

**State of Colorado
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
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DE	ET	OE	ES
Document Number: <u>402854747</u>			
Date Received:			

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: 10110 Contact Name Linsey Jones
 Name of Operator: GREAT WESTERN OPERATING COMPANY LLC Phone: (720) 595-2218
 Address: 1001 17TH STREET #2000 Fax: ()
 City: DENVER State: CO Zip: 80202 Email: Ljones@gwp.com

FORM 4 SUBMITTED FOR:

Facility Type: WELL
 API Number : 05-0011019500 ID Number: 457464
 Name: Seltzer LD Number: 09-371HN
 Location QtrQtr: NWNE Section: 4 Township: 1S Range: 67W Meridian: 6
 County: ADAMS Field Name: WATTENBERG

Oil & Gas Location(s) and Oil & Gas Development Plan (OGDP) Information

Location(s)

Location ID	Location Name and Number
320515	Seltzer LD Pad

OGDP(s)

No OGDP

WELL LOCATION CHANGE OR AS-BUILT GPS REPORT

Change of Location for Well * As-Built GPS Location Report As-Built GPS Location Report with Survey

* Well Location Change requires a new Plat.

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

Latitude 39.998990 Longitude -104.892671
 GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Measurement Date: 04/19/2018
 Well Ground Elevation: 5140 feet (Required for change of Surface Location.)

WELL LOCATION CHANGE

Well plan is: HORIZONTAL (Vertical, Directional, Horizontal)

Change of **Surface Footage From:**

Change of **Surface Footage To:**

		FNL/FSL		FEL/FWL	
Current Surface Location From	QtrQtr <u>NWNE</u>	Sec <u>4</u>	Twp <u>1S</u>	Range <u>67W</u>	Meridian <u>6</u>
New Surface Location To	QtrQtr <u>NWNE</u>	Sec <u>4</u>	Twp <u>1S</u>	Range <u>67W</u>	Meridian <u>6</u>

Change of **Top of Productive Zone** Footage **From:**

460 FNL

2600 FWL

Change of **Top of Productive Zone** Footage **To:**

460 FNL

2300 FWL

**

Current **Top of Productive Zone** Location

Sec 4

Twp 1S

Range 67W

New **Top of Productive Zone** Location

Sec 4

Twp 1S

Range 67W

Change of **Base of Productive Zone** Footage **From:**

FNL

FWL

Change of **Base of Productive Zone** Footage **To:**

470 FSL

2300 FWL

**

Current **Base of Productive Zone** Location

Sec

Twp

Range

New **Base of Productive Zone** Location

Sec 9

Twp 1S

Range 67W

Change of **Bottomhole** Footage **From:**

370 FSL

2600 FWL

Change of **Bottomhole** Footage **To:**

370 FSL

2300 FWL

**

Current **Bottomhole** Location

Sec 9

Twp 1S

Range 67W

** attach deviated drilling plan

New **Bottomhole** Location

Sec 9

Twp 1S

Range 67W

SAFETY SETBACK INFORMATION

Required for change of Surface Location.

Distance from Well to nearest:

Building: 1729 Feet
 Building Unit: 1064 Feet
 Public Road: 486 Feet
 Above Ground Utility: 471 Feet
 Railroad: 5280 Feet
 Property Line: 335 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit – as defined in 100 Series Rules.

SUBSURFACE MINERAL SETBACKS

Required for change of Top and/or Base of Productive Zone. Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 460 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 218 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

LOCATION CHANGE COMMENTS

This was spud 4/10/2020. SHL has changed by one foot (now 2320' FEL). Top of productive zone, bottom of productive zone, and BHL are changing.

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, as required by Rule 434.b.(3).

Date well temporarily abandoned _____
 Has Production Equipment been removed from site? _____
 Mechanical Integrity Test (MIT) required. Date of last MIT _____

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/REQUEST FOR APPROVAL Approximate Start Date 11/04/2021
 SUBSEQUENT REPORT Date of Activity _____

- | | | |
|---|--|--|
| <input type="checkbox"/> Bradenhead Plan | <input type="checkbox"/> Venting or Flaring (Rule 903) | <input type="checkbox"/> E&P Waste Mangement |
| <input checked="" 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"/> Underground Injection Control | | |
| <input type="checkbox"/> Request approval of Reuse and Recycling Plan per Rule 905.a.(3). (Reuse and Recycling Plan must be attached.) | | |
| <input type="checkbox"/> Request approval of Alternative Sampling Plan per Rule 909.j.(6). for this Pit. (Alternative Sampling Program must be attached.) | | |
| <input type="checkbox"/> Other | | |

Request that an existing produced water sample from the same formation be used per Rule 909.j.(6) to meet the requirements of Rule 909.j.(1)-(5) for this Well.

Pit ID _____ Pit Name _____
 (No Sample Provided)

Subsequent well operations with heavy equipment (Rule 312)
 (No Well Provided)

COMMENTS:

Top of productive zone, bottom of productive zone, and BHL are changing as well as proposed total depth. Updated well location plat, deviated drilling plan, directional data template, and offset well evaluation are attached.

CASING PROGRAM

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
SURF	13+1/2	9+5/8	J55	36	0	2026	930	2026	0
1ST	8+1/2	5+1/2	HCP110	17	0	17841	2246	17841	0

POTENTIAL FLOW AND CONFINING FORMATIONS

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	Fox Hills	698	698	1003	1003	501-1000	USGS	WSP 2302
Confining Layer	Pierre	1003	1003	1277	1277			
Groundwater	Upper Pierre Aquifer	1277	1277	2160	2159	1001-10000	WQCC	COGCC Report, Paper 2141
Confining Layer	Pierre	2160	2159	4444	4443			
Hydrocarbon	Parkman	4444	4443	4684	4683			
Confining Layer	Pierre	4684	4683	4851	4850			
Hydrocarbon	Sussex	4851	4850	5092	5090			
Confining Layer	Pierre	5092	5090	5478	5465			
Hydrocarbon	Shannon	5478	5465	5656	5630			
Confining Layer	Pierre	5656	5630	7564	7331			
Confining Layer	Sharon Springs	7564	7331	7723	7456			
Hydrocarbon	Niobrara	7723	7456	17841	7688			The TVD of the deepest hydrocarbon zone is the bottom of the well and not the bottom of the formation. The formation is not planned to be exited.

H2S REPORTING

- Intentional release of H2S gas due to Upset Condition or malfunction.
- Intent to temporarily abandon well with potential H2S concentration >100 ppm.

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:

OIL & GAS LOCATION UPDATES

OGDP ID _____ OGDP Name _____

SITE EQUIPMENT LIST UPDATES

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells _____	Oil Tanks _____	Condensate Tanks _____	Water Tanks _____	Buried Produced Water Vaults _____
Drilling Pits _____	Production Pits _____	Special Purpose Pits _____	Multi-Well Pits _____	Modular Large Volume Tank _____
Pump Jacks _____	Separators _____	Injection Pumps _____	Heater-Treaters _____	Gas Compressors _____
Gas or Diesel Motors _____	Electric Motors _____	Electric Generators _____	Fuel Tanks _____	LACT Unit _____
Dehydrator Units _____	Vapor Recovery Unit _____	VOC Combustor _____	Flare _____	Enclosed Combustion Devices _____
Meter/Sales Building _____	Pigging Station _____	Vapor Recovery Towers _____		

OTHER PERMANENT EQUIPMENT UPDATES

OTHER TEMPORARY EQUIPMENT UPDATES

CULTURAL AND SAFETY SETBACK UPDATES

OTHER LOCATION CHANGES AND UPDATES

Provide a description of other changes or updates to technical information for this Location:

POTENTIAL OGDP UPDATES

PROPOSED CHANGES TO AN APPROVED OGDP

This Sundry Form 4 is being submitted pursuant to Rule 301.c to propose changes to an approved Oil and Gas Development Plan.

Check all boxes that pertain to the type(s) of changes being proposed for this OGDP:

- Add Oil and Gas Location(s)
- Amend Oil and Gas Location(s)
- Remove Oil and Gas Location(s)
- Oil and Gas Location attachment or plan updates
- Other
- Add Drilling and Spacing Unit(s)
- Amend Drilling and Spacing Unit(s)
- Remove Drilling and Spacing Unit(s)
- Amend the lands subject to the OGDP

Provide a detailed description of the changes being proposed for this OGDP. Attach supporting documentation such as maps if necessary.

Best Management Practices

No BMP/COA Type

Description

1	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad will be logged with open-hole resistivity log and gamma-ray log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.
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Total: 1 comment(s)

Operator Comments:

This sundry is being submitted to amend the Seltzer LD 09-371HN well which spud 4/10/2020 and had surface casing set. A preliminary Form 5, document #402430057, was submitted 7/2/2020. Surface casing setting depth on this sundry reflects the drilling rig's KB elevation and will differ from the preliminary Form 5 submitted. This well is changing TPZ, BPZ, BHL, and proposed total depth as well as casing and cement plan. Updated Offset Well Evaluation, Well Location Plat, Deviated Drilling Plan, and Directional Data Template are attached.

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

Signed: _____ Print Name: Linsey Jones
Title: Regulatory Analyst Email: ljones@gwp.com Date: _____

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

COGCC Approved: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

<u>COA Type</u>	<u>Description</u>

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402854854	DEVIATED DRILLING PLAN
402854859	WELL LOCATION PLAT
402854860	DIRECTIONAL DATA
402862494	OFFSET WELL EVALUATION

Total Attach: 4 Files