## KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

| Type Tes  | t:                         | -167                               |  | (   | See Instruc                    | tions on Re   | everse Side                            | e)   |   |                                |   |  |
|---|----------------------------|------------------------------------|--|---|--------------------------------|---|--|--|---|--------------------------------|---|--|
| Open Flow   |                            |                                    | Test Date: API N                                 |   |                                |   |  | No. 15   |   |                                |   |  |
| Deliverabilty   |                            |                                    |  | 6/9/2013 023-212  |                                |   |  |  | 0   |                                |   |  |
| Company<br>Rosewood Resources, Inc.   |                            |                                    |  |   | Lease<br>Zweygardt             |   |  |  |   | Well Number<br>43-24           |   |  |
| County Location Cheyenne NESE   |                            |                                    | Section<br>24                                    |   |                                |   | RNG (E/W) Acres Attributed 41W 80      |  |   |                                |   |  |
| Field<br>Cherry Creek   |                            |                                    |  | Reservoir<br>Niobrara                                     |                                |   |  | Gas Gathering Connection Branch Systems Inc.   |   |                                |   |  |
| Completi<br>9/27/20   |                            |                                    |  | Plug Bac<br>1507'   | Plug Back Total Depth<br>1507' |   |  |  | Set at  |                                |   |  |
| Casing S<br>4 1/2"  | Casing Size Weight         |                                    | Internal Diameter Set at 6.366 1547'             |   |                                | Perfo<br>132  | rations<br><b>0'</b>                   | то<br>1350'  |   |                                |   |  |
| Tubing S<br>NONE  | Tubing Size Weight         |                                    |  | Internal [  | Internal Diameter Set at       |   |  | Perfo  | rations   | То                             |   |  |
|   | mpletion (                 | Describe)<br>ntional)              | •  |   | Type Fluid Production Dry Gas  |   |  |  | nit or Traveling<br>g                                       | Plunger? Yes                   | (No)  |  |
| Producing<br>Annulus  | •                          | nnulus / Tubing                    | ))   | % C   | arbon Dioxi                    | ide   |  | % Nitrog   | jen   | Gas Gra                        | avity - G <sub>g</sub>                        |  |
| Vertical D  | Depth(H)                   | ·                                  |  |   | Pressure Taps Flange           |   |  |  |   | (Meter F<br>2"                 | Run) (Prover) Size                            |  |
|   | Buildup:                   | Shut in 6-8                        | 2  | 13 at 5   |                                | (AM)(PM)  | Taken 6-                               | 9  | 20  | 13 <sub>at</sub> 5:45          | (AM) (PM)                                     |  |
| Well on L   |                            | Started 6-9                        |  |   | 13 at 5:45 (AM) (PM) Taken 6-  |   |  | 10   | 20  | 13 at 6:10                     | (AM)(PM)                                      |  |
|   |                            |                                    |  |   | OBSERVE                        | D SURFAC  | E DATA                                 |  |   | Duration of Shut-i             | n_24Hours                                     |  |
| Static /<br>Dynamic<br>Property   | Dynamic Size Prover Pressu |                                    | Pressure Differential in Inches H <sub>2</sub> 0 | lemperature Temperature                                   |                                | (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> ) |  | Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> ) |   | Duration<br>(Hours)            | Liquid Produced<br>(Barrels)                  |  |
| Shut-In   |                            | paig (i iii)                       | Inches 11 <sub>2</sub> 0                         |   |                                | 155   | 169.4                                  | psig   | psia  |                                |   |  |
| Flow  | 75 89                      |                                    | 89.4   |   |                                | 24  |  |  |   |                                |   |  |
|   |                            |                                    |  |   | FLOW STF                       | REAM ATTE   | RIBUTES                                |  | <u>-</u> .  |                                | <del> </del>                                  |  |
| Coeffied<br>(F <sub>b</sub> ) (F  | /= \ /= \ Prover Pressure  |                                    | Press<br>Extension                               | Gravity Factor F <sub>g</sub>                             |                                | Flowing<br>Temperature<br>Factor<br>F <sub>ft</sub>         | Deviation<br>Factor<br>F <sub>pv</sub> |  | Metered Flov<br>R<br>(Mcfd)                                 | v GOR<br>(Cubic Fee<br>Barrel) | Flowing<br>Fluid<br>Gravity<br>G <sub>m</sub> |  |
|   |                            |                                    |  |   |                                |   |  | 18   |   |                                |   |  |
|   |                            |                                    |  | (OPEN FL  | OW) (DELIV                     | ERABILITY   | /) CALCUL                              | ATIONS   |   | (P )²                          | = 0.207                                       |  |
| (P <sub>c</sub> ) <sup>2</sup> =  | :                          | (P <sub>w</sub> ) <sup>2</sup> =   | :  | $P_d =$   |                                | % (   | P <sub>c</sub> - 14.4) +               | 14.4 =   | :_  | (P <sub>d</sub> ) <sup>2</sup> |   |  |
| $ \begin{array}{c cccc} (P_c)^2 - (P_a)^2 & (P_c)^2 - (P_w)^2 & Choose formula 1 or 2 \\ or & 1. \ P_c^2 - P_a^2 \\ (P_c)^2 - (P_d)^2 & 2. \ P_c^2 - P_d^2 \\ divided by: \ P_c^2 - P_w^2 \end{array} $ |                            | LOG of formula 1. or 2. and divide |  | Backpressure Curve Slope = "n" or Assigned Standard Slope |                                | n x LOG   |  | Antilog  | Open Flow<br>Deliverability<br>Equals R x Antilog<br>(Mcfd) |                                |   |  |
|   |                            |                                    |  |   |                                |   |  |  |   |                                |   |  |
| Open Flo  | ıw                         |                                    | Mcfd @ 14.                                       | 65 psia   |                                | Deliveral   |  |  |   | Mcfd @ 14.65 psi               | a   |  |
|   |                            | ad authority                       |  |   | statos that t                  |   |  | o make 4   |   |                                |   |  |
|   |                            | ed authority, or                   |  |   | ISAS CORPO                     | RATION CO   | MMISSION                               |  |   | ort and that he ha             | , 20 <u>13</u>                                |  |
|   |                            | Witness (if                        | any)   |   | <u>DEC</u>                     | 2 6 20  |  | 10   | <u>MUU</u>  | Oompany COT                    | ivey_   |  |
|   |                            | For Commi                          |  |   |                                | VATION DIVI<br>CHITA KS                                     |  |  | Che   | cked by                        |   |  |

| 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 Rosewood Resources, 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 Zweygardt 43-24 |
|---|
| 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: 11/21/13  |
| • •   |
| RECEIVED SIGNATURE:  CANNOL MOUTING  Production Assistant  CONSERVATION DIVISION  CONSERVATION DIVISION   |
| WICHITA. KS   |

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.

W2732

Zweygardt 43-24

St. Francis

St. Francis

Flow

June-13

**FloBoss** 

|           | Casing |        |     | HRS  | REMARKS                         |
|-----------|--------|--------|-----|------|---------------------------------|
| DATE      | PSI    | STATIC | MCF | DOWN | (Maximum length 110 characters) |
| 6/1/2013  | 72     |        | 19  |      |                                 |
| 6/2/2013  | 76     | 89     | 19  |      |                                 |
| 6/3/2013  | 73     | 86     | 19  |      |                                 |
| 6/4/2013  | 71     | 84     | 19  |      |                                 |
| 6/5/2013  | 76     | 89     | 19  |      |                                 |
| 6/6/2013  | 82     | 95     | 19  |      |                                 |
| 6/7/2013  | 78     | 91     | 19  |      |                                 |
| 6/8/2013  | 74     | 87     | 19  |      | si for state test - cp 75       |
| 6/9/2013  | 126    | 139    | 0   | 24   | reopened - cp 155               |
| 6/10/2013 | 100    | 113    | 28  | 3    |                                 |
| 6/11/2013 | 93     |        | 18  | 1    |                                 |
| 6/12/2013 | 91     | 104    | 18  |      |                                 |
| 6/13/2013 | 77     |        | 18  |      |                                 |
| 6/14/2013 | 77     | 90     | 18  |      |                                 |
| 6/15/2013 | 80     |        | 18  |      |                                 |
| 6/16/2013 | 80     | 93     | 18  |      |                                 |
| 6/17/2013 | 77     | 90     | 18  |      |                                 |
| 6/18/2013 | 73     | 86     | 18  |      |                                 |
| 6/19/2013 | 69     | 82     | 18  |      |                                 |
| 6/20/2013 | 73     | 86     | 18  |      |                                 |
| 6/21/2013 | 77     |        | 17  |      |                                 |
| 6/22/2013 | 90     |        | 17  |      |                                 |
| 6/23/2013 | 95     |        | 17  |      |                                 |
| 6/24/2013 | 92     |        | 17  |      |                                 |
| 6/25/2013 | 95     |        | 17  |      |                                 |
| 6/26/2013 | 94     |        | 17  |      | ,                               |
| 6/27/2013 | 83     |        | 17  |      |                                 |
| 6/28/2013 | 72     |        | 17  |      |                                 |
| 6/29/2013 | 73     |        | 17  |      |                                 |
| 6/30/2013 | 72     | 85     | 17  |      |                                 |
| 7/1/2013  |        |        |     |      |                                 |

Total 530

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DEC 2 6 2013

W2732

Zweygardt 43-24

St. Francis

St. Francis

Flow

July-13

FloBoss

|           | Casing |        |     | HRS   |     | REMARKS                         |
|-----------|--------|--------|-----|-------|-----|---------------------------------|
| DATE      | PSI    | STATIC | MCF | DOWN  |     | (Maximum length 110 characters) |
| 7/1/2013  | 74     |        |     | .7    |     |                                 |
| 7/2/2013  | 75     | 88     |     | .7    |     |                                 |
| 7/3/2013  | 74     | 87     |     | .7    |     |                                 |
| 7/4/2013  | 76     | 89     |     | .7    |     |                                 |
| 7/5/2013  | 76     | 89     |     | .7    |     | ·                               |
| 7/6/2013  | 75     | 88     |     | .7    |     |                                 |
| 7/7/2013  | 84     | 97     | 1   | .6    |     |                                 |
| 7/8/2013  | 83     | 96     |     | .6    |     |                                 |
| 7/9/2013  | 82     | 95     |     | .6    |     | ,                               |
| 7/10/2013 | 78     |        |     | 6     |     |                                 |
| 7/11/2013 | 81     |        |     | .6    |     |                                 |
| 7/12/2013 | 69     |        |     | .5    |     |                                 |
| 7/13/2013 | 90     |        |     |       | 2.5 |                                 |
| 7/14/2013 | 91     | 104    |     | .6    |     |                                 |
| 7/15/2013 | 75     | 88     |     | .8    |     |                                 |
| 7/16/2013 | 73     | 86     |     | .8    |     |                                 |
| 7/17/2013 | 70     | 83     | 2   | 20    |     |                                 |
| 7/18/2013 | 95     | 108    | 2   | 20    |     |                                 |
| 7/19/2013 | 87     | 100    | 2   | 20    |     |                                 |
| 7/20/2013 | 88     | 101    | 2   | 20    |     |                                 |
| 7/21/2013 | 90     | 103    | 2   | 20    |     |                                 |
| 7/22/2013 | 86     |        | 2   | 20    |     |                                 |
| 7/23/2013 | 83     | 96     | 2   | 20    |     |                                 |
| 7/24/2013 | 89     | 102    | 2   | 20 .  |     |                                 |
| 7/25/2013 | 92     | 105    | 2   | 20    |     |                                 |
| 7/26/2013 | 83     | 96     | 2   | 20    |     |                                 |
| 7/27/2013 | 74     | 87     | 2   | 20    |     |                                 |
| 7/28/2013 | 75     | 88     | 2   | 20    |     |                                 |
| 7/29/2013 | 74     | 87     | 2   | 20    |     |                                 |
| 7/30/2013 | 93     | 106    | 2   | 20 3  | 3.5 |                                 |
| 7/31/2013 | 118    | 131    | 1   | .8 _: | 5.5 |                                 |

Total 563

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Zweygardt 43-24

St. Francis

St. Francis

Flow

August-13

FloBoss

|           | Casing     |            |    | IRS | REMARKS                         |
|-----------|------------|------------|----|-----|---------------------------------|
| DATE      | PSI        | STATIC MCF |    | OWN | (Maximum length 110 characters) |
| 8/1/2013  | 93         | 106        | 21 |     |                                 |
| 8/2/2013  | 92         | 105        | 21 |     |                                 |
| 8/3/2013  | 87         | 100        | 20 |     |                                 |
| 8/4/2013  | 87         | 100        | 20 |     |                                 |
| 8/5/2013  | 82         | 95         | 20 |     |                                 |
| 8/6/2013  | 74         | 87         | 20 |     |                                 |
| 8/7/2013  | 70         | 83         | 20 |     |                                 |
| 8/8/2013  | 72         | 85         | 20 |     |                                 |
| 8/9/2013  | 75         | 88         | 20 |     |                                 |
| 8/10/2013 | 74         | 87         | 20 |     |                                 |
| 8/11/2013 | 72         | 85         | 20 |     |                                 |
| 8/12/2013 | 72         | 85         | 20 |     |                                 |
| 8/13/2013 | 72         | 85         | 20 |     |                                 |
| 8/14/2013 | 72         | 85         | 20 |     |                                 |
| 8/15/2013 | 73         | 86         | 20 | 0.5 |                                 |
| 8/16/2013 | 81         | 94         | 20 |     |                                 |
| 8/17/2013 | <b>8</b> 1 | 94         | 20 |     |                                 |
| 8/18/2013 | 81         | 94         | 19 |     |                                 |
| 8/19/2013 | 82         | 95         | 19 | 1.5 |                                 |
| 8/20/2013 | 102        | 115        | 18 | 1   |                                 |
| 8/21/2013 | 99         | 112        | 18 |     |                                 |
| 8/22/2013 | 103        | 116        | 18 | 5   |                                 |
| 8/23/2013 | 87         | 100        | 20 |     |                                 |
| 8/24/2013 | 95         | 108        | 20 | 1   |                                 |
| 8/25/2013 | 100        | 113        | 18 | 1   |                                 |
| 8/26/2013 | 75         | 88         | 18 |     |                                 |
| 8/27/2013 | 71         | 84         | 18 |     |                                 |
| 8/28/2013 | 69         | 82         | 18 |     |                                 |
| 8/29/2013 | 97         | 110        | 18 | 1   |                                 |
| 8/30/2013 | 98         | 111        | 18 |     |                                 |
| 8/31/2013 | 99         | 112        | 18 |     |                                 |

Total 600

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