

BEFORE THE INDUSTRIAL COMMISSION  
OF THE STATE OF NORTH DAKOTA

CASE NO. 25583  
ORDER NO. 27991

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF SM ENERGY CO. PURSUANT TO NDAC § 43-02-03-88.1 FOR AN ORDER ALLOWING OIL AND GAS PRODUCED FROM THE HAUGE 13-21H (FILE NO. 20668), WATERS 4-28H (FILE NO. 20525), WATERS 3-28HN (FILE NO. 28835), WATERS 3-28HS (FILE NO. 28836), WATERS 3B-28HN (FILE NO. 28834), WATERS 3B-28HS (FILE NO. 28833), BELLA 4B-28HS (FILE NO. 32237), AND WILLIAM 4B-28HN (FILE NO. 32236) WELLS, SECTIONS 16, 21, 28 AND 33, T.163N., R.99W., DIVIDE COUNTY, ND, TO BE COMMINGLED IN A CENTRAL PRODUCTION FACILITY LOCATED IN SECTION 21, T.163N., R.99W., PURSUANT TO NDAC § 43-02-03-48.1 OR GRANTING SUCH OTHER AND FURTHER RELIEF AS MAY BE APPROPRIATE.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 22nd day of February, 2017.
- (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) SM Energy Company (SM Energy) is the operator of the following wells in the Ambrose Field, Divide County, North Dakota:

<u>File No.</u>	<u>Well Name &amp; No.</u>	<u>Location</u>
20668	Hauge 13-21H	SWSW Section 21-T163N-R99W
20525	Waters 4-28H	NWNW Section 28-T163N-R99W
28835	Waters 3-28HN	NENW Section 28-T163N-R99W

<u>File No.</u>	<u>Well Name &amp; No.</u>	<u>Location</u>
28836	Waters 3-28HS	NENW Section 28-T163N-R99W
28834	Waters 3B-28HN	NENW Section 28-T163N-R99W
28833	Waters 3B-28HS	NENW Section 28-T163N-R99W
32237	Bella 4B-28HS	NWNW Section 28-T163N-R99W
32236	William 4B-28HN	NWNW Section 28-T163N-R99W

(4) SM Energy requests permission to commingle the production from the wells listed in paragraph (3) in the Hauge 13-21H CTB (CTB No. 220668-01) located in the NW/4 NW/4 of Section 28, 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 Hauge 13-21H Central Tank Battery.

(5) SM Energy 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) SM Energy states that the ownership in the wells listed in paragraph (3) above is diverse.

(7) SM Energy 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, central production facility, treating plant, or saltwater handling 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] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter]."

(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) SM Energy 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) SM Energy Company, its assigns and successors, is hereby permitted to commingle production from the wells listed in paragraph (3) below into the Hauge 13-21H CTB (CTB No. 220668-01) located in the NW/4 NW/4 of Section 28, 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.

(3) The following wells are authorized to be commingled in the Hauge 13-21H CTB:

<u>File No.</u>	<u>Well Name &amp; No.</u>	<u>Location</u>	<u>Order No.</u>
20668	Hauge 13-21H	SWSW Section 21-T163N-R99W	27991
20525	Waters 4-28H	NWNW Section 28-T163N-R99W	27991
28835	Waters 3-28HN	NENW Section 28-T163N-R99W	27991
28836	Waters 3-28HS	NENW Section 28-T163N-R99W	27991
28834	Waters 3B-28HN	NENW Section 28-T163N-R99W	27991
28833	Waters 3B-28HS	NENW Section 28-T163N-R99W	27991
32237	Bella 4B-28HS	NWNW Section 28-T163N-R99W	27991
32236	William 4B-28HN	NWNW Section 28-T163N-R99W	27991

(4) The permission granted herein is conditioned upon SM Energy 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 Hauge 13-21H CTB.

(5) SM Energy shall use the following procedures for allocating production to each well commingled in the Hauge 13-21H CTB:

- (a) Production from each well shall be isolated to allow production to stabilize before commingling can begin.
- (b) Each well shall be tested a minimum of three consecutive days per month.
- (c) The exact producing time, between the opening and closing inventory, shall be considered when determining the average well test rate for each well.
- (d) Each well's tests shall be averaged for the month.
- (e) Downtime shall be monitored to determine the exact total number of producing hours for each well.
- (f) A monthly production volume shall be calculated for each well as follows:

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

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

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

- (g) The calculated monthly production volumes shall be totaled for all the wells producing into the central production facility to determine the total calculated monthly volumes for the central production facility.
  - (h) A correction factor shall be calculated by dividing the total actual monthly production volumes for the central production facility by the total calculated monthly production volumes for the central production facility.
  - (i) 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 (h).
- (6) If gas is sold from the central production facility, the gas volumes must be accurately allocated back to the individual wells.
- (7) The following procedures shall be used for allocating gas sales from the vapor recovery unit (VRU) to each individual well:
- (a) The gas volume exiting the VRU shall be allocated to each individual well based upon the oil produced by each respective well.
  - (b) An allocation percentage for each well shall be calculated by dividing the monthly oil produced from the respective well, by the total monthly oil produced through the Hauge 13-21H CTB. The monthly gas sales allocation for each well shall be determined by multiplying the total gas sales exiting the VRU by the respective well's allocation percentage.
  - (c) Allocation percentages shall be determined monthly.
- (8) 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 production from a new well has stabilized and/or that a reasonably accurate allocation of production to each separate well producing into the facility will be obtained.
- (9) Additional wells can only be added to the Hauge 13-21H CTB by order of the Commission after due notice and hearing.
- (10) 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.

(11) SM Energy shall notify the Director in writing upon commencement of commingling production from the subject wells into the central production facility.

(12) Authorization to commingle is transferable only with approval of the Director.

(13) The Director is hereby authorized to rescind this order if SM Energy, its assigns or successors, fails to comply with any of the above provisions.

(14) This order shall remain in full force and effect until further order of the Commission.

Dated this 6th day of March, 2017.

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

By the Director, on behalf of the Commission

/s/ Lynn D. Helms, Director