



**INCINERATOR AND FLARE STACK SULFUR DIOXIDE  
ANNUAL EMISSION INVENTORY REPORT - NATURAL GAS PROCESSING PLANTS**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 50596 (11-10)

**GENERAL**

|                              |                          |                           |          |
|------------------------------|--------------------------|---------------------------|----------|
| Name of Firm or Organization | Permit to Operate Number | Year of Emissions         |          |
| Mailing Address              | City                     | State                     | Zip Code |
| Facility Name                | Facility Location        | Actual Hours of Operation |          |

**OPERATIONAL DATA**

| Component                | Quantity        |
|--------------------------|-----------------|
| INLET (WET) GAS RECEIVED | Million Cu. Ft. |
| NATURAL GAS PRODUCED     | Million Cu. Ft. |
| SULFUR RECOVERED         | Long Tons       |

**INCINERATOR/FLARE DATA**

| Gas Type               | Quantity<br>(Million Cu. Ft.) | Average H <sub>2</sub> S Mole % | Flare or Incineration<br>Duration (Hours) |
|------------------------|-------------------------------|---------------------------------|---|
| TAIL GAS INCINERATED   |                               |                                 |   |
| ACID GAS FLARED        |                               |                                 |   |
| INLET (WET) GAS FLARED |                               |                                 |   |

**SULFUR DIOXIDE EMISSIONS**

| Emission Point   | Pounds Per Hour<br>(Average) | Tons* |
|--|------------------------------|-------|
| INCINERATOR STACK  |                              |       |
| ACID GAS FLARE STACK   |                              |       |
| INLET (WET) GAS FLARE STACK  |                              |       |
| * SO <sub>2</sub> emissions may be calculated with the following equation: |                              | TOTAL |

$$Tons SO_2 = \frac{Ft^3 Gas Burned}{Year} \times \frac{H_2S \text{ mole } \%}{100} \times \frac{1 \text{ lb mole } SO_2}{1 \text{ lb mole } H_2S} \times \frac{1 \text{ lb mole } H_2S}{385.3 \text{ ft}^3 **} \times \frac{64 \text{ lb } SO_2}{1 \text{ lb mole } SO_2} \times \frac{1 \text{ ton}}{2000 \text{ lb}}$$

Provide additional calculations on back or additional sheets as necessary.

\*\* 68°F at standard conditions.

I declare under the penalties of perjury that this report has been examined by me and to the best of my knowledge is a true, correct and complete report.

|  |                  |       |
|--|------------------|-------|
| Print Name of Person Submitting Report | Title            | Email |
| Signature                              | Telephone Number | Date  |

Return completed form to:  
North Dakota Department of Health  
Division of Air Quality  
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Bismarck, ND 58501-1947  
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