#### BEFORE THE INDUSTRIAL COMMISSION

# OF THE STATE OF NORTH DAKOTA

CASE NO. 21768 ORDER NO. 24098

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF SAMSON RESOURCES CO. FOR AN ORDER ALLOWING THE PRODUCTION FROM THE FOLLOWING DESCRIBED BAKKE 3229-4TFH WELLS: WELL, BAKKE 3229-5MBH WELL, AND THE GJOVIG 0508-5MBH WELL, LOCATED IN LOT 2 OF SECTION 5, T.163N., R.99W., AMBROSE FIELD, DIVIDE COUNTY, ND, TO BE PRODUCED INTO THE BAKKE CENTRAL TANK BATTERY OR PRODUCTION FACILITY LOCATED IN SECTION 5, T.163N., R.99W., DIVIDE COUNTY, ND, AS AN EXCEPTION TO THE PROVISIONS OF NDAC § 43-02-03-48, PURSUANT TO 43-02-03-48.1, AND SUCH OTHER RELIEF AS IS APPROPRIATE.

## ORDER OF THE COMMISSION

### THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 26th day of February, 2014.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, commingling of production from two or more wells in a central tank battery under NDAC Section 43-02-03-48.1.
- (3) Samson Resource Company (Samson) is the operator of the following wells in the Ambrose Field, Divide County, North Dakota:

File No.	Well Name & No.	<u>Location</u>
24103	Bakke 3229-4TFH	Lot 2 Section 5-T163N-R99W
24101	Bakke 3229-5MBH	Lot 2 Section 5-T163N-R99W
24102	Gjovig 0508-5MBH	Lot 2 Section 5-T163N-R99W

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(4) Samson requests permission to commingle the production from the wells listed in paragraph (3) above in the Bakke-Bakke-Gjovig Central Tank Battery (CTB No. 224130-01) located in the Lot 2 of Section 5, Township 163 North, Range 99 West, Divide County, North Dakota, pursuant to NDAC Section 43-02-03-48.1. There are no wells currently authorized to be commingled in the Bakke-Bakke-Gjovig Central Tank Battery (CTB No. 224130-01).

- (5) Samson submitted a Sundry Notice and attachments for approval pursuant to NDAC Section 43-02-03-88.1 and NDAC Section 43-02-03-48.1.
  - (6) Ownership between the wells listed in paragraph (3) above is diverse.
- (7) Samson will allocate production measured at the central production facility to the various wells on the basis of production tests utilizing the facilities at the central production facility. The production from each well will be separately measured each month and applicant believes that such allocation will result in a reasonably accurate determination of production from each well.
- (8) NDAC Section 43-02-03-48 states: "Oil production may not be transported from a well premises or central production facility until its volume has been determined through the use of properly calibrated meter measurements or tank measurements. All meter and tank measurements and volume determinations must conform to American petroleum institute standards and be corrected to a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius]."
- (9) Allowing such commingling will reduce the expenditure of funds on surface facilities and enhance the economics of production, thereby preventing economic waste and promoting the greatest ultimate recovery of oil and gas from the Ambrose Field. Utilization of central production facilities will minimize surface disturbance and promote both full utilization of the surface and enhance the aesthetic values resulting from fewer production facilities.
- (10) Samson will construct and operate the central production facility in such a manner that allows for reasonably accurate allocation of production to each respective party.
- (11) The proposed process, measurement, and allocation will result in a reasonably accurate determination of production.
  - (12) There were no objections to this application.
  - (13) The granting of this application will prevent waste and protect correlative rights.

## IT IS THEREFORE ORDERED:

- (1) Samson Resources Company is hereby permitted to commingle production from the wells listed in paragraph (3) of the above findings into the Bakke-Bakke-Gjovig Central Tank Battery (CTB No. 224130-01) located in the Lot 2 of Section 5, Township 163 North, Range 99 West, Divide County, North Dakota, pursuant to NDAC Section 43-02-03-48.1.
  - (2) Allocation tests shall be performed monthly.

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(3) The following wells are authorized to be commingled in the Bakke-Bakke-Gjovig Central Tank Battery.

File No.	Well Name & No.	<u>Location</u>	Order No.
24103	Bakke 3229-4TFH	Lot 2 Section 5-T163N-R99W	24098
24101	Bakke 3229-5MBH	Lot 2 Section 5-T163N-R99W	24098
24102	Gjovig 0508-5MBH	Lot 2 Section 5-T163N-R99W	24098

- (4) The permission granted herein is conditioned upon Samson receiving approval of the Sundry Notice and attachments submitted and complying with all provisions dictated by the Director for permission to commingle production from the wells listed in paragraph (3) above into the Bakke-Bakke-Gjovig Central Tank Battery.
- (5) Samson shall use the following procedures for allocating production to each well commingled in the Bakke-Bakke-Gjovig Central Tank Battery:
  - (a) Each well shall be tested a minimum of three consecutive days per month.
  - (b) The exact producing time, between the opening and closing inventory, shall be considered when determining the average well test rate for each well.
  - (c) Each well's tests shall be averaged for the month.
  - (d) Downtime shall be monitored to determine the exact total number of producing hours for each well.
  - (e) A monthly production volume shall be calculated for each well as follows:

Calculated oil volume = (Average well test oil rate) \*
(Number of producing hours).

Calculated gas volume = (Average well test gas rate) \*
(Number of producing hours).

Calculated water volume = (Average well test water rate) \* (Number of producing hours).

- (f) The calculated monthly production volumes shall be totaled for all the wells producing into the Bakke-Bakke-Gjovig Central Tank Battery to determine the total calculated monthly volumes for the Bakke-Bakke-Gjovig Central Tank Battery.
- (g) A correction factor shall be calculated by dividing the total actual monthly production volumes for the Bakke-Bakke-Gjovig Central Tank Battery by the total calculated monthly production volumes for the Bakke-Bakke-Gjovig Central Tank Battery.

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- (h) Each well's allocated production shall then be calculated by multiplying its individual calculated oil, gas, and water volumes by the correction factor calculated in step (g).
- (6) If gas is sold from the central production facility, the gas volumes must be accurately allocated back to the individual wells.
- (7) The Director is hereby authorized to issue an administrative order modifying any provision of this order in order to prevent waste or protect correlative rights or to modify any procedures for testing or allocation of production herein approved if it can be demonstrated to his satisfaction that a reasonably accurate allocation of production to each separate well producing into the Bakke-Bakke-Gjovig Central Tank Battery will be obtained.
- (8) Additional wells can only be added to the Bakke-Bakke-Gjovig Central Tank Battery by order of the Commission after due notice and hearing
- (9) The results of each well's test and other data needed to determine the allocation for each well shall be filed with the Director at the same time monthly oil production reports are filed.
- (10) Samson shall notify the Director in writing upon commencement of commingling production from the subject wells into the Bakke-Bakke-Gjovig Central Tank Battery.
  - (11) Authorization to commingle is transferable only with approval of the Director.
- (12) The Director is hereby authorized to rescind this order if Samson, its assigns or successors, fails to comply with any of the above provisions.
  - (13) This order shall remain in full force and effect until further order of the Commission.

Dated this 30th day of April, 2014.

INDUSTRIAL COMMISSION STATE OF NORTH DAKOTA

By the Director, on behalf of the Commission

/s/ Lynn D. Helms, Director