

**FORM
2A**Rev
04/01**State of Colorado
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400349610

Date Received:

11/30/2012

Oil and Gas Location Assessment☒ New Location ☐ Amend Existing Location Location#: _____

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this Assessment will allow for the construction of the below specified location; however, it does not supersede any land use rules applied by the local land use authority. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

431392

Expiration Date:

01/16/2016☒ This location assessment is included as part of a permit application.**1. CONSULTATION**

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☐ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

2. Operator

Operator Number: 10110

Name: GREAT WESTERN OIL & GAS COMPANY LLC

Address: 1700 BROADWAY SUITE 650

City: DENVER State: CO Zip: 80290

3. Contact Information

Name: Shannon Hartnett

Phone: (303) 830-9893

Fax: (866) 522-1673

email: shartnett@gwogco.com

4. Location Identification:

Name: Land JG Pad Number: 31-25D

County: WELD

QuarterQuarter: LOT 2 Section: 31 Township: 2N Range: 64W Meridian: 6 Ground Elevation: 4933

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 249 feet FSL, from North or South section line, and 909 feet FWL, from East or West section line.

Latitude: 40.088156 Longitude: -104.599425 PDOP Reading: 1.8 Date of Measurement: 10/18/2012

Instrument Operator's Name: Robert Kay

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="text" value="13"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox"/>	Separators: <input type="checkbox"/>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: Production will flow to the Land JG Offsite Tank Battery (400361105)

6. Construction:

Date planned to commence construction: 01/01/2013 Size of disturbed area during construction in acres: 3.23
 Estimated date that interim reclamation will begin: 12/01/2013 Size of location after interim reclamation in acres: 1.00
 Estimated post-construction ground elevation: 4933 Will a closed loop system be used for drilling fluids: Yes ☒
 Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒
 Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒
 Mud disposal: Offsite ☒ Onsite ☐ Method: Land Farming ☐ Land Spreading ☐ Disposal Facility ☒
 Other: _____

7. Surface Owner:

Name: Lloyd Land Phone: 303-659-3153
 Address: 12501 Riverdale Road Fax: _____
 Address: _____ Email: _____
 City: Brighton State: CO Zip: 80602 Date of Rule 306 surface owner consultation: 10/10/2012
 Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
 Mineral Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
 The surface owner is: ☐ the mineral owner ☐ committed to an oil and gas lease
☐ is the executer of the oil and gas lease ☐ the applicant
 The right to construct the location is granted by: ☐ oil and gas lease ☒ Surface Use Agreement ☐ Right of Way
☐ applicant is owner
 Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID _____

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20090080 ☐ Gas Facility Surety ID: _____ ☐ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
 Distance, in feet, to nearest building: 797, public road: 929, above ground utilit: 351
 , railroad: 4580, property line: 249

10. Current Land Use (Check all that apply):

Crop Land: ☒ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP
 Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____
 Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

11. Future Land Use (Check all that apply):

Crop Land: ☒ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP
 Non-Crop Land: ☐ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____
 Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

12. Soils:

List all soil map units that occur within the proposed location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.gov/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: #39 - Nunn loam, 0 to 1 percent slopes

NRCS Map Unit Name:

NRCS Map Unit Name:

13. Plant Community:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☐ NRCS or, ☐ field observation Date of observation: _____

List individual species: _____

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
☐ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
☐ Alpine (above timberline)
☐ Other (describe): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☒ No ☐ Yes

Distance (in feet) to nearest surface water: 567 , water well: 919 , depth to ground water: 40

Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes

Is the location within a Rule 317B Surface Water Supply Area buffer zone:

☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. zone

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: ☒ No ☐ Yes

15. Comments:

This location will have a total of 13 wells. The closest water well to location is 919' southeast of pad, permit #12317, depth 40'. Tank Battery 2A will be separate location assessment as it is offsite.

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

Signed: _____ Date: 11/30/2012 Email: shartnett@gwogco.com

Print Name: Shannon Hartnett Title: Permitting Agent

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 1/17/2013

**CONDITIONS OF
APPROVAL, IF ANY:**

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

Attachment Check List

Att Doc Num	Name
1792559	LOCATION DRAWING
2086166	ACCESS ROAD MAP
400349610	FORM 2A SUBMITTED
400349611	LOCATION DRAWING
400351803	SURFACE AGRMT/SURETY
400352366	MULTI-WELL PLAN
400352368	LOCATION PICTURES
400352371	HYDROLOGY MAP
400352528	LOCATION DRAWING
400352530	CONST. LAYOUT DRAWINGS
400352531	REFERENCE AREA MAP
400352532	NRCS MAP UNIT DESC
400352533	REFERENCE AREA PICTURES
400352535	WASTE MANAGEMENT PLAN

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Deleted tank battery facilities. Document 400361105 describes production facilities.	1/9/2013 2:45:29 PM
Final Review	placed on hold during final review for location drawing clarification, production facilities.	1/8/2013 7:07:20 PM
Permit	Final review completed.	1/8/2013 10:06:12 AM
Permit	Received revised location drawing.	1/4/2013 4:54:57 AM
OGLA	Operator has contacted the Town of Hudson and is in the process of acquiring a driveway permit and has provided a revised Access Road Map.	1/3/2013 5:04:33 PM
LGD	<p>These comments are in regard to Great Western Oil Gas well JG 31-25D. This well is to be constructed on land adjacent to the town limits of the Town of Hudson with access to the well site shown as being through Hudson with direct access on to a Town of Hudson street. However, the Town received no notice of this proposed well from the COGCC.</p> <p>Hudson's primary concerns with oil and gas development within and near the Town boundaries are traffic and potential damage to road surfaces. While we understand that there may be issues related to noise, water quality and air quality, the Town does not have in-house expertise to develop specific comments on those matters. At this time we must rely on the state and its permitting processes to ensure that noise, air quality and water quality issues are adequately addressed to protect the public.</p> <p>Hudson is a small community with limited resources. A central feature in Hudson is the Colorado Highway 52/I-76 interchange, located adjacent to downtown Hudson. A</p>	12/27/2012 9:30:37 AM

large percentage of oil and gas related traffic traveling to and from areas north and west of Hudson uses Highway 52 to service oil field activity in the Hudson area. The interchange is poorly designed, with no traffic signals and poor sight distance. The Highway 52 intersection with the adjoining frontage road on the NW side of I-76 is next to the SE bound exit ramp creating frequent congestion problems, conflicting turning movements, and related safety problems. For four years the Town has been working with Weld County and with CDOT to realign the frontage road and mitigate this problem somewhat. But the larger problem with the interchange will remain, and the Town's only alternative in the short-term is to manage the situation by working with oil and gas developers to reroute traffic away from the interchange.

Hudson also has ordinances that require access permits when driveways are to be installed on to Town streets and that restrict overweight vehicles on Town streets. The proposed well access would violate these Town ordinances. Well permits should not be issued by COGCC for wells where these Town ordinances will be violated.

The access road map for the well that is posted on the COGCC web site shows traffic for this well originating in downtown Hudson and proceeding east on a mislabeled County Road 12 (actually Highway 52), then turning left (north) off of the 2-lane highway that has no left turn lane onto gravel County Road 49 (a portion of which is within the Town and is not labeled as such). How the anticipated oil rigs, water trucks, frack tanks, and other heavy vehicular traffic gets to downtown Hudson in the first place is not mentioned.

In preliminary meetings Great Western representatives have assured Hudson that access to the site will in fact be from the north on County Road 49, including that portion that is Hudson's, and not directed through downtown Hudson as shown on the access road map that accompanied their application. They indicated that most or all of the construction traffic will originate in the Kersey area and be routed off of CR49 along CR 18 and CR16. The map on file with COGCC for the proposed well is inadequate, incorrect, and contradictory. COGCC should review applications and require good quality, accurate, complete and timely access road maps to enable local governments to identify possible traffic problems.

Upon receipt of notice of other Great Western wells in the area we contacted Great Western to discuss access issues. No one from Great Western had contacted the Town prior to that time. We are pleased that Great Western has offered to negotiate a Memorandum of Understanding (MOU) with Hudson to include a means by which traffic to this well and other Great Western wells proposed in the area will be routed away from the town and away from the Highway 52/I-76 bottleneck. However, no draft MOU has been proposed to date by Great Western. The exact list of issues and solutions to be included in the MOU can only be identified in face to face negotiations. The COGCC should not issue any permits for this well or any wells where access to the wells impacts Hudson, where Hudson's roads are being used or when Hudson's ordinances being violated until notice has been provided by the Town that a satisfactory agreement has been reached.

COGCC should also address the inconsistencies and inaccuracies in their process of notifying LGDs in Hudson and other municipalities that are affected by oil and gas development. The location of drill holes should not be the only factor in determining impact on citizens of Colorado. The route, timing and nature of construction and long-term operations traffic to and from the drill hole should be considered. To date the Town has not been provided with any data on anticipated traffic to be generated by this or other area wells. Whether that traffic adversely affects the public by creating congestion, safety problems, or road damage can be the same for a community whether a drill hole is within the corporate limits, or whether that hole is a few feet outside of the community's boundary.

We question why the comment period is scheduled to end before Hudson has received correct notice and information. There should be a reasonable comment period for reaction to complete and correct information, and time for constructive negotiations between the Town and the company prior to permit issuance.

Hudson has a history of working well with oil and gas companies that are willing to

	work with the town, provide good information, and find creative solutions to impacts.No permits should be issued until the conclusion of the MOU negotiations between the Town and Great Western.A stated goal of the COGCC is to "Prevent and mitigate adverse impacts to public health, safety, welfare and the environment." COGCC has also represented that it is its intent to that "A traffic plan should be coordinated with the local jurisdiction prior to commencement of move in and rig up" and "These should include identification of the access route, local roadway conditions, and timing" and "An effective traffic plan can reduce the number of truck trips, congestion and dust impacts."None of this has been done in the case of this application.COGCC should ensure with adequate conditions and inspections, and with constructive involvement of Town officials, that air quality, water quality, noise, glare, traffic, and other anticipated off-site impacts are properly mitigated.The health and safety of citizens of Colorado can only be met with proper notice of well applications to Hudson and other affected jurisdictions and requirements for constructive mitigation of community impacts.Hudson appreciates the assistance of the COGCC.	
Permit	Location Drawing has "county road #49 @ 93'" closer to 930' than 93'. Request review by operator.	12/24/2012 8:43:45 AM
OGLA	Requesting clarification regarding tank battery Form 2A.	12/20/2012 1:40:24 PM
Permit	Attachments are all properly labeled.	12/10/2012 8:17:55 AM
Permit	Return to draft: the following documents are not labeled per submitted form pad location name (Land JG Pad 31-25D): 1. location pictures, 2. access road map, 3. hydrology map, 4. both location drawings, 5. construction layout, 6. multi-well plan, 7. reference area map & pictures.	12/7/2012 10:38:43 PM
Permit	Return to draft: 1. location pictures labeled Tank Pad (operator comments that Tank Battery pad will be offsite & another 2A forthcoming for Tank Battery Pad) - operator clarification needed for location pics; 2. location drawing labeled (off-site tank pad) - see prior comment; 5. access road map mislabeled (off-site tank pad) - see above comments.	12/3/2012 5:44:31 PM

Total: 11 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<p>Great Western Oil & Gas Company, LLC - Best Management Practices - Summary</p> <p>Storm water management Plans (SWMP) will be in place to address construction, drilling and operations associated with Oil and Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health (CDPHE). BMP's will be constructed around the perimeter of the site prior to or at the beginning of construction; BMP's used will vary according to the location, and will remain in place until the pad reaches final reclamation.</p> <p>Spill Prevention Control and Counter Measures (SPCC) plans will be in place to address any possible spills associated with Oil and Gas operations throughout the state of Colorado in accordance with CFR 112. In accordance with COGCC Rule 1002.f.(2) A. & B., shall provide a designated storage area for dry bulk chemicals and miscellaneous fluids. The storage area shall be covered to prevent contact of precipitation with chemicals, shall be elevated above storm- or standing water, and shall provide sufficient containment to prevent release of spilled fluids or chemicals from impacting soil, surface water or groundwater and will prevent the co-mingling of spilled fluids or chemicals with other E & P Waste.</p> <p>Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with storm water runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling, There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup will consist of patrolling the roadways, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly and promptly.</p>

Total: 1 comment(s)