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 # 9855
Name: Grand Mesa Operating Company
Address 1: 1700 N WATERFRONT PKWY BLDG 600
Address 2:
City: WICHITA State: KS Zip: 67206 + 5514
Contact Person: Michael J. Reilly
Phone: (316) 265-3000
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: David Barker
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 #:

06/14/2018	06/24/2018	06/24/2018
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-007-24329-00-00
Spot Description:
SW- NW- SE -NE Sec. 24 Twp. 30 S. R. 12 ☐ East ☑ West
1792 Feet from ☑ North / ☐ South Line of Section
1266 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)*, Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Barber
Lease Name: RINGER Well #: 1-24
Field Name:
Producing Formation: None
Elevation: Ground: 1791 Kelly Bushing: 1796
Total Vertical Depth: 4920 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 217 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: 31000 ppm Fluid volume: 1800 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Indian Oil Co., Inc.
Lease Name: Banks SWD #1 License #: 31938
Quarter NW Sec. 36 Twp. 30 S. R. 12 ☐ East ☑ West
County: Barber Permit #: D33003.0

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: 08/21/2018
☐ **Confidential Release Date:** 08/20/2020
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 08/21/2018

Page Two

Operator Name: Grand Mesa Operating Company Lease Name: RINGER Well #: 1-24

Sec. 24 Twp. 30 S. R. 12 ☐ East ☑ West County: Barber

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Geologist Report / Mud Logs ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	217	Common	220	3%CC, 2% Gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☑ Plug Back TD ☐ Plug Off Zone	0-4920	60/40 Pozmix	190	4% Gel, 1/4#sx Flocele
	-			

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

Top	Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	RINGER 1-24
Doc ID	1413732

All Electric Logs Run

CPDCN Log
AI Shallow Foc Log
Comp. Sonic
Micro Log
Caliper Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	RINGER 1-24
Doc ID	1413732

Tops

Name	Top	Datum
Onaga	2722	-926
Wabaunsee	2782	-986
Stotler	2929	-1133
Severy Shale	3307	-1511
Heebner Shale	3683	-1887
Brwn Limestone	3861	-2065
Stark	4189	-2393
Mississippian	4359	-2563
Kinderhook Shale	4443	-2647
Viola	4618	-2822
Simpson Shale	4697	-2901
Arbuckle	4806	3010
LTD	4914	0

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	RINGER 1-24
Doc ID	1413732

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	217	Common	220	3%CC, 2% Gel

QES

PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

10978
10844

TICKET NUMBER 54506
LOCATION El Dorado, KS
FOREMAN Fuzzy

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice #813490

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-24-18	3372	Ringer 1-24	24	30	12	Barber KS

CUSTOMER: Grand Mesa Operating

MAILING ADDRESS: 1700 Waterfront Bldg 600

CITY	STATE	ZIP CODE
Wichita	KS	67206

TRUCK #	DRIVER	TRUCK #	DRIVER
446	Jeremy		
775	Tracey		
725	Fuzzy		

JOB TYPE PTA HOLE SIZE 7 7/8 HOLE DEPTH 4920' CASING SIZE & WEIGHT
CASING DEPTH DRILL PIPE 4 1/2 x TUBING OTHER
SLURRY WEIGHT 13.8 SLURRY VOL 47.7 WATER gal/sk 7.1 CEMENT LEFT in CASING
DISPLACEMENT DISPLACEMENT PSI MIX PSI RATE

REMARKS: Safety Meeting on W.O #4. Rig up And plug as ordered

Top Arbuckle - 50sks @ 4814' Total 190sks 60/40 pos 4% gel
700' - 50sks 1/4# flosal
250' - 40sks
60' - 20sks
RH - 30sks

Thanks Fuzzy Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0453	1	PUMP CHARGE		
CE0002	120 miles	MILEAGE		
CE0001	120 miles	PU Mileage		
CE0710	8.1 Ton	Ton mileage Delivery		
17130 CC5829	190sks	60/40 pos 4% gel		
CC6075	50#	flo-seal		

Ravin 3737

SALES TAX
ESTIMATED TOTAL

AUTHORIZTION Daddy TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

QES

PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

10920
10812

TICKET NUMBER 55352
LOCATION Eldorado KS
FOREMAN Austin

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice #813440

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-14-18	3372	Ringer 1-24	24	30	12	Barber

CUSTOMER: Cobrand Mesa

MAILING ADDRESS: 1700 N waterfront Pkwy BLD 600

CITY: Wichita | STATE: KS | ZIP CODE: 67206

TRUCK #	DRIVER	TRUCK #	DRIVER
866	Austin		
446	Jeremy		
713	Jude		

JOB TYPE Surface | HOLE SIZE 12 1/4 | HOLE DEPTH 220 | CASING SIZE & WEIGHT 8 5/8

CASING DEPTH 217 | DRILL PIPE | TUBING | OTHER

SLURRY WEIGHT 14.5 | SLURRY VOL 55.9 | WATER gal/sk 6.5 | CEMENT LEFT in CASING 15'

DISPLACEMENT 12.4 | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safety meeting Hooked up to 8 5/8 Surface pipe broke Circulation then pumped 15 bbl water then pumped 220 SKS of Cement then displaced 12.5 bbl of water Shut in valve

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE		
CE0002	120	MILEAGE		
CE0001	120	Pick up mileage		
CE0710	9 ton	ton mileage		
CC5900A	220	Class A Cement		
CC5325	600	Calcium Chloride		
CC5965	400	Gel		
CC6075	100	Polly flake		
			=	
		total	SALES TAX	
			ESTIMATED TOTAL	

Ravin 3737

AUTHORIZTION DWH DS TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

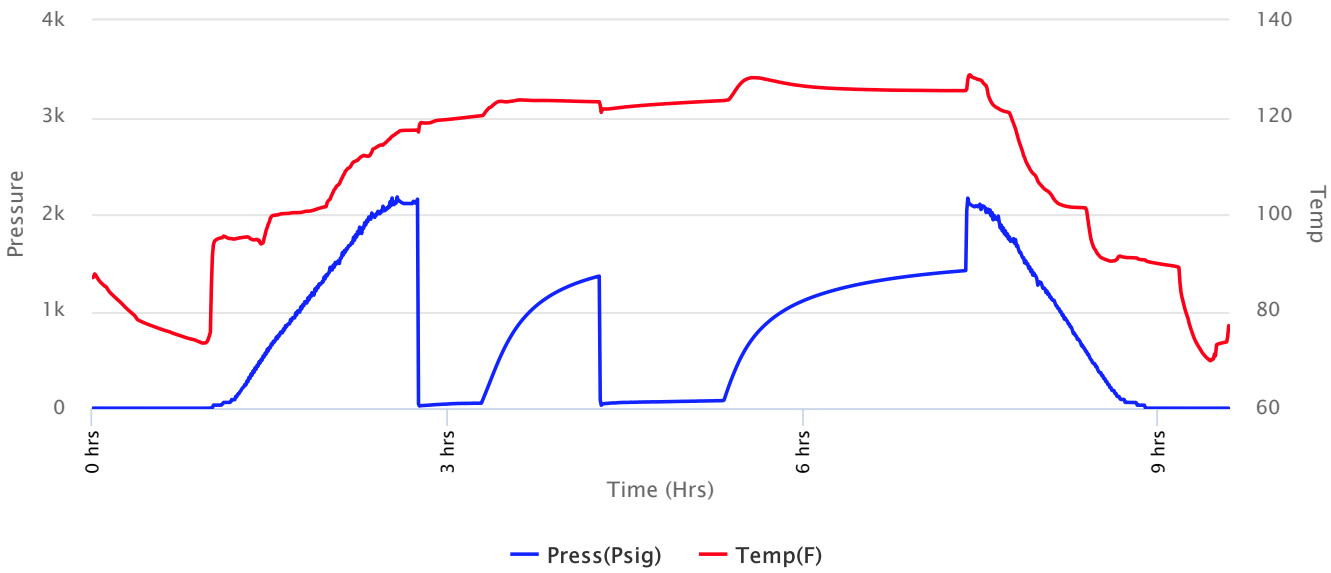
SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 174

DATE
June
20
2018

DST #1 **Formation: Mississippuan** **Test Interval: 4353 - 4385'** **Total Depth: 4385'**

Time On: 22:45 06/20 Time Off: 08:05 06/21
Time On Bottom: 01:25 06/21 Time Off Bottom: 05:55 06/21

Electronic Volume Estimate:	1st Open Minutes: 30	1st Close Minutes: 60	2nd Open Minutes: 60	2nd Close Minutes: 120
3697'	70.1" at 30 min	0" at 60 min	309.2" at 60 min	.6" at 120 min



Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
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Time On: 22:45 06/20 Time Off: 08:05 06/21
Time On Bottom: 01:25 06/21 Time Off Bottom: 05:55 06/21

Recovered

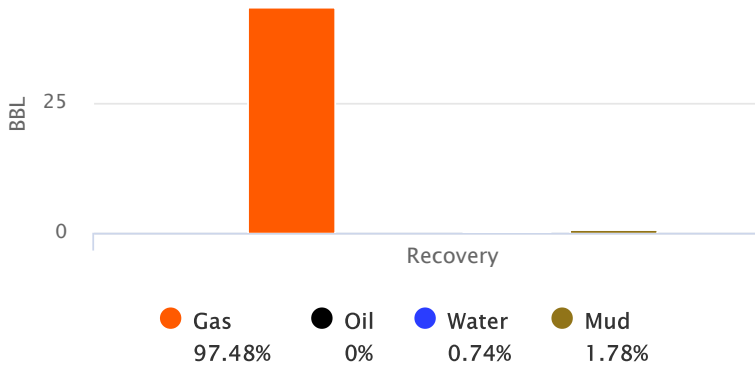
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
3050	43.4015	G	100	0	0	0
95	0.8276039	SLWCM	0	0	14	86
60	0.2952	MCW	0	0	72	28

Total Recovered: 3205 ft
Total Barrels Recovered: 44.5243039

Reversed Out
NO

Initial Hydrostatic Pressure	2112	PSI
Initial Flow	23 to 53	PSI
Initial Closed in Pressure	**1363**	**PSI**
Final Flow Pressure	31 to 79	PSI
Final Closed in Pressure	**1420**	**PSI**
Final Hydrostatic Pressure	2106	PSI
Temperature	129	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance



Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
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DATE
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20
2018

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Time On: 22:45 06/20 Time Off: 08:05 06/21
Time On Bottom: 01:25 06/21 Time Off Bottom: 05:55 06/21

REMARKS:
IF: BOB 3 min.
ISI: No BB
FF: BOB instantly
FSI: 1/4 inch BB

TOOL SAMPLE: BLEW OUT

Ph: 6.0

RW: .13 @ 65 degrees F

Chlorides: 65,000 ppm

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 174

DATE
June
20
2018

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Time On: 22:45 06/20 Time Off: 08:05 06/21
Time On Bottom: 01:25 06/21 Time Off Bottom: 05:55 06/21

Down Hole Makeup

Heads Up:	32.88 FT
Drill Pipe: *ID-3 1/2*	4237 FT
Weight Pipe: *ID-2 7/8*	0 FT
Collars: *ID-2 1/4*	116.31 FT
Test Tool: *ID-3 1/2-FH Jars Safety Joint*	33.57 FT
Total Anchor:	32

Anchor Makeup

Packer Sub:	1 FT
Perforations: (top): *4 1/2-FH*	0 FT
Change Over:	0 FT
Drill Pipe: (in anchor): *ID-3 1/2*	0 FT
Change Over:	0 FT
Perforations: (below): *4 1/2-FH*	31 FT

Packer 1:	4348 FT
Packer 2:	4353 FT
Top Recorder:	4337.42 FT
Bottom Recorder:	4355 FT
Well Bore Size:	7 7/8
Surface Choke:	1"
Bottom Choke:	5/8"

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 174

DATE
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20
2018

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Time On: 22:45 06/20 Time Off: 08:05 06/21
Time On Bottom: 01:25 06/21 Time Off Bottom: 05:55 06/21

Mud Properties

Mud Type: Chemical **Weight:** 9.3 **Viscosity:** 50 **Filtrate:** 10.4 **Chlorides:** 6,000 ppm

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
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DATE
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2018

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Time On: 22:45 06/20 Time Off: 08:05 06/21
Time On Bottom: 01:25 06/21 Time Off Bottom: 05:55 06/21

Gas Volume Report

1st Open

Time	Orifice	PSI	MCF/D

2nd Open

Time	Orifice	PSI	MCF/D

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

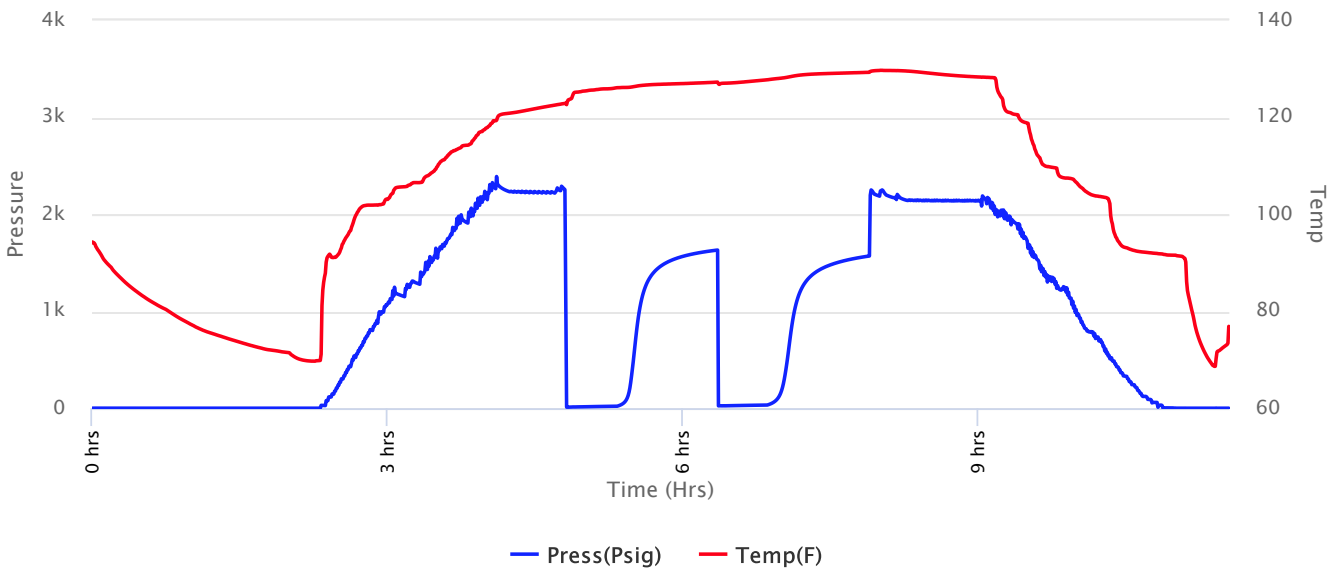
SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 174

DATE
June
23
2018

DST #2 **Formation: Simpson** **Test Interval: 4710 - 4732'** **Total Depth: 4732'**

Time On: 19:35 06/22 Time Off: 06:49 06/23
Time On Bottom: 00:15 06/23 Time Off Bottom: 03:15 06/23

Electronic Volume Estimate:	1st Open Minutes: 30	1st Close Minutes: 60	2nd Open Minutes: 30	2nd Close Minutes: 60
39'	1.1" at 30 min	0" at 60 min	0" at 30 min	0" at 60 min



Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 174

DATE
June
23
2018

DST #2 **Formation: Simpson** **Test Interval: 4710 - 4732'** **Total Depth: 4732'**

Time On: 19:35 06/22 Time Off: 06:49 06/23
Time On Bottom: 00:15 06/23 Time Off Bottom: 03:15 06/23

Recovered

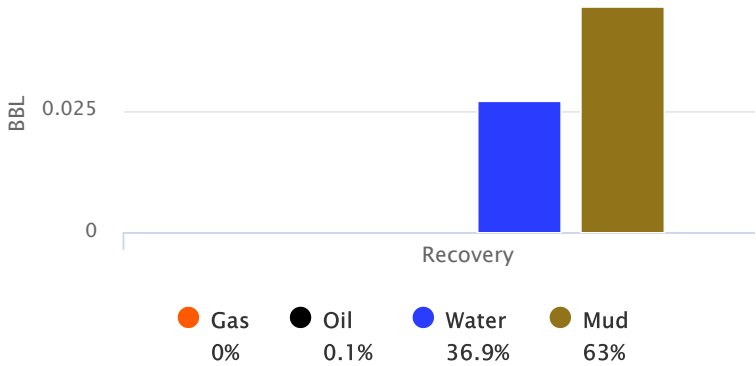
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
15	0.0738	HWCM (trace O)	0	.1	36.9	63

Total Recovered: 15 ft
Total Barrels Recovered: 0.0738

Reversed Out
NO

Initial Hydrostatic Pressure	2244	PSI
Initial Flow	11 to 22	PSI
Initial Closed in Pressure	**1632**	**PSI**
Final Flow Pressure	25 to 33	PSI
Final Closed in Pressure	**1571**	**PSI**
Final Hydrostatic Pressure	2233	PSI
Temperature	130	°F
Pressure Change Initial Close / Final Close	3.7	%

Recovery at a glance



Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
Job Number: 174

DATE
June
23
2018

DST #2 **Formation: Simpson** **Test Interval: 4710 - 4732'** **Total Depth: 4732'**

Time On: 19:35 06/22 Time Off: 06:49 06/23
Time On Bottom: 00:15 06/23 Time Off Bottom: 03:15 06/23

REMARKS:
IF: Surface to 1/2 inch blow
ISI: No BB
FF: Surface blow
FSI: No BB

TOOL SAMPLE: OIL SPECKS, 23% WATER, 77% MUD

Ph: 8.0

RW: .33 @ 78 degrees F

Chlorides: 12,000 ppm

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
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DATE
June
23
2018

DST #2 **Formation: Simpson** **Test Interval: 4710 - 4732'** **Total Depth: 4732'**

Time On: 19:35 06/22 Time Off: 06:49 06/23
Time On Bottom: 00:15 06/23 Time Off Bottom: 03:15 06/23

Down Hole Makeup

Heads Up:	24.4 FT
Drill Pipe: *ID-3 1/2*	4585.52 FT
Weight Pipe: *ID-2 7/8*	0 FT
Collars: *ID-2 1/4*	116.31 FT
Test Tool: *ID-3 1/2-FH Jars Safety Joint*	33.57 FT
Total Anchor:	22

Anchor Makeup

Packer Sub:	1 FT
Perforations: (top): *4 1/2-FH*	0 FT
Change Over:	0 FT
Drill Pipe: (in anchor): *ID-3 1/2*	0 FT
Change Over:	0 FT
Perforations: (below): *4 1/2-FH*	21 FT

Packer 1:	4705 FT
Packer 2:	4710 FT
Top Recorder:	4694.42 FT
Bottom Recorder:	4712 FT
Well Bore Size:	7 7/8
Surface Choke:	1"
Bottom Choke:	5/8"

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
Pool: WILDCAT
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DATE
June
23
2018

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Time On: 19:35 06/22 Time Off: 06:49 06/23
Time On Bottom: 00:15 06/23 Time Off Bottom: 03:15 06/23

Mud Properties

Mud Type: Chemical **Weight:** 9.3 **Viscosity:** 59 **Filtrate:** 10.8 **Chlorides:** 9,000 ppm

Company: Grand Mesa Operating Company
Lease: Ringer #1-24

SEC: 24 TWN: 30S RNG: 12W
County: BARBER
State: Kansas
Drilling Contractor: WW Drilling, LLC - Rig 2
Elevation: 1793 GL
Field Name: Wildcat
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DATE
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23
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Time On: 19:35 06/22 Time Off: 06:49 06/23
Time On Bottom: 00:15 06/23 Time Off Bottom: 03:15 06/23

Gas Volume Report

1st Open

Time	Orifice	PSI	MCF/D

2nd Open

Time	Orifice	PSI	MCF/D

David A. Barker
CONSULTING GEOLOGIST

Geologist's Report
Drilling Time and Sample Log

OPERATOR Grand Mesa Operating Company
LEASE Ringer WELL NO. #1
FIELD Wildcat API No. 15-007-24329
LOCATION 1792'FNL & 1266'FEL
SEC. 24 TWP. 30S RGE. 12W
COUNTY Barber STATE Kansas
CONTRACTOR WW Drilling, LLC
COMM. 06/20/2018 COMP. 06/24/2018
RTD 4920' LOG TD 4914'
SAMPLES SAVED FROM 2600' TO TD
DRILLING TIME KEPT FROM 2600' TO TD
SAMPLES EXAMINED FROM 2600' TO TD
GEOLOGICAL SUPERVISION FROM 2600' TO TD
MUD UP N/A TYPE MUD CHEMICAL

ELEVATION
KB 1796'
DF 1794'
GL 1791'
Measuremnts Are All From KB

CASING RECORD
SURFACE Ran 8 5/8" @ 217 w/ 300 SX
PRODUCTION

ELECTRICAL SURVEYS
CNT / LDT / MLT / PIT

FORMATION	LOG TOP	LOG DATUM	SAMPLE TOP	SAMPLE DATUM	STRUCT. COMP.
Onega Shale	2722	-926	2723	-927	
Wabaunsee	2782	-986	2785	-989	
Zndale	2930	-1134	2927	-1131	
Topeka	3355	-1559	3256	-1460	
Heebner Shale	3683	-1887	3686	-1890	
Haskel	3861	-2065	3864	-2068	
Stark Shale	4189	-2393	4194	-2398	
Mississippian	4358	-2562	4361	-2507	
Mississippian Lime	4412	-2616	4414	-2618	
Kinderhook Shale	4443	-2647	4443	-2647	
Viola	4618	-2822	4624	-2828	
Base Viola	4698	-2902	4698	-2902	
Simpson Sand	4706	-2910	4710	-2914	
Arbuckle	4806	-3010	4814	-3018	

24
Ringer #1

REFERENCE WELL FOR STRUCTURAL POSITION

OPERATOR

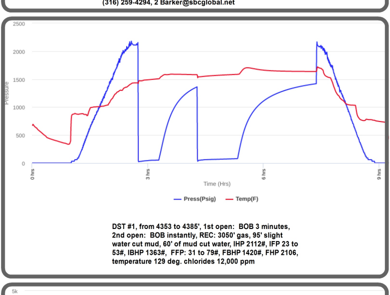
Company: Grand Mesa Operating Company
Address: 1700 N Waterfront PKWY, Bldg 600
Wichita, Kansas 67206-5514

Contractor

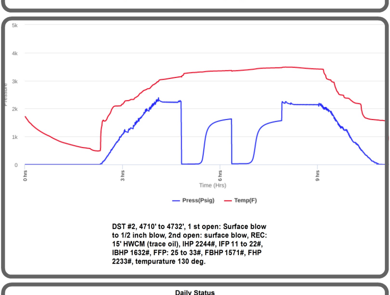
WW Drilling, LLC, 233 S. 4th, P.O. Box 307, Wakeeney, KS 67672

GEOLOGIST

Name: David A. Barker
Company:
Address: 212 N. Market, Suite# 320
Wichita, Kansas 67202
(316) 259-4294, 2 Barker@sbcglobal.net



DST #1, from 4353 to 4385', 1st open: BOB 3 minutes, 2nd open: BOB instantly, REC: 3050' gas, 95' slight water cut mud, 60' of mud cut water, IHP 2112#, IFP 23 to 53#, IBHP 1363#, FFP: 31 to 79#, FBHP 1420#, FHP 2106, temperature 129 deg. chlorides 12,000 ppm



DST #2, 4710' to 4732', 1 st open: Surface blow to 1/2 inch blow, 2nd open: surface blow, REC: 15' HWCM (trace oil), IHP 2244#, IFP 11 to 22#, IBHP 1632#, FFP: 25 to 33#, FBHP 1571#, FHP 2233#, tempurature 130 deg.

Daily Status

06/14/18MIRU of W W Drlg. Rig #4 and spud today. Spud @ 9:45 p.m.

06/15/18Drilled to 217', Ran 5 jts of new 23# 8 5/8" surface csg., Tally 210.33', Set @ 217' KB, strapped and welded. Cemented w/220sx Common, 3% CC, 2% Gel. Plug down @ 8:00 a.m. Cemented by QES Services, cement did circulate. Survey .5° @ 217'. Drilled out @ 4:00 p.m.

06/16/18Current depth at 7:00 a.m. 1185'; Footage last 24 hr. 968'; Current operation is drilling ahead. Survey .5° @ 1231'.

06/17/18Current depth at 7:00 a.m. 2380'; Footage last 24 hr. 1195'; Current operation is drilling ahead. Survey .25° @ 2235'. Trip out of hole @ 2580' (15stds), work on pump motors.

06/18/18Current depth at 7:00 a.m. 3015'; Footage last 24 hr. 635'; Current operation is drilling ahead. Displaced @ 3365' (750bbls).

06/19/18Current depth at 7:00 a.m. 3700'; Footage last 24 hr. 685'; Current operation is drilling ahead.

06/20/18Current depth at 7:00 a.m. 4250'; Footage last 24 hr. 550'; Current operation is drilling ahead.

06/21/18Current depth at 7:00 a.m. 4385'; Footage last 24 hr. 135'; Current operation is TOH w/tool. Survey .75° @ 4385'. Short trip @ 4385' (30stds). Pipe strap 1.26' long to board @ 4385'.

Daily Status

MISSISSIPPIAN FORMATION -- DST #1 (4353-4385') 30-60-60-120:

1st open: BOB in 3 mins. No blow back.
2nd open: BOB instantly. 1/4 inch blow back.

REC: Total Fluid 155':
3050' GIP
95' SLWCM (14%W, 86%M)
60' MCW (72%W, 28%M)
IFP: 23-53#; FFP: 31-79#, SIP: 1363-1420#, Temp. 129 deg.

06/22/18Current depth at 7:00 a.m. 4640'; Footage last 24 hr. 255'; Current operation is circulating for samples.

SIMPSON FORMATION -- DST #2 (4710-4732') 30-60-30-60:

1st open: Surface to 1/2" blow. No blow back.
2nd open: Surface blow. No blow back.

REC: Total Fluid 15':
15' HWCM (trace oil) (.1%O, 36.9%W, 63%M)
IFP: 11-22#; FFP: 25-33#, SIP: 1632-1571#, Temp. 130 deg.

06/23/18Current depth at 7:00 a.m. 4732'; Footage last 24 hr. 92'; Current operation is circulating for samples. Short trip @ 4732' (15stds).

06/24/18Current depth at 7:00 a.m. 4920'; Footage last 24 hr. 188'; Current operation is circulating for samples. Short trip @ 4920' (6stds).

RTD 4920'; LTD 4914';

P&A w/50sxs @ 4814'; 50sxs @ 700'; 40sxs @ 250'; 20sxs @ 60'; 30sxs in Rat Hole.

Cemented with a total of 190sxs of 60/40 Poz mix; 4% Gel, 1/4# SX Flocele.
Cemented by QES Services; KCC rep: Larry Harris – Hays – 06/20/18 @ 3:15 p.m..

Remarks

Structurally the Ringer #1-24 location ran high to the previously drillled wells in the area. After drilllstem testing the oil and gas shows and a extensive electric log evaluation it was recommended that the Ringer #1-24 be plugged and abandoned on June 25, 2018. It was decided that the Mississippian formation was close but would not be economic at this location. David Barker

ACCESSORIES

FOSSIL: Algae, Amph, Belm, Bioclst, Brach, Bryozoa, Cephal, Coral, Crin, Echin, Fish, Foram, Fossil, Gastro, Oolite, Ostra, Pelec, Pellet, Pisolite, Plant, Strom, Fuss, Oomold

MINERAL: Anhy, Arggrn, Arg, Bent, Bit, Brecfrag, Calc, Carb, Chtdk, Chtlt, Dol, Feldspar, Ferrpel, Ferr, Glau, Gyp, Hvymin, Kaol, Marl, Minxl, Nodule, Phos, Pyr, Salt, Sandy, Silt, Sil, Sulphur, Tuff, Chlorite, Dol, Sand, Slty

STRINGER: Anhy, Arg, Bent, Coal, Dol, Gyp, Ls, Mrst, Sltstrg, Ssstrg, Carbsh, Clystn, Dol, Grysh, Gryslt, Lms, Sandylms, Sh, Sltstn

TEXTURE: Boundst, Chalky, Cryxln, Earthy, Finexln, Grainst, Lithogr, Microxln, Mudst, Packst, Wackest

OTHER SYMBOLS

INTERVALS: Core, Dst, Dst

EVENTS: Rft, Sidewall, Cfs, Conn

POROSITY TYPE: Earthy, Fenest, Fracture, Inter, Moldic, Organic, Pinpoint, Vuggy

LITHOLOGY: Anhy, Cht, Congl, Shale, Shgy, Ss, Carb shale, Gray shale, Sandy lmst, Shale, Slt stn, Shaly slst, Slty shale, Blank, Gray lmst, Cream lmst, Red shale, Blue-green siltstn, D. green shale, Green shale, Brown lmst, Brown shale, Brown dol, Brown cream, D. green lmst, Light cream lmst, Gray cream lmst, Green dol, Gray dol

SORTING: Well, Moderate, Poor

ROUNDING: Rounded, Subrnd, Subang, Angular

OIL SHOWS: Even, Spotted, Ques, Dead, Gas show

ROCK TYPES

Anhy, Cht, Congl, Shale, Shgy, Ss, Carb shale, Gray shale, Sandy lmst, Shale, Shaly slst, Slty shale, Blank, Gray lmst, Cream lmst, Red shale, Blue-green siltstn, D. green shale, Green shale, Brown lmst, Brown shale, Brown dol, Brown cream, D. green lmst, Light cream lmst, Gray cream lmst, Green dol, Gray dol