Form G-2
(Rev. 7/03)

KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:
[X] Open Flow
[ ] Deliverabilty

(See Instructions on Reverse Side)

Test Date: 01/17/14

API No. 15-025-21474-00-01

Company	Lease	Well Number
Strat Land Exploration	Gardiner	1-2

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
Clark		02	34S	24W	481.55

Field	Reservoir	Gas Gathering Connection
Keiger Field	St. Genevieve	DCP Midstream

Completion Date	Plug Back Total Depth	Packer Set at
10-16-13	5725	NA

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4.500	11.6	4.000	5774	5672	5690

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2.875	4.7	1.995	5694		

Type Completion (Describe)	Type Fluid Production	(Pump) Unit or Traveling Plunger?	Yes / No
Single		X	X

Producing Thru (Annulus / Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity - G_g
Annulus	.053	21.952	.7034

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size
5774'		

Pressure Buildup: Shut in 01-13 20 14 at 10:00 (AM) (PM) Taken 01-16 20 14 at 10:00 (AM) (PM)

Well on Line: Started 01-16 20 14 at 10:00 (AM) (PM) Taken 01-17 20 14 at 10:00 (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_2O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	Casing Wellhead Pressure psia	Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	Tubing Wellhead Pressure psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In						1112	1126.4			72	
Flow	1.250	78.6	44	45	60	391	405.4			24	35.07

FLOW STREAM ATTRIBUTES

Plate Coeffiecient (F_b) (F_p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m x h}$	Gravity Factor F_g	Flowing Temperature Factor F_{tt}	Deviation Factor F_{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G_m
7.771	93	63.9687	1.1923	1.0148	1.0074	606	17.28	.8594

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2$ = 1268.78 $(P_w)^2$ = 164.3 P_d = _____ % $(P_c - 14.4) + 14.4$ = _____ $(P_a)^2$ = 0.207 $(P_d)^2$ = _____

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	Choose formula 1 or 2: 1. $P_c^2 - P_a^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_w^2$	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)
1268.57	1104.48	1.1486	.0601688	.662	.0398317	1.09605	664

Open Flow 664 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 18th day of January, 20 14.

KCC WICHITA

Witness (if any)

Thurmond-McGlothlin, Inc.
For Company

For Commission

JAN 30 2014

Checked by

RECEIVED

STRAT LAND
EXPLORATION CO
Est. 1980

January 28, 2014

Kansas Corporation Commission

Conservation Division (Oil & Gas)
Finney State Office Building
130 S. Market, Room 2078
Wichita, KS 67202-3802

Re: Gardiner 1-2 15-025-21474-00-01
Form CG-1 & G-2

Enclosed is the Deliverability Test and Back Pressure Test for subject well.

Thurmond McGlothlin called me and said they had talked to Jim Hemmen prior to testing asking for a KCC witness. Jim advised to just submit.

Thank you for your consideration. Please advise of any questions. djansen@stratland.com

Sincerely,

Dolores Dee' Jansen
Sr. Prod/Regulatory Asst

/dj

(2) Enclosures

KCC WICHITA
JAN 30 2014
RECEIVED

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM CG-1 Rev.

TYPE TEST: 4 Point ☒ Initial ☐ Annual ☐ Special TEST DATE: 01/16/14

COMPANY	LEASE	WELL NO:
Strat Land Exploration	Gardiner	1-2

COUNTY	LOCATION	SECTION	TWP	RNG (E/W)	ACRES
Clark		2	34S	24W	481.55

API WELL NUMBER	RESERVOIR	PIPELINE CONNECTION
15- 025-21474-00-01	ST. Genevieve	DCP Midstream

COMPLETION DATE	PLUG BACK TOTAL DEPTH	PACKER SET AT
10-16-2013	5725	N/A

CASING SIZE	WT.	ID.	SET AT	PERF.	TO
4.500	11.6	4.000	5774	5672	5690

TUBING SIZE	WT.	ID.	SET AT	PERF.	TO
2.875	4.7	1.995	5694		

TYPE COMPLETION (Describe)	TYPE FLUID PRODUCTION
Single	

PRODUCING THRU	RESERVOIR TEMPERATURE °F	BAR PRESS -P_a
Casing	132	14.4 Psia

GAS GRAVITY - G_g	% CARBON DIOXIDE	% NITROGEN	API GRAVITY OF LIQUID
.7034	.053	21.952	60

VERTICAL DEPTH (H)	TYPE METER CONNECTION	(METER RUN) (PROVER) SIZE
5681	Flange	3.068

REMARKS
Well On Pumping Unit

OBSERVED DATA DURATION OF SHUT-IN ____ HR.

RATE NO.	ORIFICE SIZE in	(METER) (PROVER) PRESSURE Psig	DIFF. (h_w) (h_d)	FLOWING TEMP t	WELL-HEAD TEMP. t	CSG WELLHEAD PRESS. Psig	CSG WELLHEAD PRESS. $(P_w)(P_t)(P_c)$ Psia	TBG WELLHEAD PRESS. Psig	TBG WELLHEAD PRESS. $(P_w)(P_t)(P_c)$ Psia	FLOW DURATION (HOURS)	LIQUID PROD. Bbls.
SHUT IN						1112	1126.4			72	
1	1.250	67	12.5	45	45	1053	1067.4			1	0
2	1.250	67.8	22	45	45	978	992.4			1	0
3	1.250	71	33	47	45	915	929.4			1	0
4	1.250	74	46	47	48	835	849.4			1	0
5											

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT (F_b) (F_p) Mcfd	(METER) (PROVER) PRESSURE Psia	PRESS EXTENSION $\sqrt{P_m * h_w}$	GRAVITY FACTOR F_g	FLOWING TEMP FACTOR F_t	DEVIATION FACTOR F_{pv}	RATE OF FLOW Q Mcfd	GOR (ft^3/Bbl)	G_m
1	7.771	81.4	31.8983	1.1923	1.0148	1.0065	302		
2	7.771	82.2	42.5253	1.1923	1.0148	1.0066	403		
3	7.771	85.4	53.0867	1.1923	1.0127	1.0067	502		
4	7.771	88.4	63.7683	1.1923	1.0127	1.0070	603		
5									

PRESSURE CALCULATIONS

RATE NO.	P_t Psia	P_c Psia	P_w Psia	$(P_c)^2$ THOUSANDS	$(P_w)^2$ THOUSANDS	PLOTTING POINTS $(P_c)^2 - (P_w)^2$ THOUSANDS	PLOTTING POINTS Q Mcfd	% SHUT-IN $100 \frac{(P_w - P_a)}{(P_c - P_a)}$
1		1126.4	1067.4	1268.8	1139.3	129.5	302	94.76
2		1126.4	992.4	1268.8	984.9	283.9	403	88.10
3		1126.4	929.4	1268.8	863.8	405	502	82.51
4		1126.4	849.4	1268.8	721.5	547.3	603	75.40
5								

INDICATED WELLHEAD OPEN FLOW 1050 Mcfd @ 14.65 Psia "n" = .662

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 herein, and that said report is true and correct. Executed this the 18 day of January 2014.

Witness (if any)

Thurmond-McGlothlin, Inc.
For Company

For Commission

Checked By

(Rev.10/96)

KCC WICHITA
JAN 30 2014
RECEIVED

STRAT LAND Exploration 1-16-14
GARDNER 1-2
4-14

$\theta = 56.5$ $\eta = .662$