KOLAR Document ID: 1381867

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:	SecTwpS. R East West
Address 2:	Feet from North / South Line of Section
City:	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.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:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD	Elevation: Ground: Kelly Bushing:
☐ Gas ☐ DH ☐ EOR	Total Vertical Depth: Plug Back Total Depth:
☐ OG ☐ GSW	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane)	Multiple Stage Cementing Collar Used?
Cathodic Other (Core, Expl., etc.):	
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to: sx cmt.
Original Comp. Date: Original Total Depth:	
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content:ppm Fluid volume:bbls
Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #:	Ecodition of hald disposal in riddied choice.
GSW Permit #:	Operator Name:
_	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
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 III Approved by: Date:

KOLAR Document ID: 1381867

Page Two

Operator Name: _				Lease Name:			Well #:	
Sec Twp.	S. R.	E	ast West	County:				
	flowing and shu	ut-in pressures, v	vhether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,
Final Radioactivity files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	v. Digital electronic log
Drill Stem Tests Ta			Yes No			on (Top), Depth ar		Sample
Samples Sent to 0	Geological Surv	/ey	Yes No	Na	me		Тор	Datum
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No					
		B	CASING eport all strings set-c		New Used	ion, etc.		
Purpose of Strir		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD			
Purpose:		epth T Bottom	ype of Cement	# Sacks Used		Type and F	Percent Additives	
Perforate Protect Casi Plug Back T								
Plug Off Zor								
Did you perform a Does the volume Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,
Date of first Product Injection:	tion/Injection or R	esumed Production	Producing Meth	nod:	Gas Lift 0	Other (Explain)		
Estimated Production Per 24 Hours	on	Oil Bbls.					Gas-Oil Ratio	Gravity
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:			DN INTERVAL: Bottom
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT
,	,			B.11 B1				
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid,	Fracture, Shot, Cer (Amount and Kind	menting Squeeze I of Material Used)	Record
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:				
TODING RECORD:	. 3126.		n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	RJM Company
Well Name	CKA 2
Doc ID	1381867

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	838	Common	350	60/40 4% CC 2% Gel
Production	7.875	5.50	15.50	3529	Common	180	10% Salt 5% Gilsonite



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE
December
11
2017

DST #1 Formation: Lsg H, I, J, K Test Interval: 3314 - 3416'

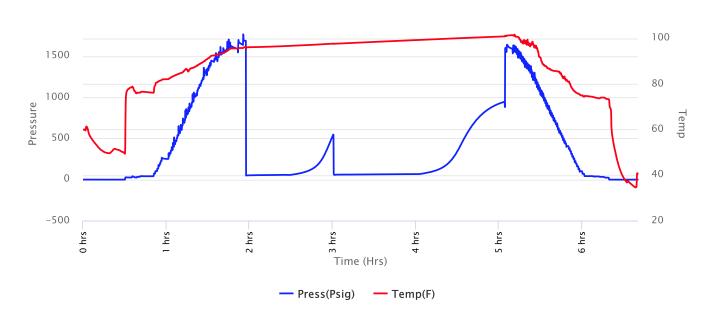
Total Depth: 3416'

Time On: 00:41 12/11 Time Off: 07:28 12/11

Time On Bottom: 02:36 12/11 Time Off Bottom: 05:36 12/11

Electronic Volume Estimate: 61' 1st Open Minutes: 30 2.8" at 30 min 1st Close Minutes: 30 0" at 30 min

2nd Open Minutes: 60 4.2" at 60 min 2nd Close Minutes: 60 0" at 60 min





Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE December 11 2017

DST #1 Formation: Lsg H, I, J, K

Test Interval: 3314 -Total Depth: 3416'

3416'

Time On: 00:41 12/11

Time Off: 07:28 12/11

Time On Bottom: 02:36 12/11 Time Off Bottom: 05:36 12/11

Recovered

<u>Foot</u>	<u>BBLS</u>	Description of Fluid
23	0.32729	G
40	0.5692	SLOCM

Gas %	<u>Oil %</u>	Water %	<u>Mud %</u>
100	0	0	0
0	8	0	92

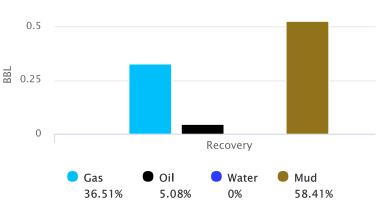
Total Recovered: 63 ft

Total Barrels Recovered: 0.89649

NO	Reversed Out
1 ''	NO

		NO
Initial Hydrostatic Pressure	1594	PSI
Initial Flow	48 to 57	PSI
Initial Closed in Pressure	544	PSI
Final Flow Pressure	56 to 66	PSI
Final Closed in Pressure	940	PSI
Final Hydrostatic Pressure	1595	PSI
Temperature	101	°F
Pressure Change Initial	0.0	%
Close / Final Close		

Recovery at a glance





Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December

11

2017

DST #1 Formation: Lsg H, I,

J, K

Test Interval: 3314 -

Total Depth: 3416'

3416'

Time On: 00:41 12/11

Time Off: 07:28 12/11

Time On Bottom: 02:36 12/11 Time Off Bottom: 05:36 12/11

REMARKS:

IF: 1/2" Built to 3" in 30 mins.

IS: 0" Blowback

FF:. 1" Built to 4.5" in 60 mins.

FS: 0" Blowback

Diesel in bucket.

TOOL SAMPLE: 10% O 65% W 25% M

Ph: 7

RW: .58 @ 32 degrees F

Chlorides: 28000 ppm



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December 11 2017

DST #1 Formation: Lsg H, I, J, K

Test Interval: 3314 -3416'

Total Depth: 3416'

3383 FT

Time On: 00:41 12/11 Time Off: 07:28 12/11

Time On Bottom: 02:36 12/11 Time Off Bottom: 05:36 12/11

Down Hole Makeup

Heads Up: 12.7 FT Packer 1: 3308.76 FT

Drill Pipe: 3301.3 FT Packer 2: 3313.76 FT

ID-3 1/2 Top Recorder: 3300.76 FT

Weight Pipe: 0 FT **Bottom Recorder:**

ID-2 7/8

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

1" **Surface Choke:** ID-2 1/4

Bottom Choke: 5/8" Test Tool: 26.16 FT ID-3 1/2-FH

Total Anchor: 102.24

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 3 FT

4 1/2-FH

Change Over: 1 FT

Drill Pipe: (in anchor): 62.24 FT

ID-3 1/2

Change Over: 1 FT

Perforations: (below): 34 FT

4 1/2-FH



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATEDecember

11 2017

DST #1 Formation: Lsg H, I, J, K

Test Interval: 3314 -

Total Depth: 3416'

3416'

Time On: 00:41 12/11 Time C

Time Off: 07:28 12/11

Time On Bottom: 02:36 12/11 Time Off Bottom: 05:36 12/11

Mud Properties

Mud Type: Chem Weight: 8.8 Viscosity: 57 Filtrate: 6.4 Chlorides: 4800 ppm



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East Pool: Infield

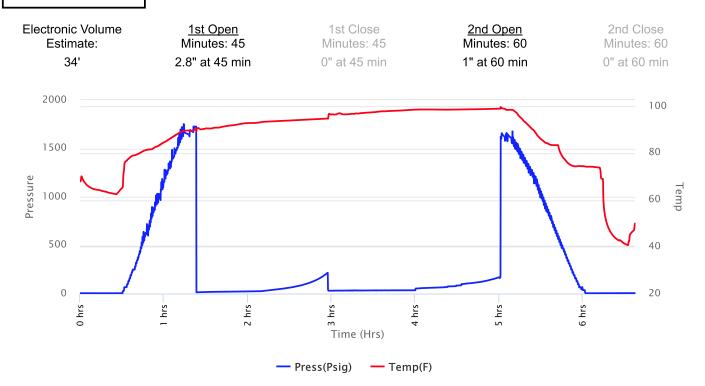
Job Number: 90

DATE
December
11
2017

DST #2 Formation: Arbuckle Test Interval: 3426 - Total Depth: 3471'

Time On: 14:15 12/11 Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11





Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East Pool: Infield

Job Number: 90

DATE

December

11

2017

DST #2 Formation: Arbuckle Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11 Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

0

Recovered

<u>Foot</u> **BBLS** 40 0.5692 **Description of Fluid SLOCM**

Gas % <u>Oil %</u>

6

Water % 0

Mud % 94

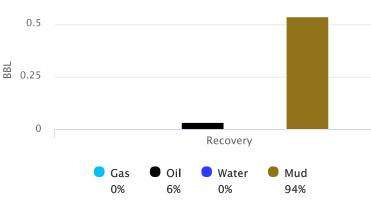
Total Recovered: 40 ft

Total Barrels Recovered: 0.5692

Reversed Out NO

		110
Initial Hydrostatic Pressure	1679	PSI
Initial Flow	13 to 24	PSI
Initial Closed in Pressure	216	PSI
Final Flow Pressure	30 to 35	PSI
Final Closed in Pressure	167	PSI
Final Hydrostatic Pressure	1642	PSI
Temperature	99	°F
Pressure Change Initial	22.5	%
Close / Final Close		

Recovery at a glance





Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December

11

2017

DST #2 Formation: Arbuckle Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11

Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

REMARKS:

IF: 1/2" Built to 3" in 45 mins.

IS: No Blowback

FF: 1" Built to 1 1/4" in 60 mins.

FS: No Blowback

Diesel in Bucket

TOOL SAMPLE: 6% O 94% M



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

11 2017

DST #2 Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11

Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

Down Hole Makeup

Heads Up: 26.03 FT

Packer 1: 3420.9 FT

Drill Pipe: 3426.77 FT

Packer 2: 3425.9 FT

3459 FT

ID-3 1/2

Top Recorder: 3412.9 FT

Weight Pipe: 0 FT

ID-2 7/8

Bottom Recorder:

Well Bore Size: 7 7/8

Collars: 0 FT

ID-2 1/4

Surface Choke: 1"

Test Tool: 26.16 FT

Bottom Choke: 5/8"

ID-3 1/2-FH

Total Anchor: 45.1

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 0 FT

4 1/2-FH

Change Over: .5 FT

Drill Pipe: (in anchor): 30.10 FT

ID-3 1/2

Change Over: .5 FT

Perforations: (below): 13 FT

4 1/2-FH



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATEDecember

11 2017

DST #2 Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11

Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

Mud Properties

Mud Type: Chem Weight: 9.2 Viscosity: 59 Filtrate: 7.2 Chlorides: 6000 ppm



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East Pool: Infield

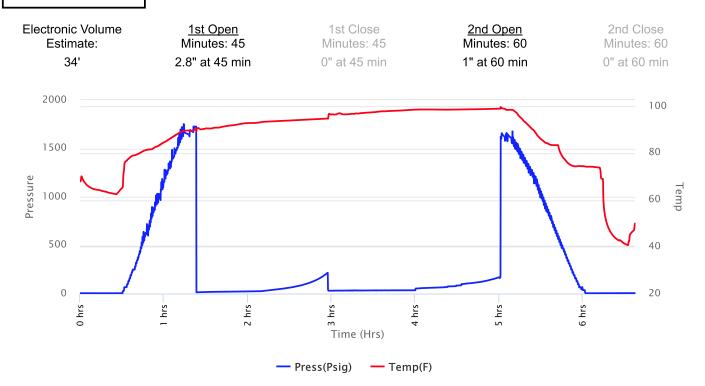
Job Number: 90

DATE
December
11
2017

DST #2 Formation: Arbuckle Test Interval: 3426 - Total Depth: 3471'

Time On: 14:15 12/11 Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11





Inc

Lease: CKA #2

DST #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL

Field Name: Weber East Pool: Infield Job Number: 90

DATE

December

11 2017 Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11

Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

Recovered

<u>Foot</u> **BBLS** 40 0.5692 **Description of Fluid SLOCM**

Gas % 0

<u>Oil %</u> 6

Water % 0

Mud % 94

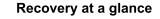
Total Recovered: 40 ft

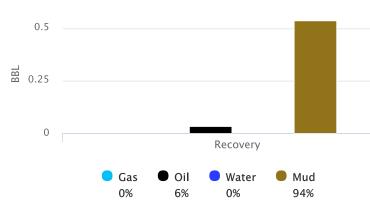
Total Barrels Recovered: 0.5692

Reversed Out NO

		NO
Initial Hydrostatic Pressure	1679	PSI
Initial Flow	13 to 24	PSI
Initial Closed in Pressure	216	PSI
Final Flow Pressure	30 to 35	PSI
Final Closed in Pressure	167	PSI
Final Hydrostatic Pressure	1642	PSI
Temperature	99	°F
Pressure Change Initial	22.5	%

Close / Final Close







Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December

11

2017

DST #2 Formation: Arbuckle Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11

Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

REMARKS:

IF: 1/2" Built to 3" in 45 mins.

IS: No Blowback

FF: 1" Built to 1 1/4" in 60 mins.

FS: No Blowback

Diesel in Bucket

TOOL SAMPLE: 6% O 94% M



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

5/8"

DATE

December 11 2017

DST #2 Formation: Arbuckle Test Interval: 3426 -

Total Depth: 3471'

3471'

Bottom Choke:

Time On: 14:15 12/11 Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

Down Hole Makeup

Heads Up: 26.03 FT Packer 1: 3420.9 FT

Drill Pipe: 3426.77 FT Packer 2: 3425.9 FT

ID-3 1/2 Top Recorder: 3412.9 FT

Weight Pipe: 0 FT

Bottom Recorder: 3459 FT ID-2 7/8

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

1" **Surface Choke:** ID-2 1/4

Test Tool: 26.16 FT ID-3 1/2-FH

Total Anchor: 45.1

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 0 FT

4 1/2-FH

Change Over: .5 FT

Drill Pipe: (in anchor): 30.10 FT

ID-3 1/2

Change Over: .5 FT

Perforations: (below): 13 FT

4 1/2-FH



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATEDecember

11 2017

DST #2 Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3471'

3471'

Time On: 14:15 12/11

Time Off: 20:43 12/11

Time On Bottom: 15:38 12/11 Time Off Bottom: 19:08 12/11

Mud Properties

Mud Type: Chem Weight: 9.2 Viscosity: 59 Filtrate: 7.2 Chlorides: 6000 ppm



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE December

2017

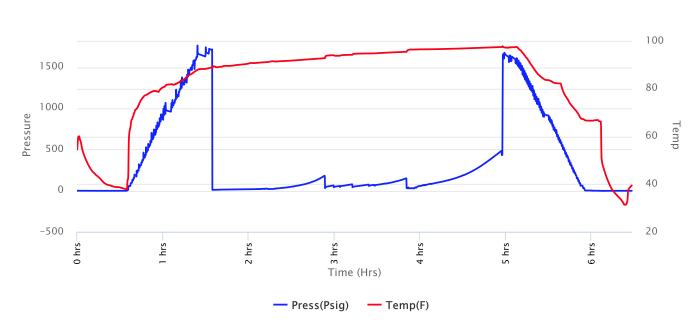
12

DST #3 Formation: Arbuckle Test Interval: 3426 - Total Depth: 3481'

Time On: 01:28 12/12 Time Off: 07:46 12/12

Time On Bottom: 03:01 12/12 Time Off Bottom: 06:16 12/12

Electronic Volume Estimate: 40' 1st Open Minutes: 45 2.8" at 45 min 1st Close N/A 2nd Open Minutes: 60 1.6" at 60 min 2nd Close Minutes: 60 0" at 60 min





Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December

12

2017

DST #3 Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3481'

3481'

Time On: 01:28 12/12 Time Off: 07:46 12/12

Time On Bottom: 03:01 12/12 Time Off Bottom: 06:16 12/12

Recovered

<u>Foot</u> **BBLS** 40 0.5692 Description of Fluid M (trace O)

Gas % 0

<u>Oil %</u>

.1

Water % 0

Mud % 99.9

Total Recovered: 40 ft

Total Barrels Recovered: 0.5692

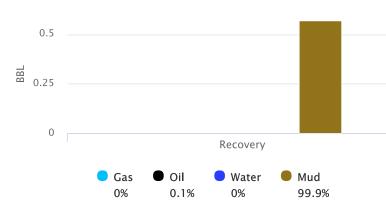
Reversed Out

Reversed Out
NO
PSI

Initial Hydrostatic Pressure	1647	PSI
Initial Flow	10 to 20	PSI
Initial Closed in Pressure	181	PSI
Final Flow Pressure	31 to 30	PSI
Final Closed in Pressure	469	PSI
Final Hydrostatic Pressure	1644	PSI
Temperature	98	°F
Pressure Change Initial	0.0	%

Close / Final Close

Recovery at a glance





Inc

Lease: CKA #2

DST#3

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December

12

2017

REMARKS:

IF: 3/4"- Built to 3 1/4.

IS: NoBB

FF: 1/2" - Built to 2"

FS: NoBB

Diesel in bucket

Tool Sample: 2% O 98% M

Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3481'

3481'

Time On: 01:28 12/12 Time Off: 07:46 12/12

Time On Bottom: 03:01 12/12 Time Off Bottom: 06:16 12/12



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE

December 12 2017

Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3481'

3481'

Time On: 01:28 12/12

Time Off: 07:46 12/12

Time On Bottom: 03:01 12/12 Time Off Bottom: 06:16 12/12

Down Hole Makeup

Heads Up: 26.03 FT

DST #3

Packer 1: 3420.9 FT

Drill Pipe: 3426.77 FT Packer 2: 3425.9 FT

ID-3 1/2

Top Recorder: 3412.9 FT

Weight Pipe: 0 FT **Bottom Recorder:** 3459 FT

ID-2 7/8

Well Bore Size:

7 7/8

Collars: 0 FT

1" **Surface Choke:**

ID-2 1/4

26.16 FT

Bottom Choke: 5/8"

Test Tool: ID-3 1/2-FH

Total Anchor: 55.1

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 0 FT

4 1/2-FH

Change Over: .5 FT

Drill Pipe: (in anchor): 30.10 FT

ID-3 1/2

Change Over: .5 FT

Perforations: (below): 23 FT

4 1/2-FH



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3

Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATEDecember

12 2017

DST #3 Formation: Arbuckle

Test Interval: 3426 -

Total Depth: 3481'

3481'

Time On: 01:28 12/12 Time

Time Off: 07:46 12/12

Time On Bottom: 03:01 12/12 Time Off Bottom: 06:16 12/12

Mud Properties

Mud Type: Chem Weight: 9.2 Viscosity: 59 Filtrate: 7.2 Chlorides: 6000 ppm



Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL Field Name: Weber East

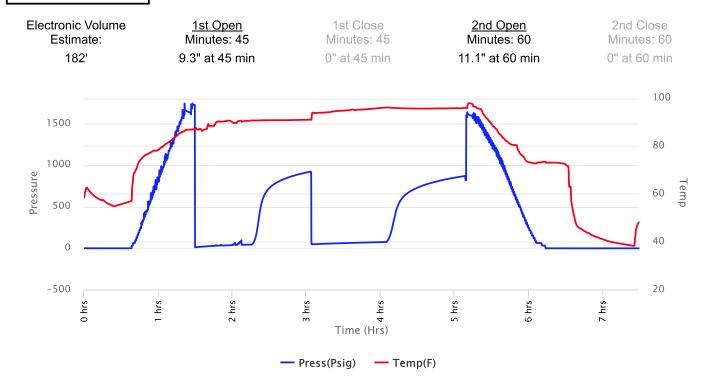
Pool: Infield Job Number: 90

DATE
December
12
2017

DST #4 Formation: Arbuckle Test Interval: 3427 - Total Depth: 3489'

Time On: 12:41 12/12 Time Off: 19:58 12/12

Time On Bottom: 14:09 12/12 Time Off Bottom: 17:39 12/12





Inc

Lease: CKA #2

SEC: 6 TWN: 19S RNG: 13W

County: BARTON State: Kansas

Drilling Contractor: Southwind Drilling,

Inc - Rig 3 Elevation: 1874 GL Field Name: Weber East

Pool: Infield Job Number: 90

DATE
December
12
2017

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Time On: 12:41 12/12 Time Off: 19:58 12/12

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Recovered

<u>Foot</u>	<u>BBLS</u>	Description of Fluid	<u>Gas %</u>	<u>Oil %</u>	Water %	<u>Mud %</u>
10	0.1423	0	0	100	0	0
10	0.1423	SLWCHOCM	0	30	1	69
126	1.79298	SLWCSLOCM	0	10	6	84

Total Recovered: 146 ft

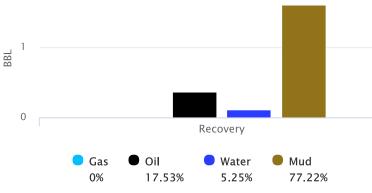
Total Barrels Recovered: 2.07758

Reversed Out
NO

voicea eat	
NO	
PSI	

Initial Hydrostatic Pressure	1640	PSI
Initial Flow	11 to 44	PSI
Initial Closed in Pressure	923	PSI
Final Flow Pressure	47 to 74	PSI
Final Closed in Pressure	871	PSI
Final Hydrostatic Pressure	1630	PSI
Temperature	97	°F
Pressure Change Initial	5.6	%
Close / Final Close		

Recovery at a glance





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REMARKS:

IF: 3/4" Built to 10" in 45 mins.

IS: Very WSBB

FF: 3/4" Built to BB in 55 mins.

FS: Very WSBB

Diesel in bucket.

Tool Sample: 4% O 74% W 22% M

Gravity: 35.4 @ 60 degrees F

Ph: 6

RW: .5 @ 41 degrees F

Chlorides: 24000 ppm



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Down Hole Makeup

Heads Up: 25.03 FT

DST #4

Packer 1: 3421.9 FT

Drill Pipe: 3426.77 FT Packer 2: 3426.9 FT

ID-3 1/2

Top Recorder: 3413.9 FT

Weight Pipe: 0 FT

ID-2 7/8

Bottom Recorder:

7 7/8

3463 FT

Collars: 0 FT Well Bore Size:

1" **Surface Choke:**

ID-2 1/4

Bottom Choke: 5/8" 26.16 FT

Test Tool: ID-3 1/2-FH

Total Anchor: 62.1

Anchor Makeup

Packer Sub: 1 FT

Perforations: (top): 3 FT

4 1/2-FH

Change Over: .5 FT

Drill Pipe: (in anchor): 30.10 FT

ID-3 1/2

Change Over: .5 FT

Perforations: (below): 27 FT

4 1/2-FH



Inc

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SEC: 6 TWN: 19S RNG: 13W

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Drilling Contractor: Southwind Drilling,

Inc - Rig 3

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Mud Properties

Mud Type: Chem Weight: 9.3 Viscosity: 50 Filtrate: 8 Chlorides: 8800 ppm

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. 614

Date 12-7-17 Sec.	Twp. Range		County	K State	On Location	6	Finish
CKA		Location	··· · · · · · · · · · · · · · · · · ·	4 Jct -	5 on Boy	d Rd	1 40
Lease	Well No. 2		Owner 40	th Ave, 13	MEINITA	70	
Contractor Southwind	#3		To Quality Oi You are here	ilwell Cementing, In	c. t cementing equipme	· ent and f	turnish
Type Job Susface		<u> </u>	cementer and	d helper to assist ov	vner or contractor to	do work	as listed.
Hole Size 12 1/4"	T.D. 8531		Charge F	52W CO.	npany		•
Csg. 85/8 11	Depth \$53'		Street				
Tbg. Size	Depth		City		State		
Tool	Depth		The above wa		and supervision of own		or contractor.
Cement Left in Csg. 201	Shoe Joint 20		Cement Amo	ount Ordered 35	60140 4%	CL	<u> 2% (ul</u>
Meas Line	Displace 52 3/4	BLS	-			\perp	
EQUIPA 1 / No. Cementer	MENT		Common 0		· · · · · · · · · · · · · · · · · · ·		
Pumptrk / b Helper L	David		Poz. Mix	140			
Bulktrk 01 Driver	dan		Gel. 7	•			
Bulktrk D.U. Driver	Tc/c		Calcium/5				
JOB SERVICES			Hulls				
Remarks: Cement did	Circula	æ	Salt				
Rat Hole			Flowseal	-		4	
Mouse Hole			Kol-Seal				
Centralizers		_	Mud CLR 48				TATALON I
Baskets			CFL-117 or C	CD110 CAF 38			
D/V or Port Collar			Sand				
			Handling 3	72			
***************************************			Mileage				
				FLOAT EQUIP	MENT	30.	
	*		Guide Shoe	Rubber	plucy		
			Centralizer		1 V	<u> </u>	
			Baskets				
	yn: I dan		AFU Inserts		<u> </u>		
			Float Shoe				
**	*		Latch Down				
	modesa' sa assessa waina		. 98	2			
<u>*</u>					= 0	 	
			Pumptrk Cha	irge Long Si	wface		
			Mileage /5	Mim	**************************************		
^					Ta:	<u> </u>	
X Signature					Discoun	<u> </u>	
Signature Juy Mue			w g e	en e	Total Charge	³ <u> </u>	

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- 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 CUS-TOMER.
- 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, pollution, 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.
- 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 Call 785-324-1041

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

616 No.

Cell 705-324-1041						
Date 12-14-17 6	Twp. Range		County	State KS	On Location	Finish
Date 12-19-11 6	19 13		18 T		8 1 0	1 15 40 Rd
Lease CKA	Well No. 2	Location	Owner 3/	4E NS	on Buyd Ro	d to 40 Rd
Contractor Southwind	#3			ilwell Cementing, Inc by requested to rent	c. t cementing equipment	and furnish
Type Job Longstring			cementer an	d helper to assist ow	ner or contractor to do	work as listed.
Hole Size 77/8"	T.D. 38001		Charge To	JM Com	pany	
Csg. 5 15,50# New	Depth 3529,1	<u>o' </u>	Street		1	
Tbg. Size	Depth		City -		- State -	·
Tool	Depth	 r	The above wa	s done to satisfaction	and supervision of owner	
Cement Left in Csg. 42. 34	Shoe Joint 42.3		Cement Amo	ount Ordered \\70	Com 10% Sal	1 5%6ilsonite
Meas Line	Displace 83	<u>BLS</u>	Soo gal	mud Clear		
EQUIPN	NENT		Common	94 180		
Pumptrk 18 No. Cementer Too	2015		Poz. Mix		·	
Bulktrk)4 No. Driver DFO	lan		Gel.			
Bulkerk P.W. No. Driver Driver	ick .		Calcium			
JOB SERVICES	& REMARKS		Hulls			
Remarks:			Salt 15			
Rat Hole Set triple	ox shoe W/1	600 #	Flowseal			
Mouse Hole		SI.	Kol-Seal 7	50 H		
Centralizers 1-9			Mud CLR 48	500 9	ial	
Baskets 2+4			CFL-117 or (CD110 CAF 38		
DN or Port Collar Dine on b	attorn break C?	culati	∿Sand		· · · · · · · · · · · · · · · · · · ·	
	ear 48 Olus Ral		Handling 2	02		
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	hut allown wa			FLOAT EQUIP	AENT	
pump + lines Displa	ad plus w/8	33 BUS	Guide Shoe	Topplex she	ie .	
	, 0 ,		Centralizer (
Keleased to he	ld.		Baskets			
	erika 🖟 🖟 wang		AFU Inserts			
Lift pressu	re 900 #		Float Shoe			
		Ż	Latch Down	1		
Land plug to	1600 #			4		
		i di		<u> </u>	<i></i>	
		Anna	Pumptrk Cha	arge Oros	String	·
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