

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

#### 1065659

Form ACO-1

June 2009

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 North / South Line of Section				
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 #	County:				
Name:	Lease Name: Well #:				
Wellsite Geologist:	Field Name:				
Purchaser:	Producing Formation:				
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:				
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:				
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Amount of Surface Pipe Set and Cemented at: Feet  Multiple Stage Cementing Collar Used? Yes No  If yes, show depth set: Feet  If Alternate II completion, cement circulated from: sx cmt				
Operator:					
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)				
Original Comp. Date: Original Total Depth:  Deepening Re-perf. Conv. to ENHR Conv. to SWD  Conv. to GSW	Chloride content: ppm Fluid volume: bbls  Dewatering method used:				
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:				
Commingled Permit #:	Operator Name:				
Dual Completion Permit #:	Lease Name: License #:				
SWD Permit #:	Quarter Sec TwpS. R				
ENHR Permit #:	County: Permit #:				
GSW Permit #:	. 5				
Spud Date or Date Reached TD Completion Date or Recompletion Date  Recompletion Date					

#### **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							
Letter of Confidentiality Received							
Date:							
Confidential Release Date:							
☐ Wireline Log Received							
Geologist Report Received							
UIC Distribution							
ALT I II III Approved by: Date:							

Side Two



Operator Name:			Lease	Name:			Well #:			
Sec Twp	S. R	East West	County	/:						
INSTRUCTIONS: Show time tool open and close recovery, and flow rates ine Logs surveyed. Atta	ed, flowing and shut- if gas to surface tes	in pressures, whether t, along with final char	shut-in pres	sure reach	ed static level,	hydrostatic press	sures, bottom h	ole tempe	erature, fluid	
Drill Stem Tests Taken (Attach Additional Sh	eets)	Yes No		Log	Formation	n (Top), Depth an	d Datum	□ s	ample	
Samples Sent to Geolog	,	☐ Yes ☐ No		Name			Тор	D	atum	
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)		Yes No Yes No								
List All E. Logs Run:										
		CASIN Report all strings se	G RECORD	New	Used	on, etc.				
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Wei	ight	Setting Depth	Type of Cement	# Sacks Used		nd Percent	
	Diffied	Set (III O.D.)	LDS.	/ I t.	Берш	Cement	Osed	Ac	luitives	
		ADDITION	AL CEMENTI	NG / SQUE	EZE RECORD					
Purpose:  —— Perforate  —— Protect Casing  —— Plug Back TD	Depth Top Bottom	Type of Cement	# Sacks	s Used		Type and F	Percent Additives			
Plug Off Zone										
Shots Per Foot	PERFORATIO Specify Fo	N RECORD - Bridge Plootage of Each Interval P	ugs Set/Type erforated			cture, Shot, Cement nount and Kind of Ma		d	Depth	
TUBING RECORD:	Size:	Set At:	Packer A	At:	Liner Run:	Yes No				
Date of First, Resumed Pr	roduction, SWD or ENH	R. Producing Me	ethod:	ng Ga	as Lift	ther (Explain)				
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf	Water	Bk	ols. (	Gas-Oil Ratio		Gravity	
DISPOSITION	N OF GAS:		METHOD OF				PRODUCTIO	ON INTERV	AL:	
Vented Sold	Used on Lease	Open Hole	Perf.	Dually C (Submit AC		nmingled mit ACO-4)				
(If vented, Subm	nit ACO-18.)	Other (Specify)								

Form	ACO1 - Well Completion			
Operator	Mai Oil Operations, Inc.			
Well Name	Flegler 'B' 4			
Doc ID	1065659			

### Tops

Name	Тор	Datum
Anhydrite	847	+1001
Tarkio Lm	2461	-613
Topeka	2736	-888
Heebner	2965	-1117
Toronto	2981	-1133
Lansing	3027	-1179
Base Kansas City	3234	-1386
Arbuckle	3278	-1430

#### JAMES C. MUSGROVE

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

Office (620) 588-4250

Res. Claflin (620) 587-3444

Mail Oil Operations
Flegler 'B' #4
N/2-SE-SE-NW (200' FNL & 2310' FWL0
Section 11-15s-14w
Russell County, Kansas
Page No. 1

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

Contractor:

Southwind Drilling Inc (Rig #3)

Commenced:

September 1, 2011

Completed:

September 8, 2011

Elevation:

1848' K.B.; 1846' D.F.; 1840' G.L.

Casing Program:

Surface; 8 5/8" @ 439'

Production; 5 1/2" @ 3359'

Samples:

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

**Drilling Time:** 

One (1) foot drilling time recorded and kept 2200' to the Rotary

Total Depth.

Measurements:

All depths measured from the Kelly Bushing.

**Drill Stem Tests:** 

There were four (4) Drill Stem Tests ran by Trilobite Testing Co.

Electric Log:

By Superior Well Services, Dual Induction Compensated

Density/Neutron and Micro Log.

<u>Formation</u>	Log Depth	Sub-Sea Datum
Anhydrite	847	+1001
Base Anhydrite	881	+967
Grand Haven	2392	-544
1 <sup>st</sup> Tarkio Sand	2403	-555
Dover	2416	-568
2 <sup>nd</sup> Tarkio Sand	2421	-573
Tarkio Lime	2461	-613
3 <sup>rd</sup> Tarkio Sand	2481	-633
Elmont	2527	-679
Topeka	2736	-888
Heebner	2965	-1117
Toronto	2981	-1133
Lansing	3027	-1179
Base Kansas City	3234	-1386
Arbuckle	3278	-1430
Rotary Total Depth	3360	-1512
Log Total Depth	3358	-1510

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

Mail Oil Operations Flegler 'B' #4 N/2-SE-SE-NW (200' FNL & 2310' FWL0 Section 11-15s-14w Russell County, Kansas Page No. 2

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

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

2404-2411' Sand; gray, very fine grained, micaceous, scattered intergranular

porosity, brown stain, show of free oil and no odor in fresh

samples.

2421-2434' Sand; gray/tan, very fine grained, sub rounded, friable, fair

intergranular porosity, fair stain and saturation, fair show of free

oil and questionable odor in fresh samples.

**Drill Stem Test #1** 

2398-2450'

Times:

45-45-45-45

Blow:

Good

Recovery:

283' gas in pipe

57' oil and gas cut mud

(10% gas, 20% oil, 70% mud)

Pressures: ISIP

347 psi **FSIP 287** 

IFP 41-56 psi

psi

69-73 FFP

psi

HSH 1177-1120 psi

2481-2492'

Sand; gray and grayish green, very fine grained, micaceous in part, sub rounded, friable, fair intergranular porosity, trace black and dark brown stain, trace of free oil and questionable odor in

fresh samples.

2496-2511'

Sand: as above.

#### TOPEKA SECTION

Limestone; gray, white, tan, slightly dolomitic, poor visible 2736-2746'

porosity, trace brown stain, trace of free oil and no odor in fresh

samples.

Limestone; tan, gray, fossiliferous, chalky, fair porosity, brown 2770-2779'

and black stain, show of free oil and odor samples broken.

Limestone; gray, brown, tan, fossiliferous, fair porosity, 2844-2850'

questionable stain, no show of free oil and no odor.

Limestone; tan, fossiliferous, granular in part, chalky, fair brown 2888-2902'

stain and saturation, show of free oil and faint odor in fresh

samples.

Limestone; as above, scattered porosity, trace stain, show of 2908-2924'

free oil and no odor in fresh samples.

#### TORONTO SECTION

Limestone; white, cream, gray, finely crystalline, chalky in part, 3027-3040'

fair pin point type porosity, brown and dark brown stain, show of

free oil and questionable odor in fresh samples.

Mail Oil Operations Flegler 'B' #4 N/2-SE-SE-NW (200' FNL & 2310' FWL0 Section 11-15s-14w Russell County, Kansas Page No. 3

#### LANSING SECTION

3027-3040'

Limestone; tan, fossiliferous, few oolitic, slightly cherty, light brown stain, weak show of free oil and questionable odor in

fresh samples.

3050-3056'

Limestone; white, gray, oolitic/fossiliferous, fair intercrystalline to

fine vuggy porosity, dark brown to light brown stain, show of free

oil and faint odor in fresh samples.

3068-3078'

Limestone; cream, white, oomoldic, fair oomoldic porosity, fair

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

Drill Stem Test #2

3032-3080'

Times:

30-30-45-45

Blow;

Weak

Recovery:

33' slightly oil and gas cut mud

(5% oil, 95% mud)

Pressures: ISIP

345

psi

**FSIP 343** IFP 39-50 psi psi

FFP 52-54

psi

HSH 1535-1452 psi

3106-3110'

Limestone; gray, fossiliferous/oolitic, scattered porosity, brown

and gray stain, show of free oil and questionable odor in fresh

samples.

3116-3121'

Limestone; gray, oolitic, chalky, poor stain, show of free oil and

faint odor in fresh samples.

3128-3132

Limestone; oomoldic, poor to fair porosity, questionable stain, no

show of free oil and no odor in fresh samples.

Mail Oil Operations Flegler 'B' #4

N/2-SE-SE-NW (200' FNL & 2310' FWL0

Section 11-15s-14w Russell County, Kansas

Page No. 4

Drill Stem Test #3

3093-3136'

Times:

45-45-45

Blow:

Strong

Recovery:

1271' gas in pipe

63' heavy oil and gas cut watery mud (40% gas, 30% oil, 10% water, 20% mud)

20' oil and gas cut watery mud

(10% gas, 20% oil, 2% water, 68% mud)

63' oil and gas cut muddy water (10% gas, 40% oil, 50% mud) 63' muddy water, scum of oil

(80% water, 20% mud)

Pressures: ISIP

397 psi **FSIP 372** psi IFP 35-69 psi FFP 82-108 psi

HSH 1555-1510 psi

3151-3168'

Limestone; white, gray, chalky, oolitic in part, plus gray chert, no

shows.

3171-3181

Limestone; white, gray, fossiliferous/oolitic in part, slightly cherty, gray and black stain, no show of free oil and faint odor in fresh samples.

3191-3201'

Limestone; white, oolitic, chalky, trace stain, trace of free oil and faint odor in fresh samples.

3216-3222'

Limestone; cream, white, oolitic, oomoldic, fair and good brown to dark brown stain, show of free oil and faint odor in fresh

samples.

#### **Drill Stem Test #4**

3186-3250'

Times:

45-45-45-60

Blow;

Strong

Recovery:

2110' gas in pipe

157' gassy oil

189' heavy oil and gas cut mud (50% gas, 35% oil, 15% mud) 63' oil and gas cut mud (40% gas, 20% oil, 40% mud)

Pressures: ISIP 369

psi

**FSIP 364** psi IFP 55-116 psi FFP 139-181 psi HSH 1656-1563 psi

3244-3252'

Limestone; gray, cream, finely crystalline, fossiliferous, chalky in

part, poor visible porosity, no shows.

Mail Oil Operations Flegler 'B' #4 N/2-SE-SE-NW (200' FNL & 2310' FWL0 Section 11-15s-14w Russell County, Kansas Page No. 5

#### ARBUCKL E SECTION

3278-3288'

Dolomite; white, medium and coarse crystalline, fair intercrystalline porosity, brown and dark brown stain and saturation, show of free oil and fair to good odor in fresh samples.

#### **Drill Stem Test #5**

3253-3290' (log measurements 3251-3288)

Times:

30-30-30-30

Blow:

Strong

Recovery:

157' gas in pipe

1134' gassy oil

287' mud cut gassy oil (3% gas, 65% oil, 5% mud) 63' oil and gas cut mud (20% gas, 10% oil, 70% mud)

Pressures: ISIP 1002

psi **FSIP 1005** psi IFP 100-352 psi

375-557 FFP psi HSH 1674-1610 psi

3290-3310'

Dolomite; white, light gray, fine and medium crystalline, few intercrystalline type porosity, brown and dark brown stain, show

of free oil and fair odor in fresh samples.

3310-3330'

Dolomite; white and light gray, fine and medium crystalline, scattered intercrystalline porosity, light brown and gray stain,

show of free oil and fair odor in fresh samples.

3330-3363'

Dolomite; white, finely crystalline, few medium crystalline, poorly developed porosity, trace black stain, no show of free oil and

faint and fair odor in fresh samples.

**Rotary Total Depth** 

3360 (-1512)

Log Total Depth

3358 (-1510)

Recommendations

5 1/2" production casing was set and cemented.

Respectfully submitted;

ames C.

Joshua R. Austin,

Petroleum Geologists



Mai Oil Operations Inc

Flegler B#4 11-15s-14w-Russell

8411 Preton Rd ste 800 Dallas Tx 75225+5520

Job Ticket: 039748

DST#:1

ATTN: Allen Bangert

Test Start: 2011.09.04 @ 08:52:12

#### GENERAL INFORMATION:

Time Test Ended: 15:05:12

Formation:

Tarkio

Deviated:

No Whipstock: Time Tool Opened: 10:35:12

ft (KB)

Test Type: Conventional Bottom Hole

Tester:

Jeff Brown

Unit No:

44

1847.00 ft (KB)

Reference Bevations:

1840.00 ft (CF)

KB to GR/CF:

7.00 ft

Interval:

2398.00 ft (KB) To 2450.00 ft (KB) (TVD)

Total Depth: Hole Diameter:

Serial #: 8321

Press@RunDepth:

2450.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good

Inside

72.75 psig @ 2437.00 ft (KB)

2011.09.04 End Time:

2011.09.04

Capacity:

8000.00 psig

Start Date: Start Time:

Last Calib .: Time On Btm 2011.09.04 @ 10:34:42

2011.09.04

15:05:12

Time Off Btm

TEST COMMENT: IFP-Good blow BOB in 23 min ISI-Dead no blow back FFP-Good blow BOB in 10 min FSI-Dead no blow back

					F	ressure	vs. Time						
	-		8321	Pressure				8321	Temperati	re			
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	o E		-	-	-		-	-	-	-	-		
	1 Sep 2011	QAM .				Time (	2PM				3PM		

		Pl	RESSUF	RE SUMMARY	
1	Time	Pressure	Temp	Annotation	
	(Min.)	(psig)	(deg F)		
	0	1176.84	91.67	Initial Hydro-static	
1	1	41.47	91.45	Open To Flow (1)	
	45	56.02	91.65	Shut-In(1)	
	91	347.10	91.90	End Shut-In(1)	
Ten	92	68.57	91.82	Open To Flow (2)	
perat	136	72.75	92.00	Shut-In(2)	
are	184	286.98	92.18	End Shut-In(2)	
	186	1119.91	92.36	Initial Hydro-static	
Temperature	91 92 136 184	56.02 347.10 68.57 72.75 286.98	91.65 91.90 91.82 92.00 92.18	Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2) End Shut-In(2)	

Description	Volume (bbl)			
VSOCM 3% O97% M	0.15			
OCGM 10% G20% O70% M 0.28				
283 GIP	0.00			
8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	VSOCM 3%O97%M OCGM 10%G20%O70%M 283 GIP			

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 039748

Printed: 2011.09.15 @ 09:00:50 Page 2



Mai Oil Operations Inc

Flegler B #4

11-15s-14w-Russell

8411 Preton Rd ste 800 Dallas Tx 75225+5520

Job Ticket: 039749

DST#: 2

ATTN: Allen Bangert

Test Start: 2011.09.05 @ 21:18:42

GENERAL INFORMATION:

Time Tool Opened: 22:31:12

Time Test Ended: 02:25:12

Formation:

LKC-A&B

Deviated:

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole

Tester:

Jeff Brown

Unit No:

Reference Bevations:

1847.00 ft (KB) 1840.00 ft (CF)

KB to GR/CF:

7.00 ft

Interval:

3032.00 ft (KB) To 3080.00 ft (KB) (TVD)

Total Depth: Hole Diameter:

Serial #: 8321

Press@RunDepth:

3080.00 ft (KB) (TVD)

7.88 inches Hole Condition: Good

Inside

3067.00 ft (KB)

Capacity:

8000.00 psig

Start Date: Start Time:

53.98 psig @ 2011.09.05 End Date: 21:18:43

End Time:

2011.09.06 02:25:12

Last Calib.: Time On Btm: 2011.09.06

2011.09.05 @ 22:30:42 Time Off Btm 2011.09.06 @ 01:04:42

TEST COMMENT: IFP-Weak blow built to 2 in

ISI-Dead no blow back FFP-Weak blow built to 1 1/2 in FSI-Dead no blow back

5 Mon Sep 2011

	PI	RESSUR	RE SUMMARY
Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	1534.58	97.96	Initial Hydro-static
1	38.86	97.69	Open To Flow (1)
30	49.51	98.31	Shut-In(1)
60	344.90	98.53	End Shut-In(1)
61	52.13	98.41	Open To Flow (2)
105	53.98	99.65	Shut-In(2)
153	343.26	100.19	End Shut-In(2)
154	1451.88	100.55	Final Hydro-static
			·

	Recovery	
Length (ft)	Description	Volume (bbl)
33.00	SOCM 5% O95% M	0.46
	,	

Gas Rates

Choke (inches) Pressure (psig)

Gas Rate (Mcf/d)

Trilobite Testing, Inc

Ref. No: 039749

Printed: 2011.09.15 @ 09:02:20 Page 2



Mai Oil Operations Inc

8411 Preton Rd ste 800 Dallas Tx 75225+5520

ATTN: Allen Bangert

Flegler B #4

11-15s-14w-Russell

Job Ticket: 039750

DST#: 3

Test Start: 2011.09.06 @ 10:03:57

#### GENERAL INFORMATION:

Time Test Ended: 16:37:57

Formation:

Lansing-D-G

Deviated:

No Whipstock: Time Tool Opened: 11:47:27

ft (KB)

Tester:

Test Type: Conventional Bottom Hole Jeff Brown

Unit No:

44

3093.00 ft (KB) To 3136.00 ft (KB) (TVD)

3136.00 ft (KB) (TVD)

Hole Diameter:

7.88 inches Hole Condition: Good

Reference Bevations:

1847.00 ft (KB)

1840.00 ft (CF)

KB to GR/CF:

7.00 ft

Serial #: 8321

Press@RunDepth:

Inside

108.21 psig @

3128.00 ft (KB) End Date:

2011.09.06

Capacity:

8000.00 psig

Start Date: Start Time:

Total Depth:

2011.09.06 10:03:58

End Time:

16:37:57

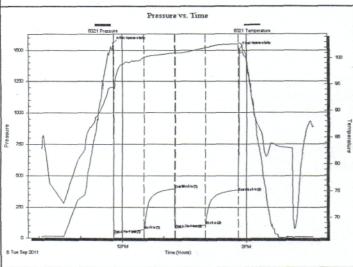
Last Calib .: Time On Btm 2011.09.06

Time Off Btm:

2011.09.06 @ 11:46:57 2011.09.06 @ 14:49:27

TEST COMMENT: IFP-Strong blow BOB in 3 min

ISI-Weak blow back built to 2 in FFP-Strong blow BOb in 3 1/2 min FSI-Weak blow back built to 3 in



		PI	RESSUR	E SUMMARY
1	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1555.36	94.39	Initial Hydro-static
	1	34.91	94.08	Open To Flow (1)
	45	69.47	100.17	Shut-In(1)
	89	397.15	101.02	End Shut-In(1)
Tem	90	81.92	100.96	Open To Flow (2)
Temperature	134	108.21	101.98	Shut-In(2)
110	182	371.83	102.69	End Shut-In(2)
	183	1510.32	102.86	Final Hydro-static
				,

Length (ft) Description		Volume (bbl)
63.00	MW with a scum of oil 20%M80%W	0.88
63.00	OOGMW 10%O10%G30%M50%W	0.88
20.00 OCGWM 20% O10% G2% W68% M		0.28
63.00 HOCGWM 30%O40%G10%W20%M		0.88
0.00	1271 GIP	0.00

Recovery

Gas Rates Choke (inches) Pressure (psig) Gas Rate (Mct/d)

Trilobite Testing, Inc

Ref. No: 039750

Printed: 2011.09.15 @ 09:03:13 Page 2



Mai Oil Operations Inc

ATTN: Allen Bangert

8411 Preton Rd ste 800 Dallas Tx 75225+5520 Flegler B #4

11-15s-14w-Russell

Job Ticket: 44626

Test Start: 2011.09.07 @ 02:02:31

#### GENERAL INFORMATION:

Time Tool Opened: 03:46:31

Formation:

LKC-I-J

Deviated:

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole

Tester:

Jeff Brown

Unit No:

44

KB to GR/CF:

Reference Bevations:

1847.00 ft (KB)

1840.00 ft (CF) 7.00 ft

Time Test Ended: 09:26:31 Interval:

3186.00 ft (KB) To 3250.00 ft (KB) (TVD)

Total Depth:

Serial #: 8321

Press@RunDepth:

3250.00 ft (KB) (TVD)

Hole Diameter:

7.88 inchesHole Condition: Good

Inside

181.45 psig @ 3223.00 ft (KB)

End Date:

2011.09.07

Capacity:

8000.00 psig

Start Date: Start Time:

2011.09.07 02:02:32

End Time:

09:26:31

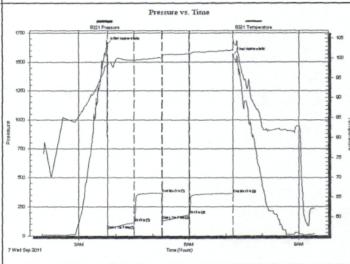
Last Calib.: Time On Btm

2011.09.07 2011.09.07 @ 03:46:01

Time Off Btm: 2011.09.07 @ 07:12:31

TEST COMMENT: IFP-Strong blow BOB in 4 min

ISI-Fair blow back built to 8 in FFP-Strong blow BOB in 4 min FSI-Fair blow back built to 10 in



	PRESSURE SUMMARY			
1	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1655.51	98.45	Initial Hydro-static
	1	54.86	98.24	Open To Flow (1)
	44	116.27	99.49	Shut-In(1)
	90	368.84	100.23	End Shut-In(1)
Tem	90	139.39	100.11	Open To Flow (2)
Temperature	135	181.45	101.14	Shut-In(2)
9	206	364.11	102.06	End Shut-In(2)
	207	1563.40	104.68	Final Hydro-static
				,
				[

63.00	OCGM 20%O40%G40%M	0.88
189.00	HOOGM 35%O50%G15%M	2.65
157.00	Gassy Oil 10%G90%O	2.20
0.00	2110 GIP	0.00

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



Mai Oil Operations Inc

8411 Preton Rd

ste 800 Dallas Tx 75225+5520

ATTN: Allen Bangert

Flegler B#4

11-15s-14w-Russell

Job Ticket: 44627

DST#:5

Test Start: 2011.09.07 @ 16:56:19

#### GENERAL INFORMATION:

Formation:

Arbuckle

Deviated:

No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole

Tester:

Jeff Brown

Unit No:

44

Reference Bevations:

1847.00 ft (KB) 1840.00 ft (CF)

KB to GR/CF:

7.00 ft

Interval: Total Depth:

Start Date:

Start Time:

3253.00 ft (KB) To 3290.00 ft (KB) (TVD)

3290.00 ft (KB) (TVD)

Hole Diameter:

Time Tool Opened: 18:17:19 Time Test Ended: 22:54:49

7.88 inches Hole Condition: Good

Inside

556.87 psig @ 3258.00 ft (KB) 2011.09.07 16:56:20

End Date: End Time:

2011.09.07 22:53:49 Capacity: Last Calib .: 8000.00 psig

Time On Btm

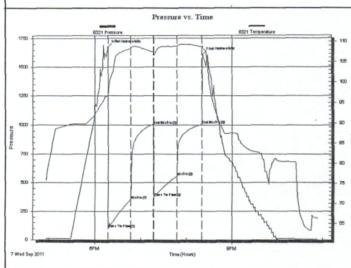
2011.09.07 2011.09.07 @ 18:16:49

Time Off Btm 2011.09.07 @ 20:21:19

Serial #: 8321

Press@RunDepth:

TEST COMMENT: IFP-Strong blow BOB in 2 min ISI-Fair blow back built to 4 in FFP-Strong blow BOB in 1 1/2 min FSI-Weak surface blow back built to 1/2 in



Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	1673.60	96.70	Initial Hydro-static
1	99.83	96.49	Open To Flow (1)
30	351.78	108.39	Shut-In(1)
60	1002.05	107.46	End Shut-In(1)
60	375.39	107.10	Open To Flow (2)
91	556.87	108.92	Shut-In(2)
124	1005.02	108.72	End Shut-In(2)
125	1609.97	108.57	Final Hydro-static

Length (ft)	Description	Volume (bbl)
63.00	OCGM 10%O20%G70%M	0.88
283.00	MOGO 5%M30%G65%O	3.97
1134.00	Gassy Oil 40%G60%O	15.91
0.00	157 GIP	0.00

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

Trilobite Testing, Inc

Ref. No: 44627

Printed: 2011.09.15 @ 09:04:04 Page 2

## QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

5288 Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 Cell 785-324-1041 Sec. Twp. Range County On Location Finish State Date 11 15 4 MSSP Location R Well No Contractor Owner To Quality Oilwell Cementing, Inc. S. Nact Type Job You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. W T.D. Hole Size Charge To Depth 439 Csg Operations Depth Tbg. Size Street Depth Tool City Shoe Joint The above was done to satisfaction and supervision of owner agent or contractor. Cement Left in Csg Displace Cement Amount Ordered Meas Line EQUIPMENT Cementer Common Pumptrk Driver Bulktrk Poz. Mix Driver Bulktrk Gel. Driver JOB SERVICES & REMARKS Calcium Remarks: Hulls Rat Hole Salt Mouse Hole Flowseal Centralizers Kol-Seal Baskets Mud CLR 48 D/V or Port Collar CFL-117 or CD110 CAF 38 Sand Handling Mileage irculated FLOAT EQUIPMENT Guide Shoe Centralizer Baskets AFU Inserts Float Shoe Latch Down Pumptrk Charge Mileage / Tax Discount

Total Charge

X Signature

# ALLIED CEMENTING CO., LLC. 035808

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31 SERVICE POINT: RUSSELL, KANSAS 67665 Russell Ks TWP. RANGE CALLED OUT ON LOCATION JOB START JOB FINISH DATE 9-8-11 8.000. 2:00 COUNTY STATE LOCATION PUSSELL 4/40, 281 WELL# OLD OR NEW (Circle one) Walters Rd YEE Sinh Southwind CONTRACTOR **OWNER** Production TYPE OF JOB 3360 **CEMENT HOLE SIZE** T.D. CASING SIZE 51/2 3354 AMOUNT ORDERED DEPTH 29.601 TUBING SIZE **DEPTH** DRILL PIPE **DEPTH** TOOL **DEPTH** PRES. MAX COMMON **MINIMUM** @ 8,50 MEAS. LINE SHOE JOINT **POZMIX** 100 21,70' 85,00 CEMENT LEFT IN CSG. 4 GEL @21,25 PERFS. **CHLORIDE** 81.31 661 DISPLACEMENT ASC (a) @ **EQUIPMENT** Salt @ 23,95 790,35 33 @ CEMENTER Heath Shane **PUMP TRUCK** Flo Scal @ 2.70 /67,40 409 HELPER TOOO @ **BULK TRUCK** @ DRIVER Mark 481 WFR.2 1000 Oal @ / / 0 **BULK TRUCK** @ DRIVER 378 645.75 HANDLING @ MILEAGE /11/5k/m/e **REMARKS:** TOTAL 5/96.99

Gol 1000 SERVICE **DEPTH OF JOB** PUMP TRUCK CHARGE EXTRA FOOTAGE (a) MILEAGE @ 7,00 (a) MANIFOLD. @

To Allied Cementing Co., LLC.

@ 4,00 CHARGE TO: Moi Oil operation'S TOTAL 2379.00

CITY\_ STATE ZIP PLUG & FLOAT EQUIPMENT

1-Baske @\_ 236,00 @ 60,w 600,00 @\_\_\_\_ 245100 @\_\_ You are hereby requested to rent cementing equipment

2225, w

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 Ward Loyd, Commissioner Thomas E. Wright, Commissioner

October 20, 2011

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

Re: ACO1 API 15-167-23738-00-00 Flegler 'B' 4 NW/4 Sec.11-15S-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