KOLAR Document ID: 1461847

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No.:		
Name:	Spot Description:		
Address 1:			
Address 2:	Feet from North / South Line of Section		
City: State: Zip:+	Feet from		
Contact Person:	Footages Calculated from Nearest Outside Section Corner:		
Phone: ()	□NE □NW □SE □SW		
CONTRACTOR: License #	GPS Location: Lat:, Long:		
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)		
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84		
Purchaser:	County:		
Designate Type of Completion:	Lease Name: Well #:		
New Well Re-Entry Workover	Field Name:		
☐ Oil ☐ WSW ☐ SWD	Producing Formation:		
Gas DH EOR	Elevation: Ground: Kelly Bushing:		
☐ OG ☐ GSW	Total Vertical Depth: Plug Back Total Depth:		
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet		
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used? Yes No		
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet		
Operator:	If Alternate II completion, cement circulated from:		
Well Name:	feet depth to:w/sx cmt.		
Original Comp. Date: Original Total Depth:			
□ Deepening □ Re-perf. □ Conv. to EOR □ Conv. to SWD □ Plug Back □ Liner □ Conv. to GSW □ Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)		
	Chloride content: ppm Fluid volume: bbls		
Commingled Permit #:	Dewatering method used:		
☐ Dual Completion Permit #:			
SWD Permit #: EOR Permit #:	Location of fluid disposal if hauled offsite:		
GSW Permit #:	Operator Name:		
	Lease Name: License #:		
	Quarter Sec TwpS. R		
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	County: Permit #:		

AFFIDAVIT

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

Submitted Electronically

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

KOLAR Document ID: 1461847

Page Two

Operator Name:					Lease Nam	ne:			Well #:	
Sec Tw	pS	S. R	Eas	st West	County:					
	l, flowing an	d shut-in pres	sures, wh	ether shut-in pre	ssure reached	static	level, hydrostat	ic pressures, bo		val tested, time tool erature, fluid recovery,
Final Radioactivi files must be sub							gs must be emai	led to kcc-well-l	ogs@kcc.ks.gov	v. Digital electronic log
Drill Stem Tests (Attach Addit)		Yes No		Lo		n (Top), Depth a		Sample
Samples Sent to	Geological	Survey		Yes No		Name			Тор	Datum
Cores Taken Electric Log Run Geologist Report List All E. Logs F	t / Mud Log	s		Yes No Yes No Yes No						
			Rep	CASING	RECORD [Nev		on, etc.		
Purpose of St	tring	Size Hole Drilled		Size Casing let (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
				ADDITIONAL	CEMENTING /	SQUE	EEZE RECORD		<u>'</u>	
Purpose: Perforate		Depth Top Bottom	Тур	pe of Cement	# Sacks Use	ed		Type and	Percent Additives	
Protect Ca										
Plug Off Z										
Did you perform Does the volume Was the hydraul	e of the total	base fluid of the	hydraulic	fracturing treatment		-	Yes yes Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Date of first Produ Injection:	ction/Injectio	n or Resumed P	roduction/	Producing Meth	od:		Gas Lift O	ther <i>(Explain)</i>		
Estimated Product Per 24 Hours		Oil	Bbls.		Mcf	Water			Gas-Oil Ratio	Gravity
DISPO	OSITION OF	GAS:		N	METHOD OF CO	MPLET	ΓΙΟΝ:			DN INTERVAL: Bottom
Vented		Used on Lease		Open Hole		Dually (Submit A		nmingled nit ACO-4)	Тор	BOLLOTTI
,	ed, Submit AC							·		
Shots Per Foot	Perforation Top	on Perfor Bott		Bridge Plug Type	Bridge Plug Set At		Acid,		ementing Squeeze and of Material Used)	
TUBING RECORI	D: S	Size:	Set A	: -	Packer At:					

Form	ACO1 - Well Completion
Operator	RJM Company
Well Name	REDETZKE 2
Doc ID	1461847

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	20	385	Common		60/40, 4%cc, 2% gel
Production	7.875	5.50	17	3352	Common	180	10% salt, 5% gilsonite



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

> **DATE** April 23 2019

DST #1 Formation: Lans A-D Test Interval: 3066 -Total Depth: 3130'

3130'

Time On: 03:01 04/23 Time Off: 10:34 04/23

Time On Bottom: 05:47 04/23 Time Off Bottom: 08:17 04/23

Electronic Volume Estimate:

59'

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

1.9" at 45 min

Max Reading: 1.9"

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

0" at 45 min

Max Reading: 0"

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

.7" at 30 min

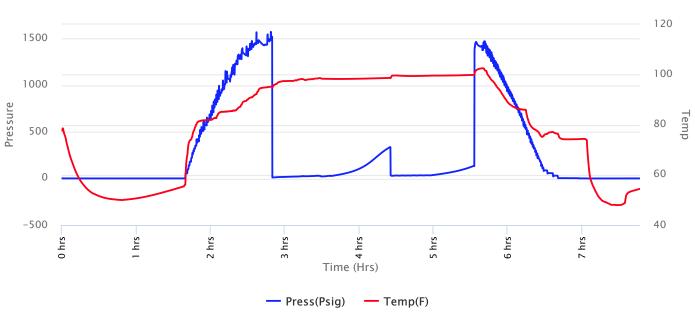
Max Reading: .7"

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

0" at 30 min

Max Reading: 0"

Inside Recorder





Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation: Uploading recovery &

pressures

DATE April 23 2019

DST #1 Formation: Lans A-D Total Depth: 3130' Test Interval: 3066 -

3130'

Time On: 03:01 04/23 Time Off: 10:34 04/23

Time On Bottom: 05:47 04/23 Time Off Bottom: 08:17 04/23

Recovered

Foot BBLS 20 0.0984 **Description of Fluid SLOCM**

Gas % Oil % 0 1

Water % Mud % 99 0

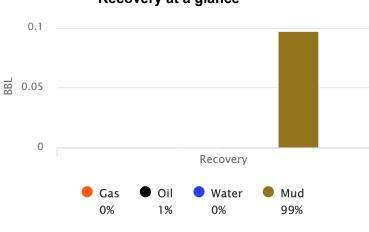
Total Recovered: 20 ft

Total Barrels Recovered: 0.0984

Reversed Ou	t
NO	

Initial Hydrostatic Pressure	1468	PSI
Initial Flow	10 to 27	PSI
Initial Closed in Pressure	337	PSI
Final Flow Pressure	28 to 33	PSI
Final Closed in Pressure	136	PSI
Final Hydrostatic Pressure	1471	PSI
Temperature	100	°F
Pressure Change Initial	59.7	%
Close / Final Close		

Recovery at a glance



GIP cubic foot volume: 0



Uploading recovery &

pressures

Company: RJM Oil Company, Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

DATE April

23

2019

DST #1 Formation: Lans A-D Test Interval: 3066 - Total Depth: 3130'

Time On: 03:01 04/23 Time Off: 10:34 04/23

Time On Bottom: 05:47 04/23 Time Off Bottom: 08:17 04/23

BUCKET MEASUREMENT:

1st Open: 1/4" Blow. Built to 2 inches in 45 mins

1st Close: NOBB

2nd Open: WSB. Built to 3/4 inch in 30 mins

2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 1% Oil 0% Water 99% Mud



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Top Recorder:

Elevation: 1894 GL Field Name: Beaver South

3052.2 FT

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

23

2019

DST #1 Formation: Lans A-D Test Interval: 3066 - Total Depth: 3130'

Time On: 03:01 04/23 Time Off: 10:34 04/23

Time On Bottom: 05:47 04/23 Time Off Bottom: 08:17 04/23

Down Hole Makeup

Heads Up: 19.86 FT **Packer 1:** 3060.2 FT

Drill Pipe: 2944.96 FT **Packer 2:** 3065.7 FT

ID-3 1/2

Weight Pipe: FT

ID-2 7/8 Bottom Recorder: 3104 FT

Collars: 114.94 FT Well Bore Size: 7 7/8

ID-2 1/4 Surface Choke: 1"

Test Tool: 26.66 FT Bottom Choke: 5/8"

ID-3 1/2-FH

Total Anchor: 64.3

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 3 FT

4 1/2-FH

Change Over: .5 FT

Drill Pipe: (in anchor): 31.80 FT

ID-3 1/2

Change Over: 1 FT

Perforations: (below): 27 FT

4 1/2-FH



Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

23

2019

DST #1 Formation: Lans A-D Test Interval: 3066 - Total Depth: 3130'

0100

Time On: 03:01 04/23 Time Off: 10:34 04/23

Time On Bottom: 05:47 04/23 Time Off Bottom: 08:17 04/23

Mud Properties

Mud Type: Chem Weight: 8.6 Viscosity: 57 Filtrate: 8 Chlorides: 1800 ppm



Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:
Uploading recovery & pressures

DATE April 23

2019

DST #1 Formation: Lans A-D Test Interval: 3066 - Total Depth: 3130'

Time On: 03:01 04/23 Time Off: 10:34 04/23

Time On Bottom: 05:47 04/23 Time Off Bottom: 08:17 04/23

Gas Volume Report

1st Open 2nd Open

Time Ori	ce PSI	MCF/D	Time	Orifice	PSI	MCF/D
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Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATEApril **23**2019

DST #2 Formation: Lans E-F Test Interval: 3127 - Total Depth: 3155'

3155'

Time On Bottom: 18:48 04/23 Time Off Bottom: 21:18 04/23

Electronic Volume Estimate: 1828' <u>1st Open</u> Minutes: 30 Current Reading:

144.5" at 30 min

Max Reading: 144.5"

1st Close Minutes: 45 Current Reading:

14.8" at 45 min

Max Reading: 14.8"

2nd Open Minutes: 30 Current Reading:

99.4" at 30 min

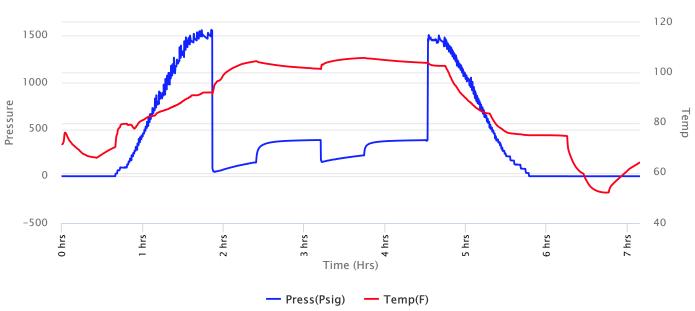
Max Reading: 99.4"

2nd Close Minutes: 45 Current Reading:

19.5" at 45 min

Max Reading: 19.5"

Inside Recorder





Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation: Uploading recovery &

pressures

DATE
April
23
2019

DST #2 Formation: Lans E-F Test Interval: 3127 - Total Depth: 3155'

Time On: 17:00 04/23 Time Off: 23:56 04/23

Time On Bottom: 18:48 04/23 Time Off Bottom: 21:18 04/23

Recovered

<u>Foot</u>	BBLS	Description of Fluid
1616	22.99568	G
148	2.10604	SLWCGCHOCM
126	1.79298	SLOCGCMCW
189	2.68947	SLMCW

<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
100	0	0	0
20	30	10	40
20	10	45	25
0	0	98	2

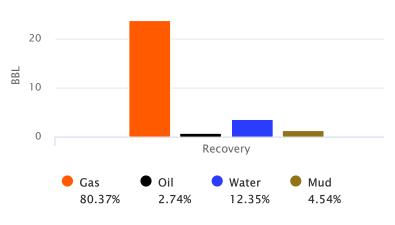
Total Recovered: 2079 ft

Total Barrels Recovered: 29.58417

-	
	Reversed Out NO
	NO

Initial Hydrostatic Pressure	1469	PSI
Initial Flow	47 to 147	PSI
Initial Closed in Pressure	387	PSI
Final Flow Pressure	152 to 223	PSI
Final Closed in Pressure	385	PSI
Final Hydrostatic Pressure	1468	PSI
Temperature	106	°F
Pressure Change Initial	0.5	%
Close / Final Close		

Recovery at a glance



GIP cubic foot volume: 133.48745



Uploading recovery &

pressures

Company: RJM Oil Company, Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

DATE

April **23**

2019

DST #2 Formation: Lans E-F Test Interval: 3127 - Total Depth: 3155'

Time On: 17:00 04/23 Time Off: 23:56 04/23

Time On Bottom: 18:48 04/23 Time Off Bottom: 21:18 04/23

BUCKET MEASUREMENT:

1st Open: 1" Blow. BOB in 45 Secs 1st Close: Bottom Bucket Blow Back 2nd Open: 2 1/2" Blow. BOB in 4 mins 2nd Close: Bottom Bucket Blow Back

REMARKS:

Tool Sample: 0% Gas 3% Oil 96% Water 1% Mud

Ph: 7

Measured RW: .42 @ 52 degrees °F

RW at Formation Temp: 0.219 @ 106 °F

Chlorides: 68,000 ppm



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

23

2019

DST #2 Formation: Lans E-F Test Interval: 3127 - Total Depth: 3155'

Time On: 17:00 04/23 Time Off: 23:56 04/23

Time On Bottom: 18:48 04/23 Time Off Bottom: 21:18 04/23

Down Hole Makeup

Heads Up: 32.19 FT **Packer 1:** 3122 FT

Drill Pipe: 3134.03 FT **Packer 2:** 3127 FT

ID-3 1/2

Top Recorder: 3114 FT
Weight Pipe: FT

ID-2 7/8 Bottom Recorder: 3129 FT

Collars: 0 FT Well Bore Size: 7 7/8

ID-2 1/4 Surface Choke: 1"

Test Tool: 26.16 FT Bottom Choke: 5/8"

ID-3 1/2-FH

Total Anchor: 28

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 0 FT

4 1/2-FH

Change Over: 0 FT

Drill Pipe: (in anchor): 0 FT

ID-3 1/2

Change Over: 0 FT

Perforations: (below): 27 FT

4 1/2-FH



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

23

2019

DST #2 Formation: Lans E-F Test Interval: 3127 - Total Depth: 3155'

3155'

Time On: 17:00 04/23 Time Off: 23:56 04/23

Time On Bottom: 18:48 04/23 Time Off Bottom: 21:18 04/23

Mud Properties

Mud Type: Chem Weight: 9.1 Viscosity: 55 Filtrate: 8 Chlorides: 5000 ppm



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

23 2019

DST #2 Formation: Lans E-F Test Interval: 3127 - Total Depth: 3155'

3155'

Time On: 17:00 04/23 Time Off: 23:56 04/23

Time On Bottom: 18:48 04/23 Time Off Bottom: 21:18 04/23

Gas Volume Report

1st Open 2nd Open

Time Orifice PSI MCF/D	Time	Orifice PSI	MCF/D
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Uploading recovery &

pressures

Company: RJM Oil Company,

Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1894 GL

Field Name: Beaver South Pool: Infield

Job Number: 327

DATE April

24 2019 **DST #3** Formation: Lans H-J Test Interval: 3198 -Total Depth: 3270'

3270'

Time On: 10:27 04/24 Time Off: 17:37 04/24

Time On Bottom: 12:29 04/24 Time Off Bottom: 15:29 04/24

Electronic Volume Estimate: 913'

1st Open Minutes: 30 **Current Reading:** 41.6" at 30 min

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

2nd Open Minutes: 45 **Current Reading:** 74.6" at 45 min

2nd Close Minutes: 60 **Current Reading:** .5" at 60 min

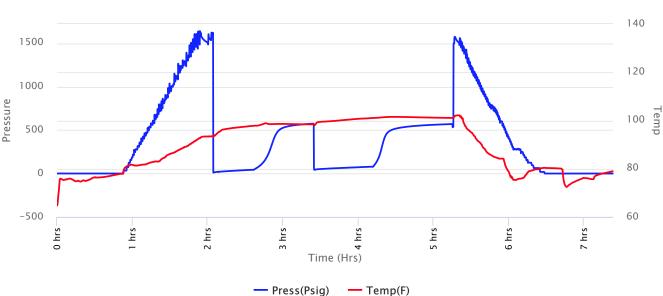
Max Reading: 41.6"

Max Reading: 0"

Max Reading: 74.6"

Max Reading: .5"

Inside Recorder





Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1894 GL

Field Name: Beaver South Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATEApril **24**2019

DST #3 Formation: Lans H-J Test Interval: 3198 - Total Depth: 3270'

3270'

Time On: 10:27 04/24 Time Off: 17:37 04/24

Time On Bottom: 12:29 04/24 Time Off Bottom: 15:29 04/24

Recovered

<u>Foot</u>	<u>BBLS</u>	Description of Fluid
850	12.0955	G
31	0.44113	SLOCSLGCM
126	1.79298	SLOCHGCM

Gas %	<u>Oil %</u>	<u>water %</u>	Mud %
100	0	0	0
10	2	0	88
32	15	0	53

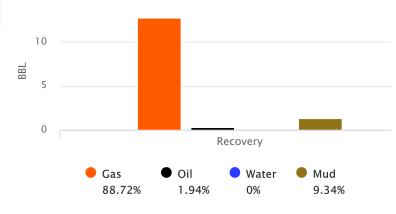
Total Recovered: 1007 ft

Total Barrels Recovered: 14.32961

Reversed Out
NO

Initial Hydrostatic Pressure	1509	PSI
Initial Flow	12 to 43	PSI
Initial Closed in Pressure	576	PSI
Final Flow Pressure	45 to 77	PSI
Final Closed in Pressure	571	PSI
Final Hydrostatic Pressure	1509	PSI
Temperature	102	°F
Pressure Change Initial	0.9	%
Close / Final Close		

Recovery at a glance



GIP cubic foot volume: 71.3792



Uploading recovery &

pressures

Company: RJM Oil Company,

Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

Field Name: Beaver South

Total Depth: 3270'

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1894 GL

Pool: Infield Job Number: 327

DATE

April

24 2019

DST #3 Formation: Lans H-J Test Interval: 3198 -

3270'

Time On: 10:27 04/24 Time Off: 17:37 04/24

Time On Bottom: 12:29 04/24 Time Off Bottom: 15:29 04/24

BUCKET MEASUREMENT:

1st Open: 1/4 Blow. BOB in 8 3/4 mins

1st Close: NOBB

2nd Open: 6" Blow. BOB in 1 min 2nd Close: 1/2" Blow Back

REMARKS:

Mud in Grind Outs were heavy oil spec'd

Tool Sample: 0% Gas 45% Oil 0% Water 55% Mud



Uploading recovery &

pressures

Company: RJM Oil Company,

Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1894 GL

Field Name: Beaver South Pool: Infield Job Number: 327

DATE April

24 2019

DST #3 Formation: Lans H-J Test Interval: 3198 - Total Depth: 3270'

3270'

Time On: 10:27 04/24 Time Off: 17:37 04/24

Time On Bottom: 12:29 04/24 Time Off Bottom: 15:29 04/24

Down Hole Makeup

Heads Up: 24.79 FT **Packer 1:** 3193.18 FT

Drill Pipe: 3197.81 FT **Packer 2:** 3198.18 FT

ID-3 1/2 Top Recorder: 3185.18 FT

Weight Pipe: FT Bettem Becorder: 2025 FT

ID-2 7/8 Bottom Recorder: 3235 FT

Collars: 0 FT Well Bore Size: 7 7/8

ID-2 1/4 Surface Choke: 1"

Test Tool: 26.16 FT Bottom Choke: 5/8"

ID-3 1/2-FH

Total Anchor: 71.82

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 1 FT

4 1/2-FH

Change Over: 1 FT

Drill Pipe: (in anchor): 31.82 FT

ID-3 1/2

Change Over: 1 FT

Perforations: (below): 36 FT

4 1/2-FH



Uploading recovery &

pressures

Company: RJM Oil Company,

Inc

DST #3

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

DATE

April

24 2019

Formation: Lans H-J

Test Interval: 3198 -

Total Depth: 3270'

3270'

Time On: 10:27 04/24 Time Off: 17:37 04/24

Time On Bottom: 12:29 04/24 Time Off Bottom: 15:29 04/24

Mud Properties

Mud Type: Chem Weight: 9.1 Viscosity: 50 Filtrate: 8.8 Chlorides: 5000 ppm



Uploading recovery &

pressures

Company: RJM Oil Company,

Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

DATE

April **24**

2019

DST #3 Formation: Lans H-J Test Ir

Test Interval: 3198 -

Total Depth: 3270'

3270'

Time On: 10:27 04/24 Time Off: 17:37 04/24

Time On Bottom: 12:29 04/24 Time Off Bottom: 15:29 04/24

Gas Volume Report

1st Open

2nd Open



Company: RJM Oil Company, Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Uploading recovery & pressures

DATEApril **25**2019

DST #4 Formation: Arbuckle Test Interval: 3339 - Total Depth: 3353'

3353'

Time On: 05:18 04/25 Time Off: 12:27 04/25

Time On Bottom: 06:51 04/25 Time Off Bottom: 09:51 04/25

Electronic Volume Estimate:

620'

1st Open Minutes: 30 Current Reading: 38.3" at 30 min

Max Reading: 38.3"

1st Close Minutes: 45 Current Reading:

0" at 45 min Max Reading: 0" <u>2nd Open</u> Minutes: 45 Current Reading:

36.1" at 45 min

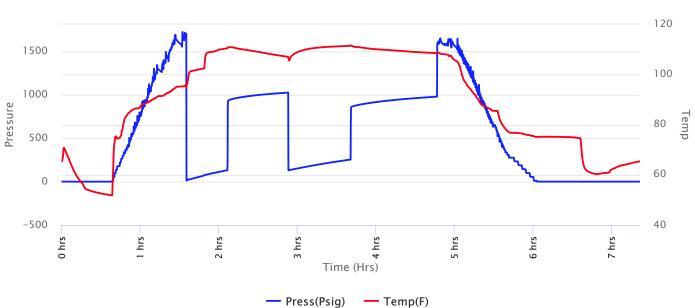
Max Reading: 36.1"

2nd Close Minutes: 60 Current Reading:

0" at 60 min

Max Reading: 0"

Inside Recorder





Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation: Uploading recovery &

pressures

DATEApril **25**2019

DST #4 Formation: Arbuckle Test Interval: 3339 - Total Depth: 3353'

Time On: 05:18 04/25 Time Off: 12:27 04/25

Time On Bottom: 06:51 04/25 Time Off Bottom: 09:51 04/25

Recovered

<u>Foot</u>	BBLS	Description of Fluid
176	2.50448	0
315	4.48245	MCO
126	1.79298	HMCW

Gas %	<u>Oil %</u>	Water %	<u>Mud %</u>
0	100	0	0
0	75	0	25
0	0	55	45

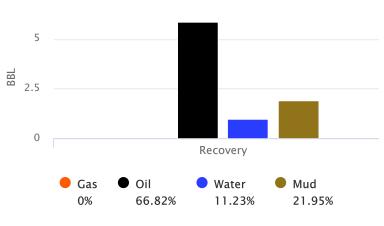
Total Recovered: 617 ft

Total Barrels Recovered: 8.77991

Reversed Out
NO

Initial Hydrostatic Pressure	1580	PSI
Initial Flow	14 to 131	PSI
Initial Closed in Pressure	1026	PSI
Final Flow Pressure	131 to 254	PSI
Final Closed in Pressure	979	PSI
Final Hydrostatic Pressure	1577	PSI
Temperature	112	°F
Pressure Change Initial	4.6	%
Close / Final Close		

Recovery at a glance



GIP cubic foot volume: 0



Uploading recovery &

pressures

Company: RJM Oil Company, Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

DATE

April **25**

2019

DST #4 Formation: Arbuckle Test Interval: 3339 - Total Depth: 3353'

Time On: 05:18 04/25 Time Off: 12:27 04/25

Time On Bottom: 06:51 04/25 Time Off Bottom: 09:51 04/25

BUCKET MEASUREMENT:

1st Open: 1/2 Blow. BOB in 7 1/2 mins

1st Close: NOBB

2nd Open: 1/2 Blow. BOB in 15 3/4 mins

2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 95% Oil 0% Water 5% Mud

Gravity: 35 @ 60 °F

Ph: 7

Measured RW: .69 @ 65 degrees °F

RW at Formation Temp: 0.417 @ 112 °F

Chlorides: 15,000 ppm



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DST#4

Formation: Arbuckle

Test Interval: 3339 -3353'

Total Depth: 3353'

DATE April

25

2019

Time On: 05:18 04/25

Time Off: 12:27 04/25

Time On Bottom: 06:51 04/25 Time Off Bottom: 09:51 04/25

Down Hole Makeup

Heads Up: 10.37 FT

0 FT

26.16 FT

Packer 1: 3334 FT

Drill Pipe:

3324.21 FT

Packer 2: 3339 FT

ID-3 1/2

Top Recorder:

3326 FT

5/8"

Weight Pipe: FT

Bottom Recorder:

3341 FT

ID-2 7/8

Collars:

Well Bore Size: 7 7/8

ID-2 1/4

Surface Choke: 1"

Test Tool:

Bottom Choke:

ID-3 1/2-FH

Total Anchor: 14

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 0 FT

4 1/2-FH

Change Over: 0 FT

Drill Pipe: (in anchor): 0 FT

ID-3 1/2

Change Over: 0 FT

Perforations: (below): 13 FT

4 1/2-FH



Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

25 2019

DST #4 Formation: Arbuckle

Test Interval: 3339 -

Total Depth: 3353'

3353'

Time On: 05:18 04/25

Time Off: 12:27 04/25

Time On Bottom: 06:51 04/25 Time Off Bottom: 09:51 04/25

Mud Properties

Mud Type: Chem Weight: 9.1 Viscosity: 50 Filtrate: 8.8 Chlorides: 5000 ppm



Formation: Arbuckle

Inc

Lease: Redetzke #2

SEC: 34 TWN: 16S RNG: 12W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1894 GL Field Name: Beaver South

Pool: Infield Job Number: 327

Operation:

Uploading recovery & pressures

DATE April

25 2019

DST #4

Test Interval: 3339 -

Total Depth: 3353'

3353'

Time On: 05:18 04/25

Time Off: 12:27 04/25

Time On Bottom: 06:51 04/25 Time Off Bottom: 09:51 04/25

Gas Volume Report

1st Open 2nd Open

Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D
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QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1272

Date 4-20-19	Sec. 34	Twp.	Range	10	County (State	On Location	2:15 AM
	·. · ·				on Beaux	r - 15.1%	E	
Lease Roc	letzke	, [·	Well No. # 2		Owner	i i		
Contractor Soul	hwind	#3	3		To Quality Oi	lwell Cementing, Inc.		
- (ace.				cementer and	d helper to assist ow	cementing equipmenter or contractor to de	o work as listed.
	ul	T.D.	3851		Charge R	TM (a	many	
Csg. § 5	18"	Depth	3851	٠.	Street			
Tbg. Size		Depth	· 	',	City		State	
Tool		Depth	,,		The above wa	s done to satisfaction a	nd supervision of owner	agent or contractor.
Cement Left in Csg.	201	Shoe Jo	oint 20 ⁷		Cement Amo	unt Ordered \\	60/40 4% CC	2% Gel
Meas Line		Displac	e 23/4	BUS				· .
	EQUIP	*			Common /	28		* •
Pumptrk 1-6 H	ementer (K			Poz. Mix	72		
Bulktrk /4 D	river	Cy	Nate	-	Gel. 3			
	river river	0			Calcium 🖁			
JOE	SERVICES	& REMA	RKS		Hulls		·	
Remarks: Compon	the did		Proulate		Salt	·		
Rat Hole					Flowseal	· ·		
Mouse Hole					Kol-Seal			
Centralizers					Mud CLR 48			
Baskets	· .				CFL-117 or C	D110 CAF 38		
D/V or Port Collar				<u> </u>	Sand	7		
****					Handling /4	8 191		
					Mileage			
				¥		FLOAT EQUIPM	ENT	:
			***		Guide Shoe			·
			, , , , , , , , , , , , , , , , , , ,		Centralizer		•.	
					Baskets			
<u> </u>		42.0			AFU Inserts		N NORTH A	
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x /	1/						Discount	
Signature (Jun	/hrw			·			Total Charge	

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- TERMS: Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwith-standing the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.
- -ATTORNEY FEES: In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.
- PRICES AND TAXES: All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.
- TOWING CHARGES: QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.
- PREPARATION CHARGES: If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.
- DEADHAUL, CHARGES: Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.
- SERVICE CONDITIONS AND LIABILITIES: 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:
- (A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:
- (B) Oil spills, poliution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.
- 2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.
- 3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.
- WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.
 - 2. More specifically:
- (A) Nothing in this contract shall be constructed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.
- (B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1278

0011700 024 1041	0.000	171 E. 1111/11	T Value of		Expressed to the second	1	T
Date 4-25-19 34	Twp.	Range	Bas	County	State K5	On Location	Finish 11:15 PM
	eta mu	mixen, srit gr	Locati	0	105-15, 11/	DE, SIINTO	ga 2 nd ja store
Lease Redetzke Well No. 72				Owner			
Contractor Southwind #3				To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish			
Type Job Lung Starting				cementer and helper to assist owner or contractor to do work as listed.			
Hole Size 7778 h	T.D. 33531			Charge KJM Company			
sg. 17# 5%" New Depth 33511			intra ejo ar	Street			
Tbg. Size	Depth			City State			
Tool	Depth			The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg. 11, 15	Shoe Jo	oint 1	5'	Cement Amo	ount Ordered 1800	on 10% Salt 5	% Gilsonite
Meas Line	Displac	e 771	a BUS	Table 1 Committee of the Committee of th	mud Clear 48	TATO COUNTY	
EQUIPMENT				Common/80			
Pumptrk 6 No. Cementer David				Poz. Mix			
ulktrk 3 No. Driver Micheal Nate			a section	Gel.			
Bulkerk D. W. No. Driver Rick				Calcium			
JOB SERVICES & REMARKS				Hulls 71, Aug. 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a 1 a a a a 1 a a a a 1 a			
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Mouse Hole				Kol-Seal 900ff			
Centralizers 1-9				Mud CLR 48 500 901			
Baskets 2 +6				CFL-117 or CD110 CAF 38			
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