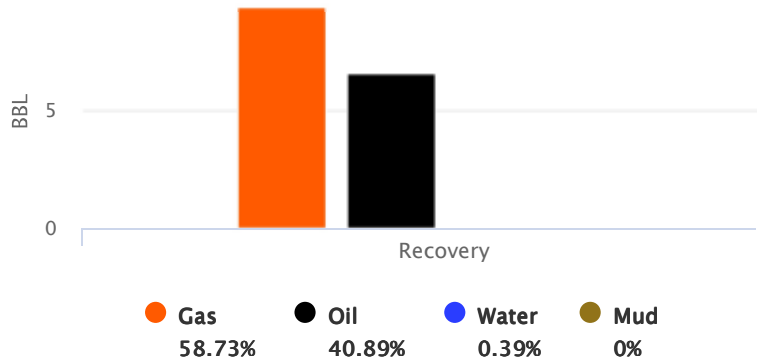
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
604	8.59492	G	100	0	0	0
450	6.4035	SLGCO	10	90	0	0
80	0.8766959	SLWCSLGCO	10	83	7	0

Total Recovered: 1134 ft  
 Total Barrels Recovered:  
 15.8751159

**Reversed Out**  
 NO

Initial Hydrostatic Pressure	1643	PSI
Initial Flow	20 to 71	PSI
<b>Initial Closed in Pressure</b>	<b>1029</b>	<b>PSI</b>
Final Flow Pressure	74 to 159	PSI
<b>Final Closed in Pressure</b>	<b>1020</b>	<b>PSI</b>
Final Hydrostatic Pressure	1622	PSI
Temperature	112	°F
Pressure Change Initial Close / Final Close	0.8	%

**Recovery at a glance**





**Company: Cobalt Energy, LLC**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**Lease: Elizabeth A #1-36**

**DATE**

July

**14**

2018

**DST #4**

**Formation: Lans  
"E&F"**

**Test Interval: 3463 -  
3488'**

**Total Depth: 3488'**

Time On: 07:29 07/14

Time Off: 14:53 07/14

Time On Bottom: 09:18 07/14

Time Off Bottom: 13:03 07/14

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Blow increasing. BOB in 8 mins.

Initial Shut-in: 1.1 in. blow back.

Final Flow: Blow increasing. BOB in 9 mins.

Final Shut-in: 4.1 in. blow back.

Tool Sample: 10% gas, 55% oil, 5% water, 30% mud

Gravity: 34 @ 60 °F





**Operation:**  
Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**  
July  
**14**  
2018

**DST #4**      **Formation: Lans "E&F"**      **Test Interval: 3463 - 3488'**      **Total Depth: 3488'**  
Time On: 07:29 07/14      Time Off: 14:53 07/14  
Time On Bottom: 09:18 07/14      Time Off Bottom: 13:03 07/14

**Down Hole Makeup**

<b>Heads Up:</b> 21.97 FT	<b>Packer 1:</b> 3458 FT
<b>Drill Pipe:</b> 3423.79 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3463 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3446.92 FT
<b>Collars:</b> 28.11 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3465 FT
<b>Test Tool:</b> 34.07 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 25	<b>Surface Choke:</b> 1"
<u><b>Anchor Makeup</b></u>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> FT <i>4 1/2-FH</i>	
<b>Change Over:</b> FT	
<b>Drill Pipe: (in anchor):</b> FT <i>ID-3 1/2</i>	
<b>Change Over:</b> FT	
<b>Perforations: (below):</b> 24 FT <i>4 1/2-FH</i>	



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**



**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**14**

2018

**DST #4**

**Formation: Lans  
"E&F"**

**Test Interval: 3463 -  
3488'**

**Total Depth: 3488'**

Time On: 07:29 07/14

Time Off: 14:53 07/14

Time On Bottom: 09:18 07/14

Time Off Bottom: 13:03 07/14

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 8.9

**Viscosity:** 55

**Filtrate:** 6.0

**Chlorides:** 2,100 ppm



**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**14**

2018

**DST #4**

**Formation: Lans  
"E&F"**

**Test Interval: 3463 -  
3488'**

**Total Depth: 3488'**

Time On: 07:29 07/14

Time Off: 14:53 07/14

Time On Bottom: 09:18 07/14

Time Off Bottom: 13:03 07/14

**Gas Volume Report**

**1st Open**

<b>Time</b>	<b>Orifice</b>	<b>PSI</b>	<b>MCF/D</b>
-------------	----------------	------------	--------------

**2nd Open**

<b>Time</b>	<b>Orifice</b>	<b>PSI</b>	<b>MCF/D</b>
-------------	----------------	------------	--------------



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

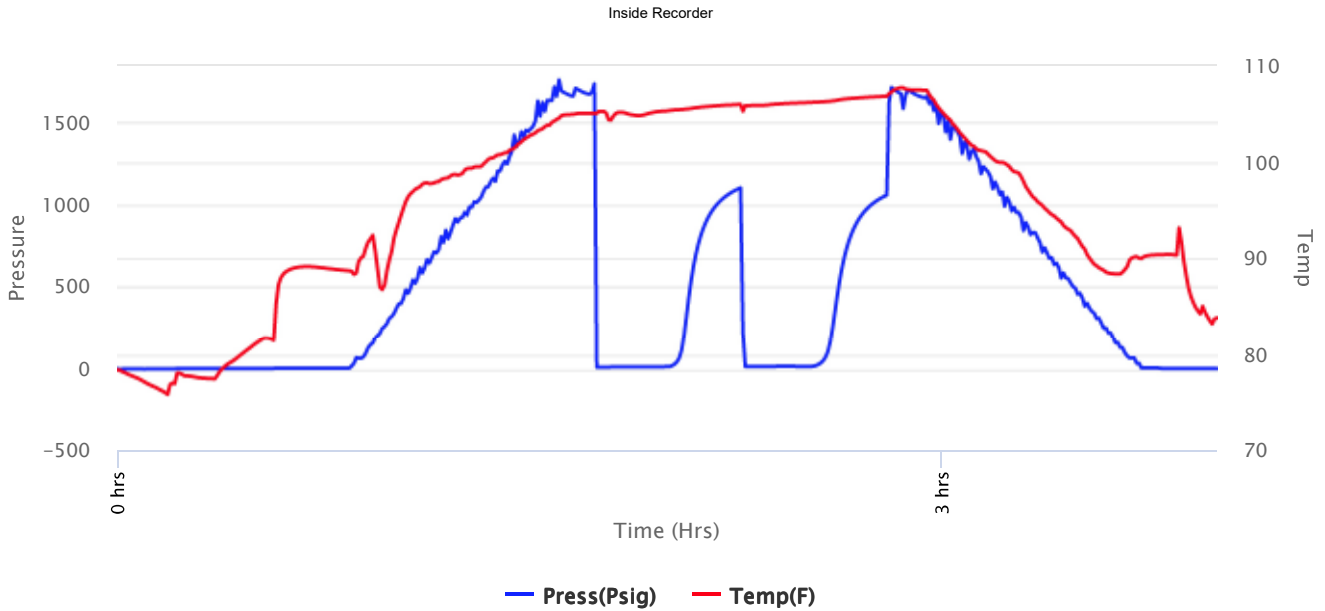
**DATE**  
 July  
**15**  
 2018

**DST #5    Formation: Lans "J"    Test Interval: 3557 - 3576'    Total Depth: 3576'**

Time On: 01:44 07/15    Time Off: 05:38 07/15  
 Time On Bottom: 03:27 07/15    Time Off Bottom: 04:27 07/15

Electronic Volume Estimate:  
 3'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 15	Minutes: 15	Minutes: 15	Minutes: 15
Current Reading: 0" at 15 min	Current Reading: 0" at 15 min	Current Reading: 0" at 15 min	Current Reading: 0" at 15 min
Max Reading: .1"	Max Reading: 0"	Max Reading: 0"	Max Reading: 0"





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**15**  
 2018

**DST #5 Formation: Lans "J" Test Interval: 3557 - Total Depth: 3576'**  
**3576'**

Time On: 01:44 07/15 Time Off: 05:38 07/15  
 Time On Bottom: 03:27 07/15 Time Off Bottom: 04:27 07/15

Recovered

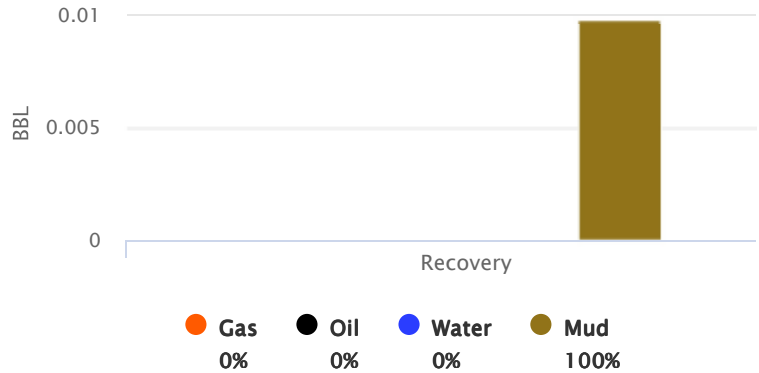
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
2	0.00984	M	0	0	0	100

Total Recovered: 2 ft  
 Total Barrels Recovered: 0.00984

**Reversed Out**  
 NO

Initial Hydrostatic Pressure	1670	PSI
Initial Flow	9 to 13	PSI
<b>Initial Closed in Pressure</b>	<b>1100</b>	<b>PSI</b>
Final Flow Pressure	13 to 14	PSI
<b>Final Closed in Pressure</b>	<b>1056</b>	<b>PSI</b>
Final Hydrostatic Pressure	1665	PSI
Temperature	107	°F
Pressure Change Initial Close / Final Close	4.0	%

**Recovery at a glance**





**Company: Cobalt Energy, LLC**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

**DATE**

July

**15**

2018

**DST #5**

**Formation: Lans "J"**

**Test Interval: 3557 -  
3576'**

**Total Depth: 3576'**

Time On: 01:44 07/15

Time Off: 05:38 07/15

Time On Bottom: 03:27 07/15

Time Off Bottom: 04:27 07/15

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Surface blow. Died in 5 mins.

Initial Shut-in: No blow back.

Final Flow: No blow.

Final Shut-in: No blow back.

Tool Sample: 100% mud





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**15**  
2018

**DST #5      Formation: Lans "J"      Test Interval: 3557 - 3576'      Total Depth: 3576'**

Time On: 01:44 07/15      Time Off: 05:38 07/15  
Time On Bottom: 03:27 07/15      Time Off Bottom: 04:27 07/15

**Down Hole Makeup**

**Heads Up:** 16.03 FT

**Packer 1:** 3552 FT

**Drill Pipe:** 3516.68 FT

**Packer 2:** 3557 FT

*ID-3 1/2*

**Top Recorder:** 3540.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3559 FT

*ID-2 7/8*

**Well Bore Size:** 7 7/8

**Collars:** 28.11 FT

**Surface Choke:** 1"

*ID-2 1/4*

**Bottom Choke:** 5/8"

**Test Tool:** 29.24 FT

*ID-3 1/2-FH*

*Safety Joint*

**Total Anchor:** 19

**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):** 18 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**15**

2018

**DST #5      Formation: Lans "J"      Test Interval: 3557 -      Total Depth: 3576'**  
**3576'**

Time On: 01:44 07/15      Time Off: 05:38 07/15

Time On Bottom: 03:27 07/15      Time Off Bottom: 04:27 07/15

**Mud Properties****Mud Type:** Chemical**Weight:** 8.9**Viscosity:** 56**Filtrate:** 6.0**Chlorides:** 2,100 ppm**Company: Cobalt Energy, LLC****Lease: Elizabeth A #1-36****Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**15**

2018

**DST #5      Formation: Lans "J"      Test Interval: 3557 -      Total Depth: 3576'**  
**3576'**

Time On: 01:44 07/15

Time Off: 05:38 07/15

Time On Bottom: 03:27 07/15

Time Off Bottom: 04:27 07/15

### Gas Volume Report

1st Open

2nd Open

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

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





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**15**  
 2018

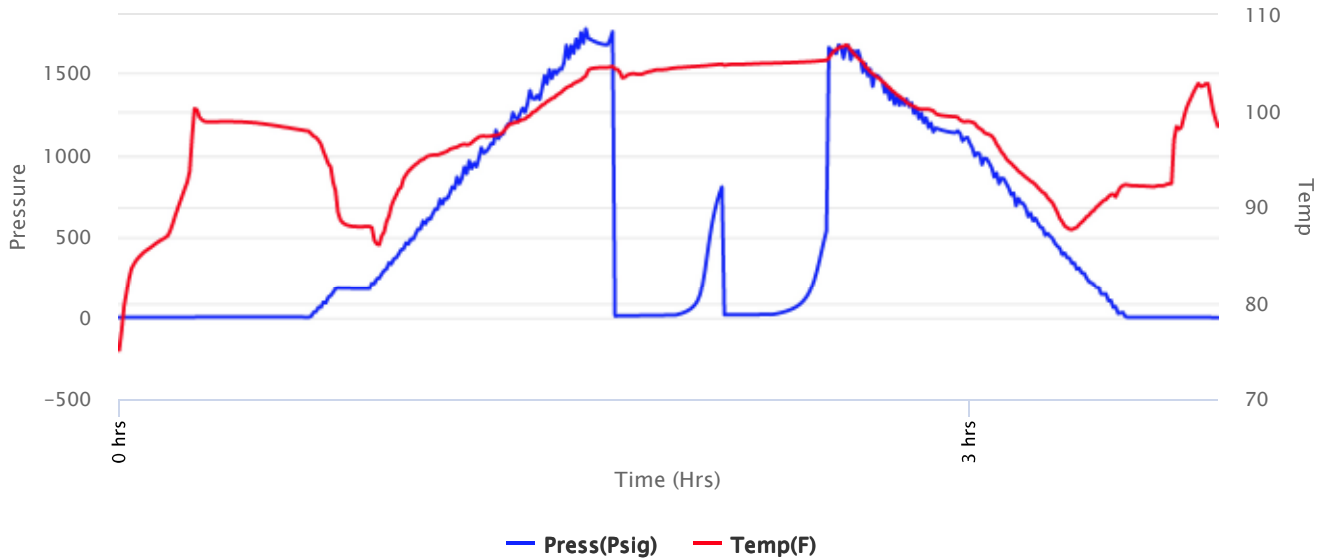
**DST #6    Formation: Lans "K"    Test Interval: 3570 - 3593'    Total Depth: 3593'**

Time On: 11:35 07/15    Time Off: 15:22 07/15  
 Time On Bottom: 13:18 07/15    Time Off Bottom: 14:20 07/15

Electronic Volume Estimate:  
 3'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 12	Minutes: 10	Minutes: 10	Minutes: 10
Current Reading: 0" at 12 min	Current Reading: 0" at 10 min	Current Reading: 0" at 10 min	Current Reading: 0" at 10 min
Max Reading: .1"	Max Reading: 0"	Max Reading: 0"	Max Reading: 0"

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**15**  
 2018

**DST #6 Formation: Lans "K" Test Interval: 3570 - 3593' Total Depth: 3593'**

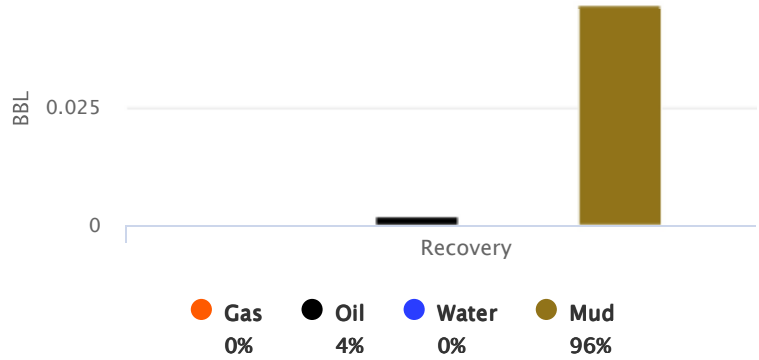
Time On: 11:35 07/15 Time Off: 15:22 07/15  
 Time On Bottom: 13:18 07/15 Time Off Bottom: 14:20 07/15

<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
10	0.0492	SLOCM	0	4	0	96

Total Recovered: 10 ft  
 Total Barrels Recovered: 0.0492

**Reversed Out**  
 NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1679	PSI
Initial Flow	10 to 15	PSI
<b>Initial Closed in Pressure</b>	<b>804</b>	<b>PSI</b>
Final Flow Pressure	17 to 18	PSI
<b>Final Closed in Pressure</b>	<b>536</b>	<b>PSI</b>
Final Hydrostatic Pressure	1642	PSI
Temperature	106	°F
Pressure Change Initial Close / Final Close	33.4	%





**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**DATE**

July

**15**

2018

**DST #6      Formation: Lans "K"      Test Interval: 3570 -      Total Depth: 3593'**  
**3593'**

Time On: 11:35 07/15      Time Off: 15:22 07/15

Time On Bottom: 13:18 07/15      Time Off Bottom: 14:20 07/15

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Surface blow. Died in 4 mins.

Initial Shut-in: No blow back.

Final Flow: No blow.

Final Shut-in: No blow back.

Tool Sample: 5% oil, 95% mud





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**15**  
2018

**DST #6      Formation: Lans "K"      Test Interval: 3570 - 3593'      Total Depth: 3593'**

Time On: 11:35 07/15      Time Off: 15:22 07/15  
Time On Bottom: 13:18 07/15      Time Off Bottom: 14:20 07/15

**Down Hole Makeup**

**Heads Up:** 36.23 FT

**Packer 1:** 3565 FT

**Drill Pipe:** 3549.88 FT

**Packer 2:** 3570 FT

*ID-3 1/2*

**Top Recorder:** 3553.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3572 FT

*ID-2 7/8*

**Well Bore Size:** 7 7/8

**Collars:** 28.11 FT

**Surface Choke:** 1"

*ID-2 1/4*

**Bottom Choke:** 5/8"

**Test Tool:** 29.24 FT

*ID-3 1/2-FH*

*Safety Joint*

**Total Anchor:** 23

**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):** 22 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**15**

2018

**DST #6      Formation: Lans "K"      Test Interval: 3570 -      Total Depth: 3593'**  
**3593'**

Time On: 11:35 07/15

Time Off: 15:22 07/15

Time On Bottom: 13:18 07/15

Time Off Bottom: 14:20 07/15

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 8.9

**Viscosity:** 63

**Filtrate:** 6.0

**Chlorides:** 2,100 ppm



**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**15**

2018

**DST #6    Formation: Lans "K"    Test Interval: 3570 -    Total Depth: 3593'**  
**3593'**

Time On: 11:35 07/15

Time Off: 15:22 07/15

Time On Bottom: 13:18 07/15

Time Off Bottom: 14:20 07/15

### Gas Volume Report

1st Open

2nd Open

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

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



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

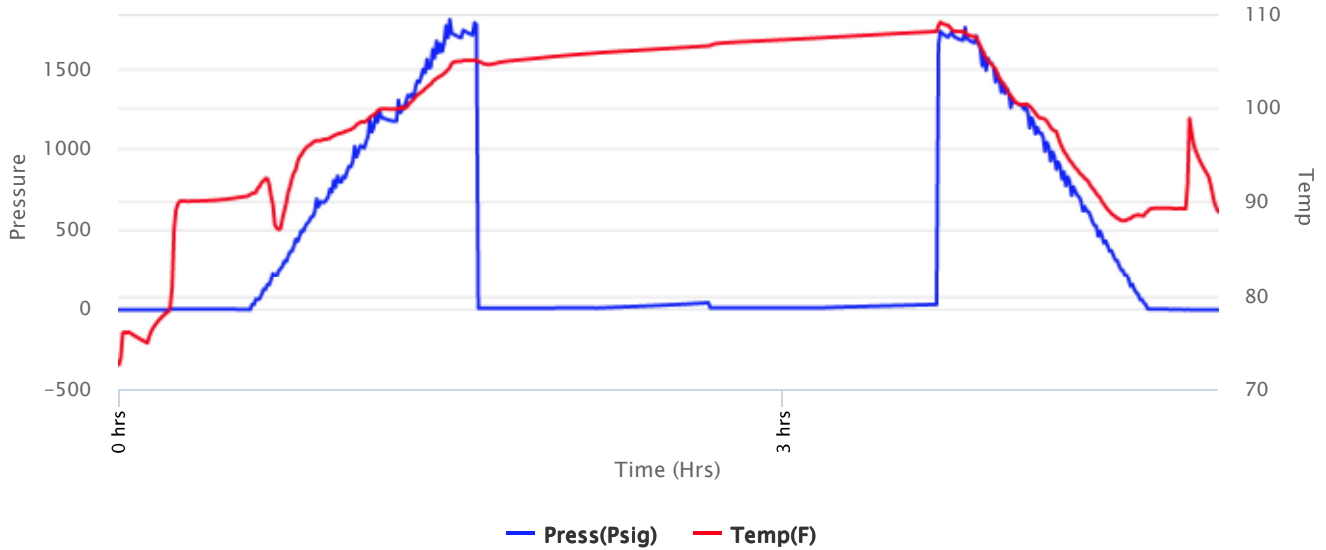
**DATE**  
 July  
**15**  
 2018

**DST #7**      **Formation: Marmaton**      **Test Interval: 3618 - 3651'**      **Total Depth: 3651'**  
 Time On: 23:05 07/15      Time Off: 04:15 07/16  
 Time On Bottom: 00:40 07/16      Time Off Bottom: 02:40 07/16

Electronic Volume Estimate:  
 3'

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

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**15**  
 2018

**DST #7**      **Formation: Marmaton**      **Test Interval: 3618 - 3651'**      **Total Depth: 3651'**  
 Time On: 23:05 07/15      Time Off: 04:15 07/16  
 Time On Bottom: 00:40 07/16      Time Off Bottom: 02:40 07/16

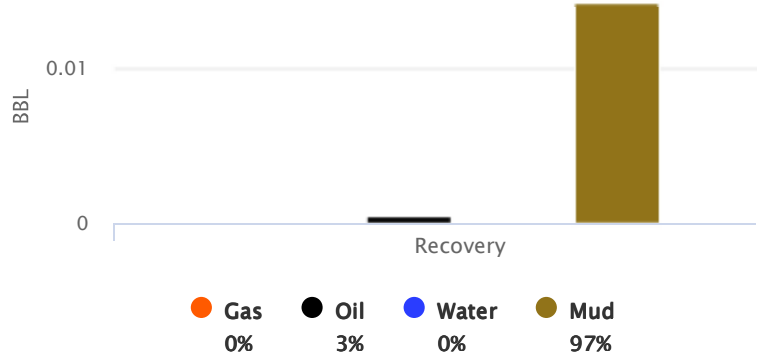
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
3	0.01476	SLOCM	0	3	0	97

Total Recovered: 3 ft  
 Total Barrels Recovered: 0.01476

**Reversed Out**  
 NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1719	PSI
Initial Flow	10 to 12	PSI
<b>Initial Closed in Pressure</b>	<b>43</b>	<b>PSI</b>
Final Flow Pressure	13 to 13	PSI
<b>Final Closed in Pressure</b>	<b>33</b>	<b>PSI</b>
Final Hydrostatic Pressure	1709	PSI
Temperature	109	°F
Pressure Change Initial Close / Final Close	23.9	%







**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**DATE**

July

**15**

2018

**DST #7**

**Formation:**

**Marmaton**

**Test Interval: 3618 -**

**3651'**

**Total Depth: 3651'**

Time On: 23:05 07/15

Time Off: 04:15 07/16

Time On Bottom: 00:40 07/16

Time Off Bottom: 02:40 07/16

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Blow building to .1 in.

Initial Shut-in: No blow back.

Final Flow: No blow.

Final Shut-in: No blow back.

Tool Sample: Mud w/heavy oil spots





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**15**  
2018

**DST #7**

**Formation:**  
**Marmaton**

**Test Interval: 3618 -**  
**3651'**

**Total Depth: 3651'**

Time On: 23:05 07/15

Time Off: 04:15 07/16

Time On Bottom: 00:40 07/16

Time Off Bottom: 02:40 07/16

**Down Hole Makeup**

**Heads Up:** 15.56 FT

**Packer 1:** 3613 FT

**Drill Pipe:** 3577.21 FT

**Packer 2:** 3618 FT

*ID-3 1/2*

**Top Recorder:** 3601.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3620 FT

*ID-2 7/8*

**Collars:** 28.11 FT

**Well Bore Size:** 7 7/8

*ID-2 1/4*

**Surface Choke:** 1"

**Test Tool:** 29.24 FT

**Bottom Choke:** 5/8"

*ID-3 1/2-FH*

*Safety Joint*

**Total Anchor:** 33

**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):** 32 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**15**

2018

**DST #7****Formation:  
Marmaton****Test Interval: 3618 -  
3651'****Total Depth: 3651'**

Time On: 23:05 07/15

Time Off: 04:15 07/16

Time On Bottom: 00:40 07/16 Time Off Bottom: 02:40 07/16

**Mud Properties****Mud Type:** Chemical**Weight:** 9.0**Viscosity:** 58**Filtrate:** 6.4**Chlorides:** 2,100 ppm**Company: Cobalt Energy, LLC****Lease: Elizabeth A #1-36****Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**15**

2018

**DST #7**

**Formation:  
Marmaton**

**Test Interval: 3618 - Total Depth: 3651'  
3651'**

Time On: 23:05 07/15

Time Off: 04:15 07/16

Time On Bottom: 00:40 07/16 Time Off Bottom: 02:40 07/16

### Gas Volume Report

1st Open

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

2nd Open

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



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling  
 Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**16**  
 2018

**DST #8 Formation: Arbuckle Test Interval: 3702 - Total Depth: 3755'**  
**3755'**

Time On: 17:31 07/16 Time Off: 21:52 07/16  
 Time On Bottom: 19:08 07/16 Time Off Bottom: 20:13 07/16

Electronic Volume  
 Estimate:  
 6'

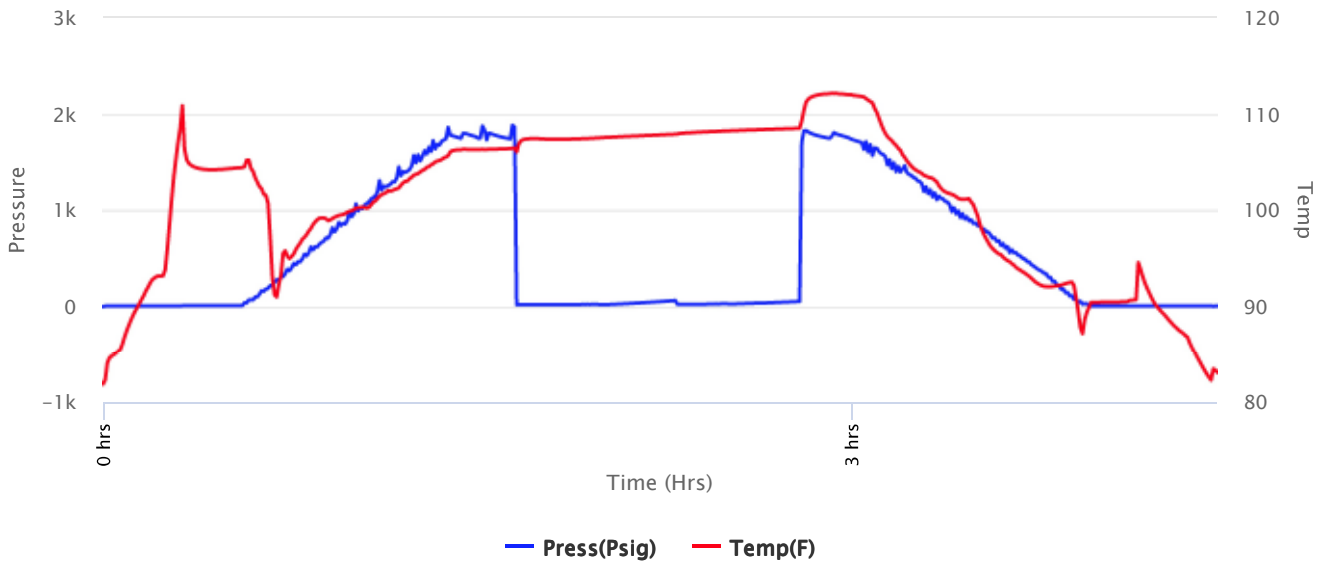
1st Open  
 Minutes: 20  
 Current Reading:  
 .1" at 20 min  
 Max Reading: .2"

1st Close  
 Minutes: 15  
 Current Reading:  
 0" at 15 min  
 Max Reading: 0"

2nd Open  
 Minutes: 15  
 Current Reading:  
 0" at 15 min  
 Max Reading: 0"

2nd Close  
 N/A

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**16**  
 2018

**DST #8 Formation: Arbuckle Test Interval: 3702 - Total Depth: 3755'**  
**3755'**

Time On: 17:31 07/16 Time Off: 21:52 07/16  
 Time On Bottom: 19:08 07/16 Time Off Bottom: 20:13 07/16

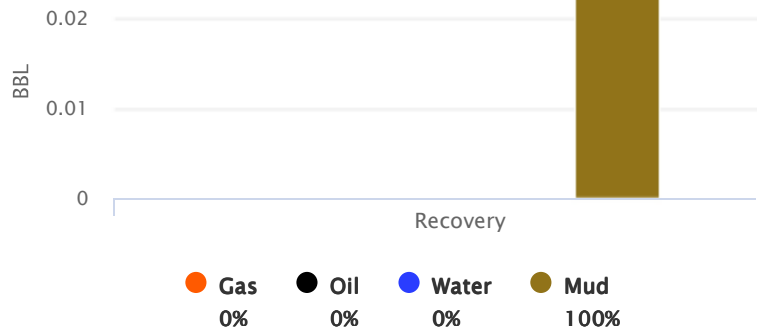
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
5	0.0246	M	0	0	0	100

Total Recovered: 5 ft  
 Total Barrels Recovered: 0.0246

**Reversed Out**  
 NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1745	PSI
Initial Flow	15 to 18	PSI
<b>Initial Closed in Pressure</b>	<b>57</b>	<b>PSI</b>
Final Flow Pressure	18 to 26	PSI
<b>Final Closed in Pressure</b>	<b>49</b>	<b>PSI</b>
Final Hydrostatic Pressure	1751	PSI
Temperature	109	°F
Pressure Change Initial Close / Final Close	14.1	%





**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**DATE**

July

**16**

2018

**DST #8      Formation: Arbuckle      Test Interval: 3702 -      Total Depth: 3755'**  
**3755'**

Time On: 17:31 07/16

Time Off: 21:52 07/16

Time On Bottom: 19:08 07/16

Time Off Bottom: 20:13 07/16

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Blow building to .2 in.

Initial Shut-in: No blow back.

Final Flow: No blow.

Final Shut-in: No blow back.

Tool Sample: 100% mud





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**16**  
2018

**DST #8      Formation: Arbuckle      Test Interval: 3702 - 3755'      Total Depth: 3755'**

Time On: 17:31 07/16      Time Off: 21:52 07/16  
Time On Bottom: 19:08 07/16      Time Off Bottom: 20:13 07/16

**Down Hole Makeup**

**Heads Up:** 34.79 FT

**Packer 1:** 3697.11 FT

**Drill Pipe:** 3675.72 FT

**Packer 2:** 3702.11 FT

*ID-3 1/2*

**Top Recorder:** 3686.03 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3748 FT

*ID-2 7/8*

**Collars:** 28.11 FT

**Well Bore Size:** 7 7/8

*ID-2 1/4*

**Surface Choke:** 1"

**Test Tool:** 34.07 FT

**Bottom Choke:** 5/8"

*ID-3 1/2-FH*

*Jars*

*Safety Joint*

**Total Anchor:** 52.89

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** 10 FT

*4 1/2-FH*

**Change Over:** 1 FT

**Drill Pipe: (in anchor):** 31.89 FT

*ID-3 1/2*

**Change Over:** 1 FT

**Perforations: (below):** 8 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**



**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**16**  
2018

**DST #8      Formation: Arbuckle      Test Interval: 3702 -      Total Depth: 3755'**  
**3755'**

Time On: 17:31 07/16      Time Off: 21:52 07/16  
Time On Bottom: 19:08 07/16      Time Off Bottom: 20:13 07/16

**Mud Properties**

**Mud Type:** Chemical      **Weight:** 8.9      **Viscosity:** 60      **Filtrate:** 6.0      **Chlorides:** 3,400 ppm



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**16**

2018

**DST #8      Formation: Arbuckle      Test Interval: 3702 -      Total Depth: 3755'**  
**3755'**

Time On: 17:31 07/16      Time Off: 21:52 07/16

Time On Bottom: 19:08 07/16      Time Off Bottom: 20:13 07/16

### Gas Volume Report

1st Open

2nd Open

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

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



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**17**  
 2018

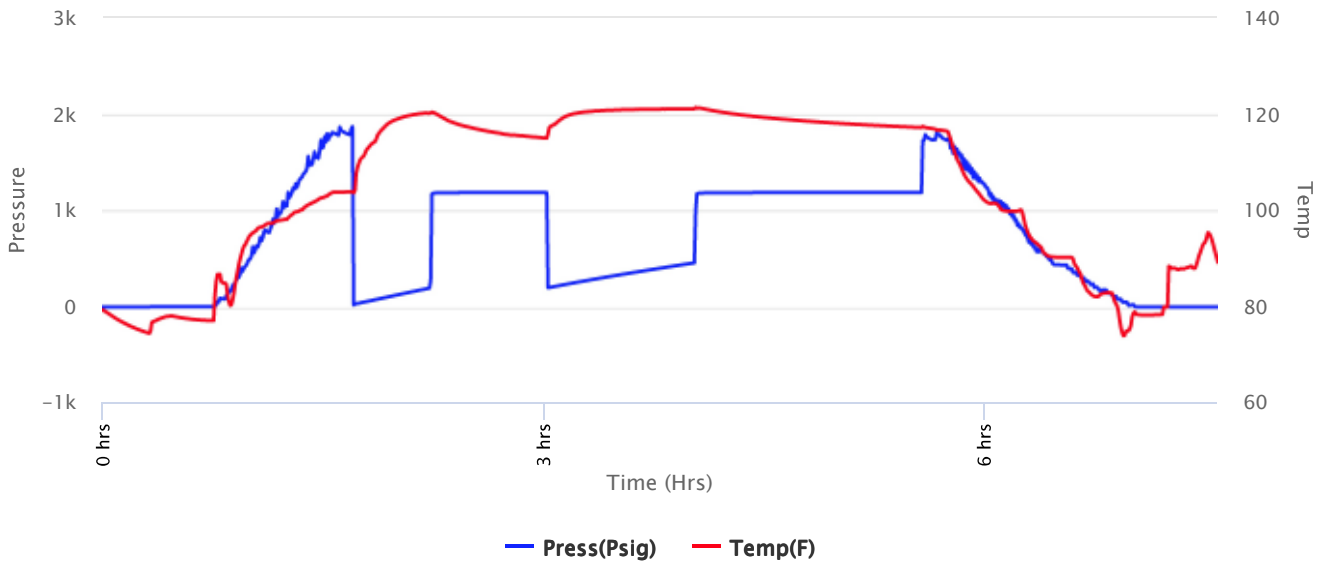
**DST #9 Formation: Arbuckle Test Interval: 3754 - Total Depth: 3775'**  
**3775'**

Time On: 04:29 07/17 Time Off: 11:52 07/17  
 Time On Bottom: 06:10 07/17 Time Off Bottom: 09:55 07/17

Electronic Volume Estimate:  
 1123'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 45	Minutes: 60	Minutes: 80
Current Reading: 44." at 30 min	Current Reading: 0" at 45 min	Current Reading: 76.6" at 60 min	Current Reading: 0" at 80 min
Max Reading: 44."	Max Reading: 0"	Max Reading: 76.6"	Max Reading: 0"

Inside Recorder





**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
 County: GRAHAM  
 State: Kansas  
 Drilling Contractor: Murfin Drilling Company, Inc - Rig 16  
 Elevation: 2182 EGL  
 Field Name: Wildcat  
 Pool: WILDCAT  
 Job Number: 190

**Operation:**  
 Well Complete

**DATE**  
 July  
**17**  
 2018

**DST #9 Formation: Arbuckle Test Interval: 3754 - 3775' Total Depth: 3775'**

Time On: 04:29 07/17 Time Off: 11:52 07/17  
 Time On Bottom: 06:10 07/17 Time Off Bottom: 09:55 07/17

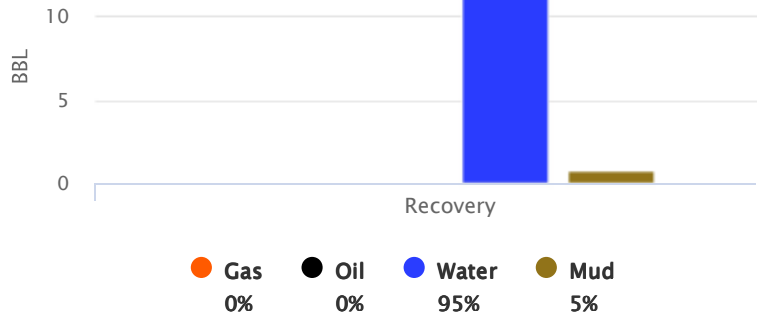
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
1000	13.9682959	SLMCW	0	0	95	5

Total Recovered: 1000 ft  
 Total Barrels Recovered:  
 13.9682959

**Reversed Out**  
 NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1784	PSI
Initial Flow	20 to 194	PSI
<b>Initial Closed in Pressure</b>	<b>1181</b>	<b>PSI</b>
Final Flow Pressure	198 to 455	PSI
<b>Final Closed in Pressure</b>	<b>1182</b>	<b>PSI</b>
Final Hydrostatic Pressure	1780	PSI
Temperature	122	°F
Pressure Change Initial Close / Final Close	0.0	%





**Company: Cobalt Energy, LLC**

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**Operation:**

Well Complete

**Lease: Elizabeth A #1-36**

**DATE**

July

**17**

2018

**DST #9**

**Formation: Arbuckle**

**Test Interval: 3754 -  
3775'**

**Total Depth: 3775'**

Time On: 04:29 07/17

Time Off: 11:52 07/17

Time On Bottom: 06:10 07/17

Time Off Bottom: 09:55 07/17

**BUCKET MEASUREMENT:**

**REMARKS:**

Initial Flow: Blow increasing. BOB in 7 mins.

Initial Shut-in: No blow back.

Final Flow: Blow increasing. BOB in 11 mins.

Final Shut-in: No blow back.

Tool Sample: Plugged with cuttings

Measured RW: .500 @ 83 degrees °F

RW at Formation Temp: 0.349 @ 122 °F

Chlorides: 8,000 ppm





**Operation:**

Well Complete

**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July  
**17**  
2018

**DST #9**      **Formation: Arbuckle**      **Test Interval: 3754 - 3775'**      **Total Depth: 3775'**

Time On: 04:29 07/17      Time Off: 11:52 07/17  
Time On Bottom: 06:10 07/17      Time Off Bottom: 09:55 07/17

**Down Hole Makeup**

**Heads Up:** 13.15 FT

**Packer 1:** 3749 FT

**Drill Pipe:** 3705.97 FT

**Packer 2:** 3754 FT

*ID-3 1/2*

**Top Recorder:** 3737.92 FT

**Weight Pipe:** FT

**Bottom Recorder:** 3756 FT

*ID-2 7/8*

**Well Bore Size:** 7 7/8

**Collars:** 28.11 FT

**Surface Choke:** 1"

*ID-2 1/4*

**Test Tool:** 34.07 FT

**Bottom Choke:** 5/8"

*ID-3 1/2-FH*

*Jars*

*Safety Joint*

**Total Anchor:** 21

**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):** 20 FT

*4 1/2-FH*



**Company: Cobalt Energy, LLC**  
**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W

County: GRAHAM

State: Kansas

Drilling Contractor: Murfin Drilling

Company, Inc - Rig 16

Elevation: 2182 EGL

Field Name: Wildcat

Pool: WILDCAT

Job Number: 190

**DATE**

July

**17**

2018

**DST #9      Formation: Arbuckle      Test Interval: 3754 -      Total Depth: 3775'**  
**3775'**

Time On: 04:29 07/17      Time Off: 11:52 07/17

Time On Bottom: 06:10 07/17      Time Off Bottom: 09:55 07/17

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 8.9

**Viscosity:** 56

**Filtrate:** 6.0

**Chlorides:** 3,200 ppm



**Company: Cobalt Energy, LLC**

**Lease: Elizabeth A #1-36**

**Operation:**

Well Complete

SEC: 36 TWN: 08S RNG: 22W  
County: GRAHAM  
State: Kansas  
Drilling Contractor: Murfin Drilling  
Company, Inc - Rig 16  
Elevation: 2182 EGL  
Field Name: Wildcat  
Pool: WILDCAT  
Job Number: 190

**DATE**

July

**17**

2018

**DST #9      Formation: Arbuckle      Test Interval: 3754 -      Total Depth: 3775'**  
**3775'**

Time On: 04:29 07/17

Time Off: 11:52 07/17

Time On Bottom: 06:10 07/17

Time Off Bottom: 09:55 07/17

### Gas Volume Report

1st Open

2nd Open

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

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