

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

Test Date:

API No. 15
00723913-0000

Company M & M Exploration, Inc.		Lease Z Bar		Well Number 4-7	
County Barber	Location 1980' FNL, 2080' FEL	Section 4	TWP 34	RNG (E/W) 15W	Acres Attributed 160
Field Aetna Northwest		Reservoir Mississippian	Gas Gathering Connection ONEOK		
Completion Date 09/25/2012		Plug Back Total Depth 4926'	Packer Set at None		
Casing Size 4.5	Weight 10.5	Internal Diameter 4.052	Set at 4950'	Perforations 4756'	To 4818'
Tubing Size 2.375	Weight 4.7	Internal Diameter 1.995	Set at 4769'	Perforations	To
Type Completion (Describe) Single (Gas)		Type Fluid Production Saltwater/Crude	Pump Unit or Traveling Plunger? Yes / No No		
Producing Thru (Annulus / Tubing) Tubing		% Carbon Dioxide 0.0640	% Nitrogen 3.6457	Gas Gravity - G _g 0.6841	
Vertical Depth(H)		Pressure Taps		(Meter Run) (Prover) Size	

Pressure Buildup: Shut in February 23 20 13 at 10:00 (AM) (PM) Taken March 4 20 13 at 10:00 (AM) (PM)

Well on Line: Started _____ 20 at _____ (AM) (PM) Taken _____ 20 at _____ (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in _____ Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						1250	1264.4	1350	1364.4		
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _s	Flowing Temperature Factor F _{tt}	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_e)² = 0.207
(P_a)² = _____

(P_c)² = _____ : (P_w)² = _____ : P_d = _____ % (P_c - 14.4) + 14.4 = _____

(P _c) ² - (P _s) ² or (P _c) ² - (P _a) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _w ² divided by: P _c ² - P _e ²	LOG of formula 1. or 2. and divide by: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)

Open Flow _____ Mcfd @ 14.65 psia Deliverability _____ Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 15th day of March, 20 13

Witness (if any)

For Commission

[Signature]

For Company

Checked by

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I declare under penalty of perjury under the laws of the state of Kansas that I am authorized to request exempt status under Rule K.A.R. 82-3-304 on behalf of the operator M & M Exploration, Inc. and that the foregoing pressure information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named.


I hereby request a one-year exemption from open flow testing for the Z Bar 4-7 gas well on the grounds that said well:

(Check one)

- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. _____
- is not capable of producing at a daily rate in excess of 250 mcf/D

I further agree to supply to the best of my ability any and all supporting documents deemed by Commission staff as necessary to corroborate this claim for exemption from testing.

Date: March 15, 2013

Signature: 

Title: President

Instructions: If a gas well meets one of the eligibility criteria set out in KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to claim exempt status for the gas well.

At some point during the current calendar year, wellhead shut-in pressure shall have been measured after a minimum of 24 hours shut-in/buildup time and shall be reported on the front side of this form under **OBSERVED SURFACE DATA**. Shut-in pressure shall thereafter be reported yearly in the same manner for so long as the gas well continues to meet the eligibility criterion or until the claim of eligibility for exemption **IS** denied.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than December 31 of the year for which it's intended to acquire exempt status for the subject well. The form must be signed and dated on the front side as though it was a verified report of annual test results.

Z-Bar 4-7 API # 15-007-23913										Sec 4 Twp 34S Rge 15W										250g x 100" x 1.000										New well Jan 2013									
DATE	Tank #1	Tank #2	INCHES	DAILY PROD	WKLY OIL	PROD THIS MONTH	WTR GAUGE FT IN	INCHES	WTR PROD	WKLY WTR	TOTAL WTR	WTR HAULED	Tkt No	TBG	CSG	LP	DIFF	MCF	WKLY GAS	TOTAL GAS MO.	HRS	ON	REMARKS																
Jan-1					0.00				0.00										0.00			24																	
Jan-2					0.00				0.00										0.00			24																	
Jan-3					0.00				0.00										0.00			24																	
Jan-4					0.00				0.00										0.00			24																	
Jan-5					0.00				0.00										0.00			24																	
Jan-6					0.00				0.00										0.00			24																	
Jan-7	6' 11 1/2"	5' 1/2"	83.5	139.45					0.00					740	1530	80	14	127.87			14	turn well to sales																	
Jan-8	6' 11"		22.5	37.58	177.02	177.02			0.00	0.00	0.00			390	1190	78	15	224.04			24	pulled wtr bottom 38 bbls																	
Jan-8	6' 11"													340	1090	79	15	225.48	577.39	577.39	24	water goes to 9-10																	
DATE	Tank #1	Tank #2	INCHES	DAILY PROD	WKLY OIL	PROD THIS MONTH	WTR GAUGE FT IN	INCHES	WTR PROD	WKLY WTR	TOTAL WTR	WTR HAULED	Tkt No	TBG	CSG	LP	DIFF	MCF	WKLY GAS	TOTAL GAS MO.	HRS	ON	REMARKS																
Jan-9	9' 1/2"		25.5	42.59					0.00					350	1000	80	18	248.56			24																		
Jan-10	10' 11"		22.5	37.57					0.00					400	950	78	12	200.39			24	16'64"																	
Jan-11	12' 7" - 12' 0"		20	31.73			12		0.00					390	990	78	13	208.57			24	pulled bottom																	
Jan-12	11' 11 3/4"	1' 5"	17	30.06					0.00					410	970	78	14	216.45			24																		
Jan-13	11' 11 3/4"	2' 9 1/4"	16.25	27.13					0.00					420	950	76	15	221.15			24																		
Jan-14	11' 11 3/4"	4' 4 1/2"	19.25	32.14					0.00					430	930	76	16	228.41			24	fire out																	
Jan-15	11' 11 3/4"	5' 9 1/4"	16.75	29.97					0.00					410	890	79	17	240.04			24																		
Jan-16	11' 10 1/4" - 4' 4"	7' 1"	15.75	26.30	257.49	434.51			0.00	0.00	0.00			410	880	83	18	253.17	1816.74	2394.13	24																		
DATE	Tank #1	Tank #2	INCHES	DAILY PROD	WKLY OIL	PROD THIS MONTH	WTR GAUGE FT IN	INCHES	WTR PROD	WKLY WTR	TOTAL WTR	WTR HAULED	Tkt No	TBG	CSG	LP	DIFF	MCF	WKLY GAS	TOTAL GAS MO.	HRS	ON	REMARKS																
Jan-17	4' 4"	8' 4 3/4"	17.5	26.30					0.00					410	870	82	14	221.93			24																		
Jan-18	4' 4"	9' 6" - 1' 4"	13.25	22.13					0.00					400	850	83	14	223.28			24																		
Jan-19	5' 6 1/4"	1' 4"	14.25	23.80					0.00					400	840	86	12	210.42			24																		
Jan-20	6' 9 1/2"	1' 4"	15.25	25.47					0.00					405	820	86	12	210.42			24																		
Jan-21	8' 1"	1' 4"	15.5	25.89					0.00					400	810	86	10	192.08			24																		
Jan-22	9' 1 1/2"	1' 4"	12.5	20.88					0.00					400	805	85	10	190.96			24																		
Jan-23	10' 2 3/4"	1' 4"	13.25	22.13					0.00					400	800	85	10	190.96			24																		
Jan-24	10' 2 1/2" - 1' 5"	2' 4 1/4"	12.25	20.46	187.04	621.55			0.00	0.00	0.00			415	800	85	9	181.18	1621.21	4016.34	24																		
DATE	Tank #1	Tank #2	INCHES	DAILY PROD	WKLY OIL	PROD THIS MONTH	WTR GAUGE FT IN	INCHES	WTR PROD	WKLY WTR	TOTAL WTR	WTR HAULED	Tkt No	TBG	CSG	LP	DIFF	MCF	WKLY GAS	TOTAL GAS MO.	HRS	ON	REMARKS																
Jan-25	1' 5"	3' 4 1/2"	12.25	20.46					0.00					410	800	86	10	192.08			24																		
Jan-26	1' 5"	4' 2"	9.5	15.87					0.00					425	800	86	10	192.08			24																		
Jan-27	1' 5"	4' 11"	9	15.03					0.00					430	800	86	10	192.08			24																		
Jan-28	1' 5"	5' 8"	9	15.03					0.00					445	800	88	11	203.79			24																		
Jan-29	1' 5"	6' 4 1/2"	8.5	14.20					0.00					360	750	92	10	198.67			24																		
Jan-30	1' 5"	7' 1"	8.5	14.20					0.00					360	730	92	9	188.48			24																		
Jan-31	1' 5"	7' 8"	7	11.69	106.46	728.01			0.00	0.00	0.00			375	725	88	10	194.30	1361.49	5376.83	24																		
TOTAL GAS			5376.83			173.46																																	
TOTAL OIL			728.01			23.48																																	
TOTAL OIL SOLD			480.55																																				
TOTAL WTR			0.00																																				
wtr goes to 9-10 SWD																																							
Date	Ticket No	Tank No	From	To	Gross Bbls	Gvty.	Temp	% BSW																															
1/16/2013	203540		1' 11' 10 1/4"	4' 4"	150.71	29.1	26	0.25 Pacer Energy Marketing LLC																															
1/18/2013	5030210		2' 9' 6"	1' 4"	163.66	29.7	50	0.02 Pacer Energy Marketing LLC																															
1/24/2013	1100314		1' 10' 2 1/2"	1' 5"	178.18	29.5	42	0.6 Pacer Energy Marketing LLC																															

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Z-Bar 4-7		API # 15-007-23913		Sec 4 Twp 34S Rge 15W										250#x100"x1.000									
DATE	Tank #1	Tank #2	INCHES	DAILY PROD	WKLY OIL	PROD THIS MONTH	WTR GAUGE FT IN	INCHES	WTR. PROD	WKLY WTR	TOTAL WTR	WTR HAULED	Tkt No	TBG	CSG	LP	DIFF	MCF	WKLY GAS	TOTAL GAS MO.	HRS. ON	REMARKS	
Feb-1	1' 5"	8' 3 1/2"	7.5	12.53					0.00					400	730	90	12	215.25			24	16/64"-sw dupm leaking gas to tank	
Feb-2	1' 5"	8' 10 1/2"	7	11.69					0.00					380	730	90	10	196.50			24	17/64"	
Feb-3	1' 5"	9' 6 1/4"	7.75	12.94					0.00					310	680	90	10	196.50			24		
Feb-4	2' 2"	9' 6 1/4"	9	15.03					0.00					300	670	90	10	196.50			24		
Feb-5	2' 9"	9' 6 1/4"	7	11.69					0.00					320	660	93	9	189.50			24		
Feb-6	3' 5 1/2"	1' 4"	8.5	14.20					0.00					340	660	90	10	196.50			24		
Feb-7	4' 1"	1' 4"	7.5	12.53					0.00					300	650	90	10	196.50			24		
Feb-8	4' 9"	1' 4"	8	13.36	103.96	103.96			0.00	0.00	0.00			300	648	92	10	198.67	1585.92	1585.92	24		
Feb-9	5' 3 1/2"	1' 4"	6.5	10.86					0.00					310	640	92	9	188.48			24		
Feb-10	5' 10 1/4"	1' 4"	6.75	11.27					0.00					300	635	90	9	188.42			24		
Feb-11	6' 6"	1' 4"	7.75	12.94					0.00					320	630	95	8	180.57			24		
Feb-12	7' 1/4"	1' 4"	6.25	10.44					0.00					310	630	95	8	180.57			24		
Feb-13	7' 6 3/4"	1' 4"	6.5	10.86					0.00					300	630	95	8	180.57			24		
Feb-14	8' 1 1/2"	1' 4"	6.75	11.27					0.00					285	625	96	7	169.80			24		
Feb-15	8' 7 1/2"	1' 4"	6	10.02					0.00					275	620	96	7	169.80			24		
Feb-16	9' 1 3/4"	1' 4"	6.25	10.44	88.09	192.05			0.00	0.00	0.00			290	620	95	8	180.57	1436.77	3022.69	24		
Feb-17	9' 7 3/4"	1' 4"	6	10.02					0.00					280	620	95	9	191.52			24		
Feb-18	9' 7 3/4"	1' 10"	6	10.02					0.00					280	620	97	8	182.46			24		
Feb-19	9' 7 3/4"	2' 4 1/2"	6.5	10.86					0.00					250	610	95	7	168.91			24		
Feb-20	9' 7 3/4"	2' 10"	5.5	9.19					0.00					250	610	95	7	168.91			24		
Feb-21	9' 7 3/4"	3' 4"	6	10.02					0.00					250	610	95	6	156.38			24		
Feb-22	9' 7 3/4"	3' 10"	6	7.93					0.00					250	610	93	6	154.72			24		
Feb-23	9' 7 3/4"	4' 2 3/4"	4.75	0.00					0.00					250	600	90	8	175.75			24	snowstorm shut well in	
Feb-24	9' 7 3/4"	4' 2 3/4"		0.00	58.03	250.08			0.00	0.00	0.00					50	15	89.69	1288.35	4311.04	12		
Feb-25	9' 7 3/4"	4' 2 3/4"		0.00					0.00								40	0	0.00			24	
Feb-26				0.00					0.00								20	0	0.00			24	
Feb-27				0.00					0.00								15	0	0.00			24	
Feb-28	9' 7 3/4"	4' 2 3/4"		0.00					0.00								15	0	0.00			24	
				0.00		250.08				0.00		0.00						0.00		4311.04			
TOTAL GAS PRODUCED				4311.04		MCF avg		153.97															
TOTAL OIL PRODUCED				250.08		BOPD avg		8.93															
TOTAL OIL SOLD				163.66																			
TOTAL WTR PRODUCED				0.00		BWPD avg																	
wtr goes to 9-10 SWD																							
Date	2/6/2013	Ticket No	5030232	Tank No	2' 9" 6"	From	1' 4"	To		Gross Bbls	163.66	Gvty.	31	Temp	55	% BSW	0.02	Pacer Energy Marketing					

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Z-Bar 4-7		API # 15-007-23913		Sec 4 Twp 34S Rge 15W										250#x100"x1.000										
DATE	Tank #1	Tank #2	INCHES	DAILY PROD	WKLY OIL	PROD THIS MONTH	WTR GAUGE FT IN	INCHES	WTR PROD	WKLY WTR	TOTAL WTR	WTR HAULED	Tkt No	TBG	CSG	LP	DIFF	MCF	WKLY GAS	TOTAL GAS MO.	HRS. ON	REMARKS		
Mar-1	9' 7 3/4"	4' 2 3/4"	0	0.00					0.00								15	0	0.00			Sl snow		
Mar-2				0.00					0.00								15	0	0.00			Sl snow		
Mar-3				0.00					0.00								14	0	0.00			Sl snow		
Mar-4	9' 7 3/4"	4' 2 3/4"		0.00					0.00					1350	1250	15	0	0.00				11/64"		
Mar-5	9' 7 3/4"	5' 5"	14.25	23.80					0.00					510	920			0.00				16/64"		
Mar-6	9' 7 3/4"	6' 2"	9	15.03					0.00					420	770			0.00						
Mar-7	9' 7 3/4"	6' 7 1/4"	5.25	8.77					0.00					350	720			0.00				reject oil		
Mar-8	9' 7 3/4"	7' 1/2"	5.25	8.77	56.36	56.36			0.00	0.00	0.00			310	690			0.00	0.00	0.00		17/64"		
Mar-9	9' 7 3/4"	7' 11"	10.5	17.54					0.00					300	645			0.00						
Mar-10				0.00					0.00									0.00						
Mar-11				0.00					0.00									0.00						
Mar-12				0.00					0.00									0.00						
Mar-13				0.00					0.00									0.00						
Mar-14				0.00					0.00									0.00						
Mar-15				0.00					0.00									0.00						
Mar-16				0.00	17.54	73.90			0.00	0.00	0.00							0.00	0.00	0.00				
Mar-17				0.00					0.00									0.00						
Mar-18				0.00					0.00									0.00						
Mar-19				0.00					0.00									0.00						
Mar-20				0.00					0.00									0.00						
Mar-21				0.00					0.00									0.00						
Mar-22				0.00					0.00									0.00						
Mar-23				0.00					0.00									0.00						
Mar-24				0.00	0.00	73.90			0.00	0.00	0.00							0.00	0.00	0.00				
Mar-25				0.00					0.00									0.00						
Mar-26				0.00					0.00									0.00						
Mar-27				0.00					0.00									0.00						
Mar-28				0.00					0.00									0.00						
Mar-29				0.00					0.00									0.00						
Mar-30				0.00					0.00									0.00						
Mar-31				0.00	0.00	73.90			0.00	0.00	0.00							0.00	0.00	0.00				
TOTAL GAS PRODUCED				0.00			MCF avg																	
TOTAL OIL PRODUCED				73.90			BOPD avg																	
TOTAL OIL SOLD				0.00																				
TOTAL WTR PRODUCED				0.00			BWPD avg																	
wtr goes to 9-10 SWD																								
Date	Ticket No	Tank No	From	To	Gross Bbls	Gvty.	Temp	% BSW																

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