



**REGISTRATION FOR
OIL/GAS PRODUCTION FACILITY**
NORTH DAKOTA DEPARTMENT OF HEALTH
DIVISION OF AIR QUALITY
SFN 14334 (10-13)

SECTION A – GENERAL INFORMATION

Type of Report <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Amended		Well Status <input checked="" type="checkbox"/> Initial Completion <input type="checkbox"/> Recompletion	
Wells Primary Production Intent is for: <input checked="" type="checkbox"/> Oil Production <input type="checkbox"/> Gas Production			
Name of Owner/Operator Rebel Oil & Gas Co			
Applicant's Name Luke Skywalker			
Title Environmental Engineer		Telephone Number (001) 555-1234	E-mail Address Luke.Skywalker@rebaloil.com
Mailing Address (Street & No.) 1401 Tatooine Way, Suite B			
City Mos Esley		State ND	ZIP Code 58410
Contact Person for Air Pollution Matters Han Solo			
Title Environmental Scientist		Telephone Number (001) 555-5438	E-mail Address Han.Solo@rebaloil.com

SECTION B – FACILITY DATA

Well Name Hoth 13-15TFH		
Producing Pool* Bakken		Field Name Sanish
NDIC Permit Number 21680		Date of Completion/Recompletion 5/15/14
County Williams	Latitude (Nearest Second) 48.185483	Longitude (Nearest Second) -102.18573
Legal Description of Facility Site NW <u> </u> 1/4 NW <u> </u> 1/4 <u> </u> Section <u>151N</u> Twp. <u> </u> Range		
List the NDIC Permit Numbers for other wells on the site: 16834, 18990, 23498		Have all wells onsite been evaluated for emissions? ● Yes ○ No
Do the total emissions of all wells onsite exceed Title V thresholds? ○ Yes ● No - If "Yes", further permitting is required by the Department		

* If the Producing Pool is from the Bakken, Three Forks, Sanish, or Pronghorn formations, attach additional emission documentation. For more information about these requirements, see the Department website at <http://www.ndhealth.gov/AQ/NewGuidanceOilandGasPro.htm> .

SECTION B – FACILITY DATA – Cont.

Location of Treater <input checked="" type="checkbox"/> Onsite <input type="checkbox"/> At Central Tank Battery, Specify Location*: _____ ¼ _____ ¼ _____ Section _____ Twp. _____ Range			
Location of Storage Tanks <input checked="" type="checkbox"/> Onsite <input type="checkbox"/> At Central Tank Battery, Specify Location*: _____ ¼ _____ ¼ _____ Section _____ Twp. _____ Range			
Location of Flare <input checked="" type="checkbox"/> Onsite <input type="checkbox"/> At Central Tank Battery, Specify Location*: _____ ¼ _____ ¼ _____ Section _____ Twp. _____ Range			
Other air pollution generating equipment (e.g., Internal Combustion Engines @ x HP; Compressors; Generators, etc., whose collective HP rating exceeds 500 HP). Specify: None			

* Emissions for the entire facility must be included in the section titled "EMISSIONS". Include well name and file number in the section titled "COMMENTS" on any additional well(s) using the central tank battery.

SECTION C – GAS INFORMATION

Gas/Oil Ratio (cf/bbl) 335.5	Date of GOR March 2015-May 2015
H ₂ S Content in Gas – ATTACH GAS ANALYSIS – ppm or mole % (1% = 10,000 ppm) 0.000	
Disposition of Gas (check all that apply) <input type="checkbox"/> Flared - Estimated amount _____ Mcf/day <input checked="" type="checkbox"/> Sold to <u>Jabba Midstream Services, LLC</u> <input type="checkbox"/> Used on Lease - Estimated amount _____ Mcf/day <input type="checkbox"/> Currently Flared - Scheduled to be Tied-in: To _____ By _____	

SECTION D – EQUIPMENT

Flare			
Emergency Flare System <input checked="" type="checkbox"/> Equipped with Automatic Ignitor Flare Stack Height Above Ground (ft) <u>12</u>		<input checked="" type="checkbox"/> Equipped with Continuous Pilot Specify pilot fuel: <u>Produced Gas</u>	
Storage Tanks			
Number of Saltwater Tanks 3	Number of Oil Tanks 10	Estimate Total Amount of Gas Generated from all Storage Tanks	
Capacity of Each 400bbl	Capacity of Each 400bbl	Mcf/day 38.25	ppm H ₂ S Negligible
All tank gas emissions are: <input type="checkbox"/> Burned by Treater (Include amount of SO ₂ produced in "EMISSIONS" section) <input type="checkbox"/> Burned by Flare (Include amount of SO ₂ produced in "EMISSIONS" section) <input checked="" type="checkbox"/> Burned by Flare with ≥95% DRE (Include amount of SO ₂ produced in "EMISSIONS" section) <input type="checkbox"/> Burned by Enclosed Flare with ≥95% DRE (Include amount of SO ₂ produced in "EMISSIONS" section) <input type="checkbox"/> Burned by Combustor with ≥95% DRE (Include amount of SO ₂ produced in "EMISSIONS" section) <input type="checkbox"/> Controlled by Vapor Recovery Unit <input type="checkbox"/> Vented to Atmosphere <input type="checkbox"/> Other - Specify:			
Treater			
Treater Fuel Produced Gas		ppm H ₂ S (if Sour) Negligible	Treater Stack Height Above Ground (ft) 28

SECTION E – EMISSIONS

Annual Total S Emissions (Note: Registration must be submitted for all facilities completed/recompleted after 7/1/87 or facilities completed/recompleted before 7/1/87 where Total S is 10 tons/year or greater).

$$S = (\text{Flared} + \text{Lease Use} + \text{Vented}) \times (\text{mole}\% \text{H}_2\text{S}) \times (365 \text{ Days}) \times (0.00042)$$

Mcf/Day	x	%H ₂ S	x	Days/Year	x	0.00042	=	Tons/Year (total S)*
53.73		0		365				0

Annual Total SO₂ Emissions (Note: This calculation is necessary to determine if prevention of significant deterioration (PSD) or Title V permitting is required).

$$\text{SO}_2 = (\text{Flared} + \text{Lease Use} + \text{Vented}) \times (\text{mole}\% \text{H}_2\text{S}) \times (\text{Days of operation/year}) \times (0.00084)$$

Mcf/Day	x	%H ₂ S	x	Days/Year	x	0.00084	=	Tons/Year (total S)*
53.73		0		365				0

*If SO₂ ≥ 100 tons/year, additional permitting is required.

Annual total VOC emissions – select controlled or uncontrolled. Select uncontrolled if no equipment for controlling emissions is installed.

VOC Emissions: 26.24 Tons/Year Controlled Uncontrolled

Note: Check the following box and initial if the company can demonstrate that the VOC emissions on site are less than 6 tons per year per tank (should be supported by established calculations).

Confirmed. Company is keeping readily available records (retained for at least 5 years) that show each individual tank on site has less than 6 tpy VOC emissions. Initials LS

Annual total greenhouse gas emissions (CO₂e) – select controlled or uncontrolled. Select uncontrolled if no equipment for controlling emissions is installed.

CO₂e Emissions - Controlled: 3,142 Tons/Year Uncontrolled: N/A Tons/Year

SECTION F – COMMENTS

Process Description:

Average daily production from the 1st 30 days is 589.48 bpd of crude and 521.24 Mscfd of nat. gas. Based on Bakken guidance decline factor of 0.6 estimated annual production is 548.49bpd and 498.15 Mscfd nat. gas.

Oil is collected into the ten 400bbl tanks then sent through a sales LACT or trucked as needed. Produced water is stored in the 400bbl fiberglass tanks and trucked offsite as needed.

Fuel gas is used to run the heater treaters. One engineered flare is onsite to control tank emissions and any gas should it not be able to connect to sales line.

Regulatory:

NSPS Kb--not subject, tanks are prior to custody transfer.

NSPS OOOO--may apply, and site will comply as required, tanks vents controlled with flare.

NSPS Dc--not subject, no dehydration unit on site.

MACT HH--not subject, no dehydration unit on site.

Title V and PSD--current emissions form production have a PTE less than 100tpy for criteria pollutant, less than 25tpy for all HAPs, and less than 10tpy for any single HAP. If production increases to major source levels Rebel Oil will submit an application for Title V permit.

Total Emissions:

Combined emissions from all wells onsite are 87tpy VOCs 36tpy NOx, 34tpy CO, 10tpy SO2, 12tpy PM, and 3tpy HAPs.

Certification of Truth, Accuracy and Completeness

As an authorized company representative, I certify that to the best of my knowledge the information contained in this Registration for Oil/Gas Production Facility form and additional sheets is true, accurate and complete.

Signature of Applicant 	Date 5/15/15
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-An analysis of any gas produced from the well must be submitted with this form for each well that is registered.

-Effective January 1, 2013 a filing fee of one hundred fifty dollars (\$150.00) per well must be submitted with each completed Registration for Oil/Gas Production Facility form.

SEND COMPLETED APPLICATION AND ALL ATTACHMENTS TO:

North Dakota Department of Health
Division of Air Quality
918 E Divide Ave., 2nd Floor
Bismarck, ND 58501-1947
(701) 328-5188