

State of Colorado
Oil and Gas Conservation Commission

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DE	ET	OE	ES
Document Number: <u>402499416</u>			
Date Received: <u>09/29/2020</u>			

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: 10459 Contact Name Philip Antonioli						Complete the Attachment Checklist OP OGCC		
Name of Operator: EXTRACTION OIL & GAS INC Phone: (720) 354-4603								
Address: 370 17TH STREET SUITE 5300 Fax: ()								
City: DENVER State: CO Zip: 80202 Email: PAntonioli@extractionog.com								
API Number : 05- 013 06069 00 OGCC Facility ID Number: 206574						Survey Plat		
Well/Facility Name: GRAHAM Well/Facility Number: 2-22						Directional Survey		
Location QtrQtr: SWNW Section: 22 Township: 1N Range: 69W Meridian: 6						Srfc Eqpmnt Diagram		
County: BOULDER Field Name: WATTENBERG						Technical Info Page		
Federal, Indian or State Lease Number:						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 _____ GPS Quality Value: _____ Type of GPS Quality Value: _____ Measurement Date: _____
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 **SWNW** Sec **22**

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	
1980	FNL	660	FWL
Twp	1N	Range	69W
Twp		Range	
			**
Twp		Range	
Twp		Range	
			**
Range		** attach deviated drilling plan	
Range			

** attach deviated drilling plan

CHANGE OR ADD OBJECTIVE FORMATION AND/OR SPACING UNIT

<u>Objective Formation</u>	<u>Formation Code</u>	<u>Spacing Order Number</u>	<u>Unit Acreage</u>	<u>Unit Configuration</u>

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 GRAHAM Number 2-22 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 (Form 2) – 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 11/02/2020

☐ 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 Mangement 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>Bradenhead Mitigation</u> | <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases | |

COMMENTS:

The sundry approved 7/16/2020 for a blowdown mitigation strategy (DOC#: 402376340) stated an approximate start date of 3/11/20 with six months of consecutive blowdowns approved. Extraction began blowdowns 3/18/2020 and closed out the blowdown mitigation strategy with the Form 17 dated 9/17/2020. Attached are the results of the blowdown mitigation strategy. The blowdown mitigation strategy was unable to successfully mitigate the bradenhead pressure below 50psi.

Pressure and flow rate data were collected during the blowdown process and showed a flowrate of 27.03 MSCF/D and a volume of 0.3036 MSCF. Additionally, a bradenhead and production gas sample were taken for comparison. The bradenhead gas sample is 87.76 MOL % Methane. Further analysis shows that the bradenhead gas sample is a mixture of microbial and thermogenic gas. When compared to the production gas sample taken the bradenhead gas sample is not as thermally mature as the production gas sample taken from the J-Sand-Codell-Niobrara completed intervals. This indicates the bradenhead gas is sourced from a shallower formation in the well.

To comply with the operator guidance Extraction requests to route the bradenhead gas to a combustion device at the facility utilizing the existing flowline to maintain bradenhead pressure below the 50psi threshold.

CASING AND CEMENTING CHANGES

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:

Bradenhead Pressure Mitigation Follow-Up and Proposed Additional Mitigation

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

Signed: _____ Print Name: Philip Antonioli
 Title: Production Engineer Email: PAntonioli@extractionog.com Date: 9/29/2020

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

COGCC Approved: Jacobson, Eric Date: 10/1/2020

CONDITIONS OF APPROVAL, IF ANY:

<u>COA Type</u>	<u>Description</u>
	<p>1. Operator shall implement measures to control venting, to protect health and safety, and to ensure that vapors and odors from well operations do not constitute a nuisance or hazard to public welfare.</p> <p>2. Bradenhead gas is not to be vented to the atmosphere; any gas from the Bradenhead will be routed to an enclosed tank and/or combustor. Shut in bradenhead pressure shall not exceed 50 psig. Operator shall implement measures to get an estimate of the gas flow rate and/or volume from the bradenhead.</p> <p>3. Within thirty days of 09/17/2021 , submit a Form 4 Sundry that summarizes current well condition. The sundry should include details of the future plans, sample analysis interpretation, bradenhead test description, and the flow rate information and pressure data.</p> <p>4. If a sample has not been collected from surface casing within the last twelve months collect bradenhead gas samples for laboratory analysis. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions, Appendix A: Liquid and Gas Sampling. Copies of all final laboratory analytical results shall be provided to the COGCC within three months of collecting the samples.</p>

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Bradenhead test date 09/17/2020 had 137 psig and flowed gas to the surface.	10/01/2020

Total: 1 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
402499416	SUNDRY NOTICE APPROVED-OTHER
402499428	OTHER
402501130	FORM 4 SUBMITTED

Total Attach: 3 Files