

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE	ET	OE	ES
Document Number: 400562122			
Date Received: 02/26/2014			

SUNDRY NOTICE

Submit a signed original. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full in Comments or provide as an attachment. Identify Well by API Number; identify Oil and Gas Location by Location ID Number; identify other Facility by Facility ID Number.

OGCC Operator Number: 100185 Contact Name Erin Lind
 Name of Operator: ENCANA OIL & GAS (USA) INC Phone: (720) 876-5827
 Address: 370 17TH ST STE 1700 Fax: ()
 City: DENVER State: CO Zip: 80202-5632 Email: erin.lind@encana.com

Complete the Attachment
Checklist

OP OGCC

API Number : 05- 123 00 OGCC Facility ID Number: 434300
 Well/Facility Name: Edith Ann-Duckworth Well/Facility Number: 21H-O268
 Location QtrQtr: SWSE Section: 21 Township: 2N Range: 68W Meridian: 6
 County: WELD Field Name: _____
 Federal, Indian or State Lease Number: _____

Survey Plat		
Directional Survey		
Srvc Eqpmt Diagram		
Technical Info Page		
Other		

CHANGE OF LOCATION OR AS BUILT GPS REPORT

☐ Change of Location * ☐ As-Built GPS Location Report ☐ As-Built GPS Location Report with Survey

* Well location change requires new plat. A substantive surface location change may require new Form 2A.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude _____ PDOP Reading _____ Date of Measurement _____
 Longitude _____ GPS Instrument Operator's Name _____

LOCATION CHANGE (all measurements in Feet)

Well will be: _____ (Vertical, Directional, Horizontal)

Change of **Surface** Footage **From** Exterior Section Lines:

Change of **Surface** Footage **To** Exterior Section Lines:

Current **Surface** Location **From** QtrQtr SWSE Sec 21

New **Surface** Location **To** QtrQtr _____ Sec _____

Change of **Top of Productive Zone** Footage **From** Exterior Section Lines:

Change of **Top of Productive Zone** Footage **To** Exterior Section Lines:

Current **Top of Productive Zone** Location **From** Sec _____

New **Top of Productive Zone** Location **To** Sec _____

Change of **Bottomhole** Footage **From** Exterior Section Lines:

Change of **Bottomhole** Footage **To** Exterior Section Lines:

Current **Bottomhole** Location Sec _____ Twp _____

New **Bottomhole** Location Sec _____ Twp _____

Is location in High Density Area? _____

Distance, in feet, to nearest building _____, public road: _____, above ground utility: _____, railroad: _____,

property line: _____, lease line: _____, well in same formation: _____

Ground Elevation _____ feet Surface owner consultation date _____

FNL/FSL		FEL/FWL	
264	FSL	1336	FEL
Twp <u>2N</u>	Range <u>68W</u>	Meridian <u>6</u>	
Twp _____	Range _____	Meridian _____	
			**
Twp _____	Range _____		
Twp _____	Range _____		
			**

** attach deviated drilling plan

OTHER CHANGES

☐ **REMOVE FROM SURFACE BOND** Signed surface use agreement is a required attachment

☐ **CHANGE OF WELL, FACILITY OR OIL & GAS LOCATION NAME OR NUMBER**

From: Name EDITH ANN-DUCKWORTH Number 21H-O268 Effective Date: _____

To: Name _____ Number _____

☐ **ABANDON PERMIT: Permit can only be abandoned if the permitted operation has NOT been conducted. Field inspection will be conducted to verify site status.**

☐ WELL: Abandon Application for Permit-to-Drill (Form2) – Well API Number _____ has not been drilled.

☐ PIT: Abandon Earthen Pit Permit (Form 15) – COGCC Pit Facility ID Number _____ has not been constructed (Permitted and constructed pit requires closure per Rule 905)

☐ CENTRALIZED E&P WASTE MANAGEMENT FACILITY: Abandon Centralized E&P Waste Management Facility Permit (Form 28) – Facility ID Number _____ has not been constructed (Constructed facility requires closure per Rule 908)

OIL & GAS LOCATION ID Number: _____

☐ Abandon Oil & Gas Location Assessment (Form 2A) – Location has not been constructed and site will not be used in the future.

☐ Keep Oil & Gas Location Assessment (Form 2A) active until expiration date. This site will be used in the future.

Surface disturbance from Oil and Gas Operations must be reclaimed per Rule 1003 and Rule 1004.

☐ **REQUEST FOR CONFIDENTIAL STATUS**

☐ **DIGITAL WELL LOG UPLOAD**

☐ **DOCUMENTS SUBMITTED** Purpose of Submission: _____

RECLAMATION

INTERIM RECLAMATION

☐ Interim Reclamation will commence approximately _____

Per Rule 1003.e.(3) operator shall submit Sundry Notice reporting interim reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

☐ Interim reclamation complete, site ready for inspection. Per Rule 1003.e(3) describe interim reclamation procedure in Comments below or provide as an attachment and attach required location photographs.

Field inspection will be conducted to document Rule 1003.e. compliance

FINAL RECLAMATION

☐ Final Reclamation will commence approximately _____

Per Rule 1004.c.(4) operator shall submit Sundry Notice reporting final reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

☐ Final reclamation complete, site ready for inspection. Per Rule 1004.c(4) describe final reclamation procedure in Comments below or provide as an attachment.

Field inspection will be conducted to document Rule 1004.c. compliance

Comments:

ENGINEERING AND ENVIRONMENTAL WORK

☐ NOTICE OF CONTINUED TEMPORARILY ABANDONED STATUS

Indicate why the well is temporarily abandoned and describe future plans for utilization in the COMMENTS box below or provide as an attachment, as required by Rule 319.b.(3).

Date well temporarily abandoned _____ Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required if shut in longer than 2 years. Date of last MIT _____

☐ SPUD DATE: _____

TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

☒ NOTICE OF INTENT Approximate Start Date 03/17/2014

☐ REPORT OF WORK DONE Date Work Completed _____

- | | | |
|---|---|--|
| <input type="checkbox"/> Intent to Recomplete (Form 2 also required) | <input type="checkbox"/> Request to Vent or Flare | <input type="checkbox"/> E&P Waste Management Plan |
| <input type="checkbox"/> Change Drilling Plan | <input type="checkbox"/> Repair Well | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Change | <input type="checkbox"/> Rule 502 variance requested. Must provide detailed info regarding request. | |
| <input checked="" type="checkbox"/> Other <u>Use of Oil Based Mud</u> | <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases | |

COMMENTS:

After careful consideration, torque and drag modeling, solids control analysis and offset steering / mitigation concerns, it was determined that utilizing synthetic oil based mud (OBM) for the extended length laterals on this pad proves to be the most cost effective and productive for drilling operations. Although water based mud (WBM) has proved effective in the DJ Basin up to 7500' of vertical section, operators have struggled with buckling / torque / drag and low gravity solids control, beyond section and a half laterals.

The Surface, intermediate, and curve sections will be batch drilled with WBM to 7" casing point and cemented in place. Upon completion of the intermediate/curves, the drilling fluids system will be changed out to synthetic based oil mud. The entire rig footprint will have secondary containment (liner) to prevent any spills or environmental concerns. The "holding bins" will be changed with "lined top loaded bins" (roll offs) from either Waste Management or Waste Connections and replaced with new bins as needed.

Drilling fluids Plan for Edith Ann-Duckworth wells will be as follows:

Surface: Drill to permitted TD utilizing fresh water with high vis / weighted sweeps to clean the hole.

Intermediate / curve: Begin section with fresh water utilizing high vis / weighted sweeps to clean the hole. Mud up with water based LSND mud 500' above the expected T.P. Buttes. Increase weight as required for well control and maintain mud properties according to drilling plan.

Lateral: Utilize Synthetic Oil Based mud to drill section to planned / permitted total depth.

WBM Disposal:

Disposal of WBM cuttings will continue under current Encana operating procedures. Cuttings caught in low sided bin (off of shakers), mixed with mulch and transferred to holding bin. Cuttings are then loaded out and taken to approved land spread facility.

Disposal of OBM cuttings will be as follows:

Cuttings caught in low sided bin (off of drying shakers), and transferred to lined holding bin supplied by Waste Management or Waste Connections. Cuttings will be hauled to either Buffalo Ridge or Front Range Landfill where they will be disposed of according to regulations.

Under NO circumstances will OBM Cuttings be land spread. All OBM cuttings will be contained, hauled, and disposed of only by approved service providers.

H2S REPORTING

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

Gas Analysis Report must be attached.

H2S Concentration: _____ in ppm (parts per million)

Date of Measurement or Sample Collection _____

Description of Sample Point:

Absolute Open Flow Potential _____ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: _____

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: _____

COMMENTS:

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

Operator Comments:

The purpose of this sundry is to add the use of oil based mud in addition to water based mud during our drilling operations.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Erin Lind
Title: Permitting Analyst Email: erin.lind@encana.com Date: 2/26/2014

Based on the information provided herein, this Sundry Notice (Form 4) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: YOUNG, ROB Date: 3/3/2014

CONDITIONS OF APPROVAL, IF ANY:**COA Type****Description**

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General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Reviewed 3/3/2014.	3/3/2014 1:20:34 PM
Engineer	Called operator to see if this applies to all 8 wells on pad. Answer is yes.	2/26/2014 1:04:10 PM

Total: 2 comment(s)

Attachment Check List**Att Doc Num****Name**

400562122	FORM 4 SUBMITTED
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Total Attach: 1 Files