Kansas Corporation Commission Confidentiality Requested: OIL & GAS CONSERVATION DIVISION Yes No

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:			Sec TwpS. R
Address 2:			Feet from North / South Line of Section
City: Sta	ate: Zi	p:+	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-l	Entry	Workover	Field Name:
			Producing Formation:
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW □ SIGW	Elevation: Ground: Kelly Bushing:
☐ Gas ☐ D&A ☐ OG	GSW	Temp. Abd.	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	d3vv	remp. Abu.	Amount of Surface Pipe Set and Cemented at: Fee
Cathodic Other (Core,	. Expl., etc.);		Multiple Stage Cementing Collar Used? Yes No
If Workover/Re-entry: Old Well Info			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:			·
Deepening Re-perf.	Conv. to E	NHR Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back	Conv. to G	SW Conv. to Producer	(Data must be collected from the Reserve Pit)
O constituents at	D		Chloride content: ppm Fluid volume: bbls
CommingledDual Completion			Dewatering method used:
SWD			Location of fluid disposal if hauled offsite:
☐ ENHR			Location of hala disposal in fladica offsite.
☐ GSW			Operator Name:
_			Lease Name: License #:
Spud Date or Date Read	ched TD	Completion Date or	QuarterSecTwpS. R East Wes
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				
Geologist Report Received				
UIC Distribution				
ALT I II Approved by: Date:				

Operator Name: Lease Name: _ Well #: _ County: _ INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF). **Drill Stem Tests Taken** No Loa Formation (Top), Depth and Datum Sample | Yes (Attach Additional Sheets) Name Top Datum No Samples Sent to Geological Survey Yes ☐ No Yes
 Yes
 ■
 Yes
 ■
 Yes
 ■
 Nes
 Nes Cores Taken Electric Log Run ___ Yes No List All E. Logs Run: CASING RECORD New Used Report all strings set-conductor, surface, intermediate, production, etc. Size Hole Size Casing Weight Setting Type of # Sacks Type and Percent Purpose of String Drilled Set (In O.D.) Lbs. / Ft. Depth Cement Used Additives ADDITIONAL CEMENTING / SQUEEZE RECORD Purpose: Depth Type of Cement # Sacks Used Type and Percent Additives Top Bottom Perforate **Protect Casing** Plug Back TD Plug Off Zone Did you perform a hydraulic fracturing treatment on this well? Yes No (If No, skip questions 2 and 3) No Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes (If No, skip question 3) Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? (If No, fill out Page Three of the ACO-1) Yes PERFORATION RECORD - Bridge Plugs Set/Type Acid, Fracture, Shot, Cement Squeeze Record Shots Per Foot Specify Footage of Each Interval Perforated Depth (Amount and Kind of Material Used) TUBING RECORD: Size: Set At: Packer At: Liner Run: Yes No Date of First, Resumed Production, SWD or ENHR. Producing Method: Flowing Pumping Gas Lift Other (Explain) **Estimated Production** Oil Bbls Gas Mcf Water Bbls. Gas-Oil Ratio Gravity Per 24 Hours METHOD OF COMPLETION: DISPOSITION OF GAS: PRODUCTION INTERVAL: Open Hole Perf. Dually Comp. Commingled Vented Sold Used on Lease (Submit ACO-5) (Submit ACO-4) (If vented, Submit ACO-18.) Other (Specify)

Form	ACO1 - Well Completion		
Operator F. G. Holl Company L.L.C.			
Well Name	MULL UNIT 'B' 1-14		
Doc ID	1099305		

All Electric Logs Run

DIL	
CNL/CDL	
Microresistivity	
BHCS	
СРІ	
frac finder	
Sector Bond Log	

Form	ACO1 - Well Completion		
Operator	F. G. Holl Company L.L.C.		
Well Name MULL UNIT 'B' 1-14			
Doc ID	1099305		

Tops

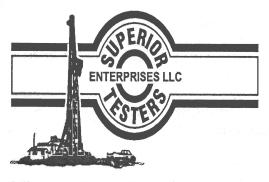
Name	Тор	Datum
Herrington	1889	+112
Winfield	1941	+60
Towanda	2006	-5
Fort Riley	2050	-49
B/Florence	2154	-153
Kinney LS	2168	-167
Wrefold	2201	-200
Council Grove	2222	-221
Neva	2396	-395
Red Eagle	2455	-454
Onaga Shale	2610	-609
Wabaunsee	2628	-627
Stotler	2757	-756
Tarkio	2816	-815
Howard	2954	-953
Topeka	3032	-1031
Heebner	3289	-1288
Toronto	3306	-1305
Douglas Shale	3320	-1319
Brown Lime	3384	-1383
LKC	3394	-1393
ВКС	3626	-1625
Conglomerate	3639	-1638
Arbuckle	3671	-1670

Form	ACO1 - Well Completion		
Operator	F. G. Holl Company L.L.C.		
Well Name MULL UNIT 'B' 1-14			
Doc ID	1099305		

Tops

Name	Тор	Datum
RTD	3900	-1899

Arbuckle



DRILL STEM TEST REPORT

Prepared For:

F.G Holl Company

9431 East Central Suit 100 Wichita Kansas 6205

ATTN: Rene Hustead

Mull unit #B 1-14

14-20s-15w-Barton

Start Date:

2012.08.16 @ 00:00:00

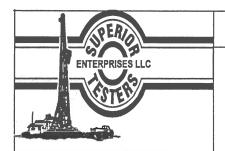
End Date:

2012.08.16 @ 00:00:00

Job Ticket #: 17787

DST#: 4

Superior Testers Enterprises LLC PO Box 138 Great Bend KS 67530 1-800-792-6902



DRILL STEM TEST REPORT

F.G Holl Company

14-20s-15w-Barton

9431 East Central Suit 100

Mull unit #B 1-14

Wichita Kansas 6205

Job Ticket: 17787

ATTN: Rene Hustead

Test Start: 2012.08.16 @ 00:00:00

GENERAL INFORMATION:

Time Tool Opened: 00:00:00

Formation:

Arbuckle

Deviated:

No Whipstock: ft (KB)

Test Type:

Conventional Bottom Hole (Initial)

Tester: Unit No: Gene Budig

Time Test Ended: 00:00:00 Interval:

3716.00 ft (KB) To 3725.00 ft (KB) (TVD)

2002.00 ft (KB)

Total Depth:

Reference Bevations:

1994.00 ft (CF)

3725.00 ft (KB) (TVD)

Hole Diameter:

7.88 inches Hole Condition: Fair

KB to GR/CF:

3335

8.00 ft

Serial #: 8524

Press@RunDepth:

1233.32 psia @

08:16:00

ft (KB)

Capacity:

psia

Start Date: Start Time: 2012.08.16

End Date: End Time: 2012.08.16 15:15:30

Last Calib.: Time On Btm: 1899.12.30

Time Off Btm:

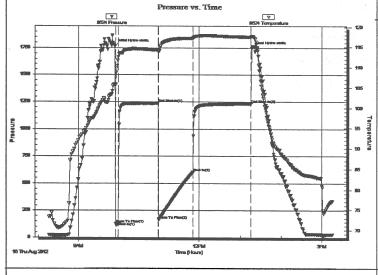
2012.08.16 @ 09:55:30 2012.08.16 @ 13:16:30

TEST COMMENT: 1st Opening 5 Minutes-Good b low built to the bottom of a 5 galllon bucket in 1 minute

1st ShutIn 60 Minutes-Weak blow back

2nd Opening 45 Minutes-Good blow built to the bottom of a 5 gallon bucket in 2 minutes

2nd Shut-In 90 Minutes-Weak blow back



PRESSURE SUMMARY					
Time	Pressure	Temp	Annotation		
(Min.)	(psia)	(deg F)			
0	1762.59	105.83	Initial Hydro-static		
1	128.16	105.67	Open To Flow (1)		
5	140.50	112.52	Shut-ln(1)		
64	1237.46	114.36	End Shut-In(1)		
65	166.66	113.84	Open To Flow (2)		
116	604.09	117.19	Shut-In(2)		
200	1233.32	117.52	End Shut-In(2)		
201	1744.72	117.74	Final Hydro-static		

Recovery

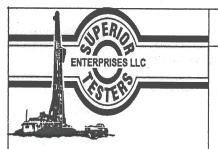
Length (ft)	Description	Volume (bbl)	
1100.00	Gas in the pipe	0.00	
200.00	water with a scum of oil	0.00	
1100.00 Water Chlorides 22000		0.00	

	Gas Rat	es	
П	Choke (inches)	Pressure (psia)	Goo Pete (Met/d)

Superior Testers Enterprises LLC

Ref. No: 17787

Printed: 2012.08.19 @ 10:34:29



DRILL STEM TEST REPORT

F.G Holl Company

9431 East Central Suit 100 Wichita Kansas 6205

ATTN: Rene Hustead

14-20s-15w-Barton

Mull unit #B 1-14

Job Ticket: 17787

DST#:4

Test Start: 2012.08.16 @ 00:00:00

GENERAL INFORMATION:

Formation:

Arbuckle

Deviated:

No Whipstock:

ft (KB)

Time Tool Opened: 00:00:00 Time Test Ended: 00:00:00

Interval:

3716.00 ft (KB) To 3725.00 ft (KB) (TVD)

Total Depth:

3725.00 ft (KB) (TVD)

Hole Diameter:

7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester:

Gene Budig

Unit No:

3335

Reference Bevations:

2002.00 ft (KB)

1994.00 ft (CF)

psia

KB to GR/CF:

8.00 ft

Serial #: 91716

Press@RunDepth:

1229.58 psia @

Capacity:

Start Date: Start Time:

2012.08.16 08:16:30

End Date: End Time:

2012.08.16 15:16:30 Last Calib.: Time On Btm: 1899.12.30

Time Off Btm:

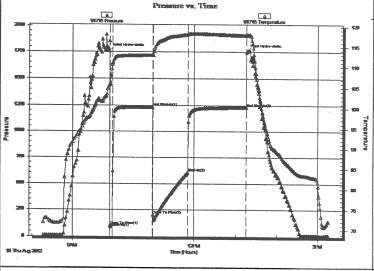
2012.08.16 @ 09:55:30 2012.08.16 @ 13:16:30

TEST COMMENT: 1st Opening 5 Minutes-Good b low built to the bottom of a 5 galllon bucket in 1 minute

1st Shutln 60 Minutes-Weak blow back

2nd Opening 45 Minutes-Good blow built to the bottom of a 5 gallon bucket in 2 minutes

2nd Shut-In 90 Minutes-Weak blow back



PRESSURE SUMMARY

	<u> </u>				
	Time	Pressure	Temp	Annotation	2 / S / S / S / S / S / S / S / S / S /
	(Min.)	(psia)	(deg F)		
	0	1760.73	105.73	Initial Hydro-static	
	1	104.04	106.08	Open To Flow (1)	
	5	125.48	111.09	Shut-In(1)	
	64	1231.75	112.90	End Shut-In(1)	
7	65	205.49	112.91	Open To Flow (2)	
Temperature	116	606.63	118.01	Shut-In(2)	
2	200	1229.58	117.79	End Shut-In(2)	
	201	1757.38	117.83	Final Hydro-static	
				-	

Recovery

Length (ft)	Description	Volume (bbl)
1100.00	Gas in the pipe	0.00
200.00	water with a scum of oil	0.00
1100.00	Water Chlorides 22000	0.00
ь		

Gas Rates

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

ENTERPRISES LLC

9431 East Central Suit 100

Wichita Kansas 6205

ATTN: Rene Hustead

F.G Holl Company

DRILL STEM TEST REPORT

14-20s-15w-Barton

TOOL DIAGRA

Mull unit #B 1-14

Job Ticket: 17787

DST#:4

Test Start: 2012.08.16 @ 00:00:00

Tool Information

Drill Collar: Heavy Wt. Pipe: Drill Pipe: Length: Length: Length: 3724.00 ft 0.00 ft 0.00 ft Diameter: Diameter: Diameter: 0.00 inches Volume: 0.00 inches Volume: 0.00 inches Volume: 0.00 bbl 0.00 bbl 0.00 bbl Weight set on Packer: Weight to Pull Loose: Tool Weight:

2000.00 lb 60000.00 lb

Total Volume: 0.00 bbl Tool Chased

String Weight: Initial

3716.00 ft 31.00 ft

Final

46000.00 lb 42000.00 lb

0.00 ft

Depth to Top Packer:

Drill Pipe Above KB:

Number of Packers: Diameter: 6.75 inches

Tool Length: Interval betw een Packers: Depth to Bottom Packer: 32.00 ft 9.00 ft ≓

Tool Comments:

-						
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Length (ft) Serial No. Position Depth (ft) Accum. Lengths	
Shut-In Tool	5.00			3698.00		
Hydrolic Tool	5.00			3703.00		
Jars	6.00		i	3709.00		
Safety Joint	2.00			3711.00		
Packer	5.00			3716.00	23.00	Bottom Of Top Packer
Perforations	4.00			3720.00		
Recorder	1.00	8524	Inside	3721.00		
Recorder	1.00	91716	Outside	3722.00		
Bull Plug	3.00			3725.00	9.00	Anchor Too
Total Tool Length:	_ength: 32.00					

Printed: 2012.08.19 @ 10:34:29



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company

9431 East Central Suit 100 Wichita Kansas 6205

ft

bbl

psia

Job Ticket: 17787

14-20s-15w-Barton

Mull unit #B 1-14

DST#:4

ATTN: Rene Hustead

Test Start: 2012.08.16 @ 00:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: Viscosity:

9.00 lb/gal 68.00 sec/qt

Water Loss: Resistivity:

10.18 in³ ohm.m

Salinity: Filter Cake: 8800.00 ppm 1.00 inches Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

Printed: 2012.08.19 @ 10:34:29

deg API

ppm

Recovery Information

Recovery Table

Length ft Description Volume bbl 1100.00 Gas in the pipe 0.000 200.00 water with a scum of oil 0.000 1100.00 Water Chlorides 22000 0.000

Total Length:

2400.00 ft

Total Volume:

bbl

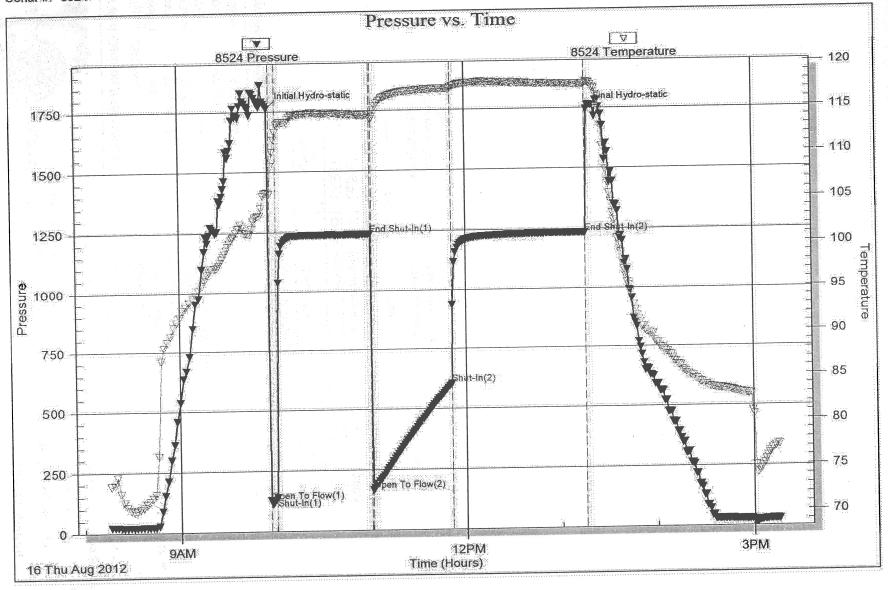
Num Fluid Samples: 0

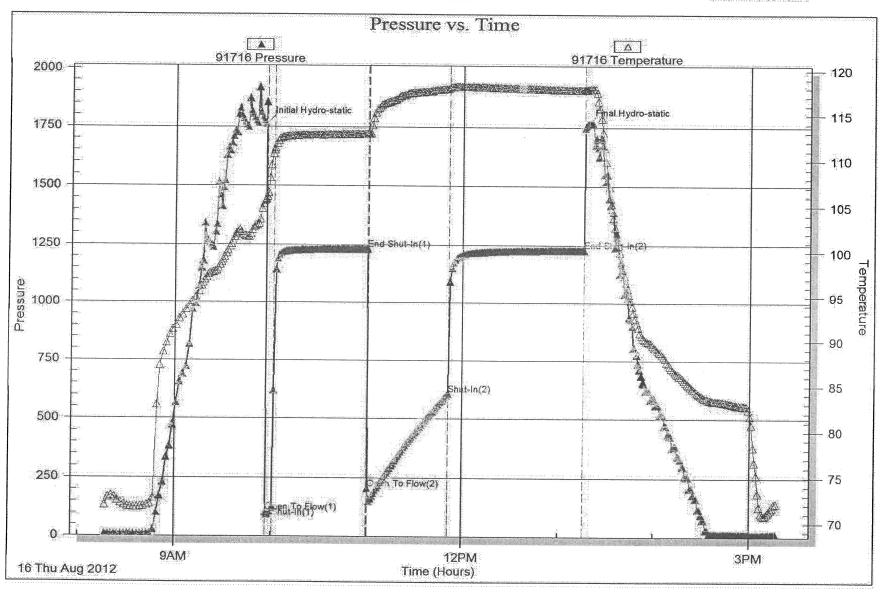
Num Gas Bombs:

Serial #:

Laboratory Name: Recovery Comments: Laboratory Location:

Ref. No: 17787





Summary of Changes

Lease Name and Number: MULL UNIT 'B' 1-14

API/Permit #: 15-009-25733-00-00

Doc ID: 1099305

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	10/24/2012	10/30/2012
Save Link	//kcc/detail/operatorE ditDetail.cfm?docID=10 98300	//kcc/detail/operatorE ditDetail.cfm?docID=10 99305

Summary of Attachments

Lease Name and Number: MULL UNIT 'B' 1-14

API: 15-009-25733-00-00

Doc ID: 1099305

Correction Number: 1

Attachment Name

DST #4



CONFIDENTIAL OIL & GAS

Kansas Corporation Commission Oil & Gas Conservation Division

1098300

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 🗌 East 🗌 West
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 Plug Back: Plug Back Total Depth Commingled Permit #: Dual Completion Permit #: SWD Permit #:	Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite: Operator Name: License #: Quarter Sec Twp S. R East West
ENHR Permit #:	County: Permit #:
Spud Date or Recompletion Date 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: