

Confidentiality Requested:

Yes No

#### Kansas Corporation Commission Oil & Gas Conservation Division

1127158

Form ACO-1 August 2013 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. 15
Name:	Spot Description:
Address 1:	SecTwpS. R
Address 2:	Feet from
City: State: Zip:+	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxxx)
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 SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):  If Workover/Re-entry: Old Well Info as follows:	Producing Formation: Kelly Bushing: Total Vertical Depth: Plug Back Total Depth: Feet Multiple Stage Cementing Collar Used? Yes No If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name: Original Total Depth: Original Total Depth:	feet depth to: w/ sx cmt.  Drilling Fluid Management Plan
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled         Permit #:           Dual Completion         Permit #:	Chloride content: ppm Fluid volume: bbls  Dewatering method used:
☐ SWD Permit #:	Location of fluid disposal if hauled offsite:
ENHR Permit #:	Operator Name:
GSW Permit #:	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	Quarter         Sec.         Twp.         S. R.         East         West           County:         Permit #:

#### **AFFIDAVIT**

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

**Submitted Electronically** 

KCC Office Use ONLY
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

Page Two



Operator Name:				_ Lease I	Name: _			Well #:	
Sec Twp	S. R	East	West	County	:				
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in press o surface test, along v	ures, whe	ther shut-in pre chart(s). Attach	ssure reac extra shee	hed stati	c level, hydrosta space is neede	tic pressures, b d.	ottom hole temp	erature, fluid recov
Final Radioactivity Lo files must be submitte						ogs must be ema	alled to kcc-well-	logs@kcc.ks.go	v. Digital electronic
Drill Stem Tests Taker (Attach Additional		Y	es No			J	on (Top), Depth		Sample
Samples Sent to Geo	logical Survey	Y	es No		Nam	е		Тор	Datum
Cores Taken Electric Log Run			es  No						
List All E. Logs Run:									
				RECORD	Ne				
	0: 11.1					ermediate, product		" 0 1	T 15
Purpose of String	Size Hole Drilled		ze Casing t (In O.D.)	Weig Lbs.		Setting Depth	Type of Cement	# Sacks Used	Type and Percer Additives
			ADDITIONAL	CEMENTI	NG / SQL	JEEZE RECORD			
Purpose:	Depth Top Bottom	Туре	of Cement	# Sacks	Used		Type and	Percent Additives	
Perforate Protect Casing	Top Dottern								
Plug Back TD Plug Off Zone									
1 lug 0 li 20 lio									
Did you perform a hydrau	ulic fracturing treatment	on this well	?			Yes	No (If No, s	skip questions 2 a	nd 3)
Does the volume of the t			-		-			skip question 3)	
Was the hydraulic fractur	ing treatment informatio	n submitted	to the chemical of	disclosure re	gistry?	Yes	No (If No, i	ill out Page Three	of the ACO-1)
Shots Per Foot			RD - Bridge Plug Each Interval Perl				cture, Shot, Ceme	nt Squeeze Recor	rd Depth
						(* *			200
TUBING RECORD:	Size:	Set At:		Packer A	t·	Liner Run:			
		0017111				[	Yes N	o	
Date of First, Resumed	Production, SWD or EN	HR.	Producing Meth	nod:	g 🗌	Gas Lift (	Other (Explain)		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat	er B	bls.	Gas-Oil Ratio	Gravity
DIODOCITI	01.05.040			4ETUOD 05	. 00145/	TION:		DDOD! ICT!	
DISPOSITION Solo	ON OF GAS:  Used on Lease		N Open Hole	∥ETHOD OF Perf.			mmingled	PRODUCTION	ON INTERVAL:
	bmit ACO-18.)		Other (Specify)		(Submit		mit ACO-4)		

Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	Kramer 'A' 5
Doc ID	1127158

### Tops

Name	Тор	Datum
Anhydrite	902	+1018
Tarkio Lime	2543	-623
Topeka	2803	-883
Heebner	3040	-1120
Toronto	3054	-1134
Lansing	3102	-1182
Base Kansas City	3311	-1391
Arbuckle	3356	-1436

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

March 25, 2013

Allen Bangert Mai Oil Operations, Inc. 8411 PRESTON RD STE 800 DALLAS, TX 75225-5520

Re: ACO1 API 15-167-23852-00-00 Kramer 'A' 5 SW/4 Sec.14-15S-14W Russell County, Kansas

#### **Dear Production Department:**

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, Allen Bangert

#### JAMES C. MUSGROVE

Petroleum Geologist 212 Main Street P.O. Box 215 Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

Mai Oil Operations Inc. Kramer 'A' #5 W/2-SE-NE-SW (1650' FSL & 2175' FWL) Section 14-15s-14w Russell County, Kansas Page 1

#### 5 1/2" Production Casing Set

Contractor:

Southwind Drilling Co. (Rig #3)

Commenced:

January 26, 2013

Completed:

February 2, 2013

Elevation:

1920' K.B; 1918' D.F; 1912' G.L.

Casing program:

Surface; 8 5/8" @ 515'

Production; 5 1/2" @ 3428'

Sample:

Samples saved and examined 2200' to the Rotary Total Depth.

**Drilling time:** 

One (1) foot drilling time recorded and kept 2200 ft. to the Rotary Total

Depth.

Measurements:

All depths measured from the Kelly Bushing.

**Drill Stem Tests:** 

There were five (5) Drill Stem Tests ran by Trilobite Testing Co.

Electric Log:

By Nabors Completion & Production Services Co; Dual Induction,

Compensated Density/Neutron Log and Micro Log.

<u>Formation</u>	Log Depth	Sub-Sea Datum
Anhydrite	902	+1018
Base Anhydrite	938	+982
Grand Haven	2471	-551
1 <sup>st</sup> Tarkio Sand	2481	-561
Dover	2495	-575
2 <sup>nd</sup> Tarkio Sand	2500	-580
Tarkio Lime	2543	-623
3 <sup>rd</sup> Tarkio Sand	2577	-657
Elmont	2605	-685
Howard	2743	-823
Topeka	2803	-883
Heebner	3040	-1120
Toronto	3054	-1134
Lansing	3102	-1182
Base Kansas City	3311	-1391
Arbuckle	3356	-1436
Rotary Total Depth	3427	-1507
Log Total Depth	3429	-1509

(All tops and zones corrected to Electric Log measurements).

Mai Oil Operations Inc. Kramer 'A' #5 W/2-SE-NE-SW (1650' FSL & 2175' FWL) Section 14-15s-14w Russell County, Kansas Page 2

#### SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

## 1<sup>ST</sup> TARKIO SAND SECTION

2481-2489"

Sand; gray and black, very fine grained, silty, few sub angular,

no shows.

### 2<sup>ND</sup> TARKIO SAND SECTION

2501-2520

Sand; light gray, very fine grained, sub angular, sub rounded,

friable, brown stain, show of free oil and faint odor.

**Drill Stem Test #1** 

2482-2550' (log measurements 2485-2552)

Times:

30-30-45-45

Blow:

Fair (4 inches) increase to 7 1/4 on 2<sup>nd</sup> opening

Recovery:

137' gas in pipe

20' slightly oil cut mud (5% oil, 95% mud)

60' heavy oil and gas cut mud (15% gas, 30% oil, 55% mud)

60' slightly oil and gas cut muddy water (5% gas, 5% oil, 50% water, 40% mud)

Pressures: ISIP 611

psi

**FSIP 639** 

psi

IFP 62-69 psi

FFP 115-97

psi

HSH 1226-1178

psi

#### **TOPEKA SECTION**

2960-2977

Limestone; white, cream, finely crystalline, scattered vuggy

porosity, trace stain, show of free oil and strong odor in fresh

samples.

2988-3008'

Limestone; cream, tan, finely crystalline, scattered porosity, light

brown stain, show of free oil and strong odor in fresh samples.

3020-3030'

Limestone; cream, tan, finely crystalline, chalky, few

fossiliferous, poor porosity, trace brown stain, no free oil and

faint odor in fresh samples.

Mai Oil Operations Inc. Kramer 'A' #5 W/2-SE-NE-SW (1650' FSL & 2175' FWL) Section 14-15s-14w Russell County, Kansas Page 3

**Drill Stem Test #2** 

2960-3035' (log measurements 2962-3037)

Times:

30-30-45-45

Blow:

Weak

Recovery:

40' mud, scum of oil

Pressures: ISIP

ISIP 775 psi FSIP 763 psi

FSIP 763 psi IFP 36-44 psi FFP 46-54 psi HSH 1541-1478 psi

#### **TORONTO SECTION**

3056-3070'

Limestone; tan, cream, finely crystalline, poor visible porosity,

light brown stain, no free oil and faint odor.

#### **LANSING SECTION**

3103-3110'

Limestone; tan, finely crystalline, chalky, poor visible porosity,

light brown stain, no free oil and faint odor.

3120-3125'

Limestone; tan, brown, scattered pinpoint porosity, light brown

stain, show of free oil.

3130-3143'

Limestone; cream, tan, chalky, few sub oomoldic, few with

pinpoint porosity, trace stain, show of free oil and strong odor in

fresh samples.

#### Drill Stem Test #3

3104-3165' (log measurements 3106-3167)

Times:

30-30-45-45

Blow:

Strong; gas to surface 5 minutes into ffp, TSTM

Recovery:

453' gassy oil

378' heavy oil and gas cut watery mud (20% gas, 45% oil, 10% water, 25% mud)

63' oil and gas cut watery mud)

(10% gas, 10% oil, 10% water, 70% mud)

Pressures:

ISIP 464 psi

FSIP 468 psi IFP 138-271 psi FFP 272-389 psi HSH 1610-1557 psi

3180-3190'

Limestone; tan, finely crystalline, oolitic, poor visible porosity,

trace brown and black stain, no free oil and no odor.

3203-3219

Limestone; brown, tan, oolitic, oomoldic, poor to fair oomoldic porosity, light brown stain, no show of free oil and questionable

odor in fresh samples.

Mai Oil Operations Inc. Kramer 'A' #5

W/2-SE-NE-SW (1650' FSL & 2175' FWL)

Section 14-15s-14w Russell County, Kansas

Page 4

3253-3260' Limestone; white, cream, finely crystalline, few with scattered

vuggy type porosity, good stain and saturation, show of free oil

and fair odor in fresh samples.

3271-3280' Limestone; as above, dense, chalky, faint odor in fresh samples.

3289-3298' Limestone; white, tan, fossiliferous, chalky, scattered porosity,

light brown stain, show of free oil and strong odor in fresh

samples.

**Drill Stem Test #4** 

3253-3298' (log measurements 3255-3300)

Times:

30-30-45-45

Blow:

Weak

Recovery:

63' gas in pipe

20' slightly oil cut mud (5% oil, 95% mud)

Pressures: ISIP 135 psi

**FSIP 159** psi IFP 38-38 psi FFP 43-55 psi HSH 1710-1662 psi

3325-3335

Limestone; tan, buff, finely crystalline, poor visible porosity, trace

stain, trace stain, show of free oil and faint odor.

#### ARBUCKLE SECTION

3356-3359'

Dolomite; white, gray, medium crystalline, scattered

intercrystalline and vuggy type porosity, brown stain, show of

free oil and strong odor in fresh samples.

**Drill Stem Test #5** 

3332-3357' (log measurements 3334-3359)

Times:

30-30-45-45

Blow:

Strong

Recovery:

5' gassy oil

346' oil & gas cut muddy water

(10% gas, 10% oil, 35% water, 45% mud) 126' very slightly oil cut muddy water (3% gas, 2% oil, 25% water, 70% mud) 1953' oil and gas cut muddy water (15% gas, 10% oil, 70% water, 5% mud)

Pressures: ISIP 1103 psi

**FSIP 1105** psi IFP 250-900 psi FFP 918-1102 psi HSH 1741-1667 psi

3359-3370'

Dolomite; white and gray, medium crystalline, scattered intercrystalline porosity, light brown stain, show of free oil and

strong odor.

Mai Oil Operations Inc. Kramer 'A' #5 W/2-SE-NE-SW (1650' FSL & 2175' FWL) Section 14-15s-14w Russell County, Kansas Page 5

3370-3390'	Dolomite; as above.		

3390-3410' Dolomite; white, finely crystalline, few sucrosic, light brown stain,

no free oil and fair odor in fresh samples.

3410-3429' Dolomite; white, finely crystalline, few sucrosic, light brown stain,

no free oil and fair odor in fresh samples.

Rotary Total Depth 3427 (-1507) Log Total Depth 3429 (-1509)

#### Recommendations:

5 1/2" production casing was set and cemented on the Kramer 'A' #5.

Respectfully submitted;

Wyatt Urban,

Petroleum Geologist



Mai Oil Operating Inc

14-15s-14w Russell,KS

8411 Preston Rd Ste 800 Dallas TX 75225 + 5520

Kramer A #5 Job Ticket: 50379

DST#: 1

ATTN: Allen Bangert

Test Start: 2013.01.28 @ 21:11:06

#### GENERAL INFORMATION:

Formation:

Interval:

Tarkio Sands

Deviated:

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 23:04:06

Time Test Ended: 03:20:36

Tester:

Unit No:

Jeff Brown

44

Reference Elevations:

1919.00 ft (KB) 1912.00 ft (CF)

2482.00 ft (KB) To 2550.00 ft (KB) (TVD)

7.00 ft

Total Depth: Hole Diameter: 2550.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good

KB to GR/CF:

Serial #: 8321

Press@RunDepth:

Outside

2013.01.28

97.19 psig @ 2518.00 ft (KB) End Date:

2013.01.29

Capacity:

8000.00 psig

Start Date: Start Time:

21:11:07

End Time:

03:19:36

Last Calib .: Time On Btm: 2013.01.28 @ 23:03:36

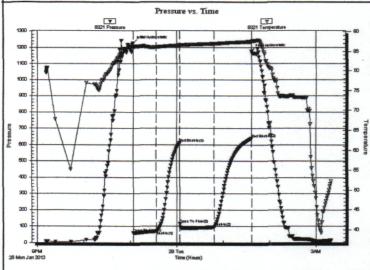
2013.01.29

Time Off Btm:

2013.01.29 @ 01:37:06

TEST COMMENT: IFP=Fair blow built to 4"

ISI=Dead no blow back FFP=Fair blow built to 7 1/4" FSI=Weak surface blow back



PRESSURE S	UMMARY
------------	--------

		PI	KE35UF	E SUMMARY		
T	Time	Pressure	Temp	Annotation		
1	(Min.)	(psig)	(deg F)			
1	0	1226.06	86.30	Initial Hydro-static		
1	1	61.52	86.03	Open To Flow (1)		
1	30	69.45	86.06	Shut-In(1)		
1	60	610.57	86.51	End Shut-In(1)		
T I	61	115.07	86.29	Open To Flow (2)		
Temperature	105	97.19	86.92	Shut-In(2)		
-	153	638.94	87.42	End Shut-In(2)		
1	154	1177.86	87.60	Final Hydro-static		
1						
1						
1						
1						
- 1					. 39	

Recovery	I	Re	CC	)VE	ery
----------	---	----	----	-----	-----

GMW 5%G 5%O 40%M 50%W	0.30
GM 15%G 30%O 55%M	0.30
M 5%O 95%M	0.28
GIP	0.00
	CGM 15%G 30%O 55%M CM 5%O 95%M CGIP

Gas Rates

Gas Rate (Mcf/d) Choke (inches) Pressure (psig)

Trilobite Testing, Inc

Ref. No: 50379

Printed: 2013.02.05 @ 10:47:03



Mai Oil Operating Inc

14-15s-14w Russell,KS

8411 Preston Rd Ste 800 Dallas TX 75225 + 5520

Kramer A #5 Job Ticket: 50380

DST#: 2

ATTN: Allen Bangert

Test Start: 2013.01.30 @ 01:10:42

#### GENERAL INFORMATION:

Time Tool Opened: 03:38:42

Time Test Ended: 08:15:42

Formation:

**Plattsmouth** 

Deviated:

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Tester:

Jeff Brown

Unit No:

44

Interval:

2960.00 ft (KB) To 3035.00 ft (KB) (TVD)

Total Depth:

2550.00 ft (KB) (TVD)

Reference Elevations:

1919.00 ft (KB) 1912.00 ft (CF)

Hole Diameter:

7.88 inches Hole Condition: Fair

KB to GR/CF:

7.00 ft

Serial #: 8679

Press@RunDepth:

Inside

53.58 psig @

01:10:43

2999.00 ft (KB)

2013.01.30 Last Calib .:

Capacity:

8000.00 psig

Start Date: Start Time:

2013.01.30

End Date: End Time:

08:04:42

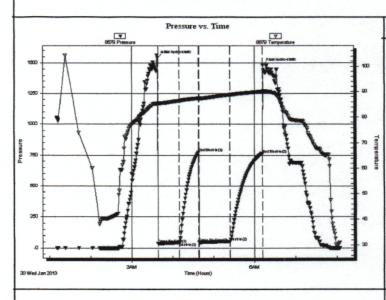
Time On Btm: 2013.01.30 @ 03:38:12

2013.01.30

Time Off Btm: 2013.01.30 @ 06:12:12

TEST COMMENT: IFP=Weak blow built to 1 3/4"

ISI=Dead no blow back FFP=Weak blow built to 1" FSI=Dead no blow back



PRESSURE S	UMMARY
------------	--------

Time	Pressure	Temp	Annotation	
(Min.)	(psig)	(deg F)		
0	1541.00	85.34	Initial Hydro-static	
1	35.56	85.10	Open To Flow (1)	
32	44.30	86.36	Shut-In(1)	
60	775.03	87.40	End Shut-In(1)	
61	46.41	87.13	Open To Flow (2)	
106	53.58	88.72	Shut-In(2)	
153	762.92	90.00	End Shut-In(2)	
154	1478.43	90.12	Final Hydro-static	
			I	

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Mud with a scum of oil	0.20
		_
*Recovery from r		

Gas Rates

Choke (inches) Pressure (psig) Gas Rate (Mcf/d)

Trilobite Testing, Inc.

Ref. No: 50380

Printed: 2013.02.05 @ 10:45:43



Mai Oil Operating Inc

14-15s-14w Russell,KS

8411 Preston Rd Ste 800 Dallas TX 75225 +

Kramer A #5 Job Ticket: 50381

DST#: 3

ATTN: Allen Bangert

Test Start: 2013.01.30 @ 18:35:46

#### GENERAL INFORMATION:

Formation:

Lansing-A-D

Deviated: Time Tool Opened: 20:29:46

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole (Reset) Tester:

44

Unit No:

Jeff Brown

Time Test Ended: 02:40:16

1919.00 ft (KB)

Total Depth:

3104.00 ft (KB) To 3165.00 ft (KB) (TVD)

Reference Elevations:

1912.00 ft (CF)

3165.00 ft (KB) (TVD)

KB to GR/CF:

7.00 ft

Hole Diameter:

7.88 inchesHole Condition: Good

Outside

Serial #: 8321 Press@RunDepth:

388.69 psig @ 2013.01.30

End Date:

3140.00 ft (KB)

2013.01.31

Capacity: Last Calib.: 8000.00 psig

Start Date: Start Time:

18:35:47

End Time:

02:36:16

Time On Btm:

2013.01.31

Time Off Btm:

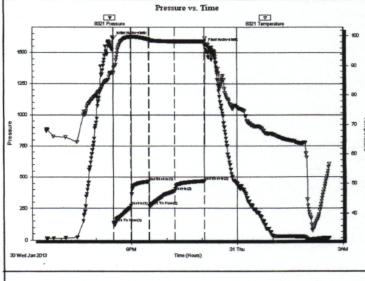
2013.01.30 @ 20:29:16 2013.01.30 @ 23:05:16

TEST COMMENT: IFP=Strong blow BOB in 3 /4 min

ISI=Strong blow back BOB in 2 min

FFP=Strong blow BOB in 3/4 min. Gas to surface in 5 min

FSI=Strong blow back BOB in 1 1/2 min



PRE	SSI	JRE	SUM	IMA	RY

Time	Pressure	Temp	Annotation	
(Min.)	(psig)	(deg F)		
0	1610.14	87.90	Initial Hydro-static	
1	138.43	87.26	Open To Flow (1)	
30	270.72	99.70	Shut-In(1)	
60	463.90	98.94	End Shut-In(1)	
61	272.29	98.55	Open To Flow (2)	
105	388.69	98.13	Shut-In(2)	
155	467.86	98.18	End Shut-In(2)	
156	1556.83	99.19	Final Hydro-static	

Recovery

63.00 GOCWM 10%G 10%O 10%W 70%M 378.00 HOCGWM 20%G 10%W 25%M 45%C 453.00 Gassy Oil 20%G 80%O
453.00 Gassy Oil 20%G 80%O
0.00 2209-GIP

Gas Rates

Choke (inches) Pressure (psig) Gas Rate (Mcf/d)

Trilobite Testing. Inc

Ref. No: 50381

Printed: 2013.02.05 @ 10:44:48



Mai Oil Operating Inc

14-15s-14w Russell,KS

8411 Preston Rd Ste 800 Dallas TX 75225 +

Kramer A #5

DST#:4

5520

Job Ticket: 50382

ATTN: Allen Bangert

Test Start: 2013.01.31 @ 12:59:45

#### GENERAL INFORMATION:

Formation: Deviated:

Lansing-H-I-J

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Time Tool Opened: 15:08:45 Time Test Ended: 19:20:45

Tester: Unit No:

Jeff Brown

44

Interval:

3253.00 ft (KB) To 3298.00 ft (KB) (TVD)

Reference Elevations:

1919.00 ft (KB)

Total Depth: Hole Diameter: 3298.00 ft (KB) (TVD)

1912.00 ft (CF)

KB to GR/CF:

7.00 ft

Serial #: 8321

Press@RunDepth:

Outside

35.16 psig @

7.88 inches Hole Condition: Good

3289.00 ft (KB)

Capacity:

8000.00 psig

Start Date: Start Time:

2013.01.31 12:59:46

End Date: End Time:

2013.01.31 19:17:45

Last Calib .: Time On Btm:

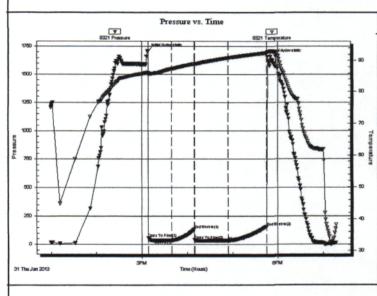
2013.01.31 2013.01.31 @ 15:08:15

Time Off Btm:

2013.01.31 @ 17:46:15

TEST COMMENT: IFP=Weak blow built to 3/4" died back to 1/2"

ISI=Dead no blow back FFP=Weak blow built to 1 1/2" FSI=Dead no blow back



THEODOTE COMMITTEE					
Time	Pressure	Temp	Annotation		
(Min.)	(psig)	(deg F)			
0	1710.36	86.13	Initial Hydro-static		
1	58.37	85.54	Open To Flow (1)		
31	37.83	87.33	Shut-In(1)		
61	134.97	88.94	End Shut-In(1)		
62	42.61	88.92	Open To Flow (2)		
106	35.16	90.83	Shut-In(2)		
157	158.53	92.50	End Shut-In(2)		
158	1662.04	92.78	Final Hydro-static		
			•		

PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
20.00	SOCM 5%O 95%M	0.28
0.00	63-GIP	0.00
,		
* Recovery from r	multiple tests	

	Gas	Rat	es

Gas Rate (Mcf/d) Choke (inches) Pressure (psig)

Trilobite Testing, Inc.

Ref. No: 50382

Printed: 2013.02.05 @ 10:07:09



Mai Oil Operating Inc

14-15s-14w Russell,KS

8411 Preston Rd Ste 800 Dallas TX 75225 +

Kramer A #5 Job Ticket: 50383

DST#:5

ATTN: Allen Bangert

Test Start: 2013.02.01 @ 05:05:01

#### GENERAL INFORMATION:

Formation:

**BKC-Arbuckle** 

Deviated:

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Tester:

Jeff Brown

Unit No:

44

Time Test Ended: 13:15:31 Interval:

Time Tool Opened: 06:48:31

3332.00 ft (KB) To 3357.00 ft (KB) (TVD)

Reference Elevations:

1919.00 ft (KB) 1912.00 ft (CF)

KB to GR/CF:

7.00 ft

Total Depth: Hole Diameter: 3357.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good

Serial #: 8321

Press@RunDepth:

Outside

1101.86 psig @

3334.00 ft (KB) End Date:

2013.02.01

Capacity:

8000.00 psig

Start Date: Start Time:

2013.02.01 05:05:02

End Time:

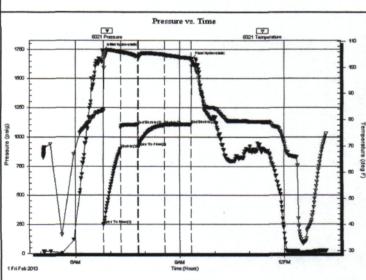
13:12:31

Last Calib .: Time On Btm: 2013.02.01

Time Off Btm:

2013.02.01 @ 06:48:01 2013.02.01 @ 09:21:01

TEST COMMENT: IFP=Strong blow BOB in 30 sec IS=Weak surface blow back FFP=Strong blow BOB in 45 sec FS⊨Dead no blow back



Time	Pressur	e Temp	Annotation	
(Min.)	(psig)	(deg F)		
	0 1740.63	83.76	Initial Hydro-static	
	1 249.52	83.28	Open To Flow (1)	
3	0 900.33	105.94	Shut-In(1)	
6	0 1102.57	104.26	End Shut-In(1)	
6	1 917.83	104.10	Open To Flow (2)	
10	6 1101.86	104.74	Shut-In(2)	
15	2 1104.69	103.49	End Shut-In(2)	
15	3 1667.40	102.30	Final Hydro-static	
			- /	

Gas Rates

Choke (inches) Pressure (psig)

Gas Rate (Mcf/d)

#### Recovery Length (ft) Description Volume (bbl) 1953.00 OCGMW 15%G 10%O 5%M 70%W 27.40 VSOCGWM 3%G 2%O 25%W 70%M 126.00 1.77 346.00 OCGWM 10%G 10%O 35%W 45%M 4.85 0.07 5.00 Gassy oil 10%G 90 %O

Trilobite Testing, Inc.

Ref. No: 50383

Printed: 2013.02.05 @ 10:04:33

PAGE 02/02 LWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041		Box 32 Russell, KS 67665 No.	6370
Date 1-26-13 14	Twp. Range	County State On Location	12,15 Ah
Ka made A	Loc	cation Russell 5 to Knuer 185 E	into
Lease Man Mer	Well No. 5	Owner	
Contractor Luth will 3		To Quality Oilwell Cementing, Inc.  You are hereby requested to rent cementing equipment	and furnish
Type Job Suprace		cementer and helper to assist owner or contractor to do	work as listed.
Hole Size 18-4	T.D. 5/5	Charge To	
Ceg. 85%	Depth 5, 82	Street // Out Oll	•.
Tbg. Size	Depth	City State	•.
Tool	Depth	The above was done to satisfaction and supervision of owner a	igent or contractor.
Cement Left in Csg. 10 41	Shoe Joint 20+1	Cement Amount Ordered 250 600 3	10CC
Meas Line	Displace 31,5 BBL	- 2% Oct	
EQUIPM		Common 150	
	A	Poz. Mix 100	· · · · · · · · · · · · · · · · · · ·
Bulktrk 14 No. Driver Bro	11	Gel. 5	
Bulktrk, DU No. Driver Club	, I	Calcium 9	
JOB SERVICES	& REMARKS	Hulls	
Remarks:		Salt	
Rat Hole		Flowseal	
Mouse Hole	· · · · · · · · · · · · · · · · · · ·	Kol-Seal	100
Centralizers		Mud CLR 48	
Baskets		CFL-117 or CD110 CAF 38	· ·
D/V or Port Collar		Sand	
		Handling	
Comons old	ibu later	Mileage	
	· · · · · · · · · · · · · · · · · · ·	FLOAT EQUIPMENT	
*		Guide Shoe	
		Centralizer	
		Baskets	
		AFU Inserts	
		Float Shoe	
		Latch Down	
		Wood Dlug	
		The state of the s	
<del></del>		Dumatri Chara Lau C. C.	
		Pumptrk Charge Long Surface	
		Mileage / Tax	•
		Discount	
x ()	f - t		
Signature 4	nou	Total Charge	

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Bo Cell 785-324-1041	ox 32 Russell, KS 67665 No. 6071
Date 2 - 2 - 13   Sec. Twp. Range   Rus	State On Location Finish SSEIN KS 130-AM
Location Location	on Russell, Ks - 105 on 281 Hay, Elanto
Lease Mamer H Well No. 5	Owner
contractor Southwind #3	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish
Type Job Production	cementer and helper to assist owner or contractor to do work as listed.
Hole Size 77/8" T.D. 34271	Charge Mai oil operations
csg. 5% New 14th Depth 3426'	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. 21, 88 Shoe Joint 21,88	Cement Amount Ordered 25 5x 60140 22601 18854 44
Meas Line Displace 83 BLS	100 5x 60/40 2966el 10% Salt 14# F.S - 1000 logal Much Clear 4
EQUIPMENT	Common 135
Rumptrk 16 No. Cementer Tauts Rick	Poz. Mix 90
Bulktrk 14 No. Driver Couter	Gel. 5
Bulktrik 10 No. Driver Dynie W.	Calclum
JOB SERVICES & REMARKS	Hulls
Remarks: Pipe on bottom, break	Salt 45
Hat HoleCitculation, Dump 1800 gal	Flowseal 56ff
Mouse Hole Mud Clear 48, plus	Kol-Seal
Centralizers Rothole w/30 5 Cement	Mud CLR 48 1000 god
Baskets Hook to SK" Casing & Mix	CFL-117 or CD110 CAF 38
D/V or Port Collar 95 5x 60140 22661 18%	Sand
Salt YUH Flo. sent, Footbased by 100 Sx 60140	Handling 275
PLGO 10965 alt KIH Flooral, shut down.	Mileage
wash pump 4 lines. Released plug	FLOAT EQUIPMENT
Displaced with BLS of water	Guide Shoe
Lift oressure 700 #	Centralizer 1 tubo's
Land plug to 1400 \$	Baskets Weatherford
F0	AFU Inserts
Basket on # 15	Float Shoe
turbo's on #51-8,10,11,14,21,24	Latch Down
Released + Floor held	
hereased + Floor held	Pumptrk Charge Prod Long String
	Mileage And III
	Tax
4	Discount
Signature Cay Shino	Total Charge