

FORM  
2A

Rev  
08/13

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:

400524831

Date Received:

12/16/2013

Oil and Gas Location Assessment

☒ New Location    ☐ Refile    ☐ Amend Existing Location    Location#: \_\_\_\_\_

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location 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. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**436062**

Expiration Date:

**02/07/2017**

☒ This location assessment is included as part of a permit application.

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.

Operator

Operator Number: 10359

Name: WARD PETROLEUM CORPORATION

Address: PO BOX 1187

City: ENID    State: OK    Zip: 73702

Contact Information

Name: Andrea Gross

Phone: (303) 942-0506

Fax: ( )

email: agross@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20100221    ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Sharp    Number: 24-3-11HC

County: ADAMS

QuarterQuarter: SWSW    Section: 24    Township: 1S    Range: 67W    Meridian: 6    Ground Elevation: 5019

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 250 feet FSL from North or South section line

190 feet FWL from East or West section line

Latitude: 39.944030    Longitude: -104.846050

PDOP Reading: 1.2    Date of Measurement: 10/15/2013

Instrument Operator's Name: Rob Daley

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

|                                |                                   |                                    |                               |  |
|--------------------------------|-----------------------------------|------------------------------------|-------------------------------|--|
| Wells <u>2</u>                 | Oil Tanks <u>4</u>                | Condensate Tanks <u>      </u>     | Water Tanks <u>3</u>          | Buried Produced Water Vaults <u>      </u>         |
| Drilling Pits <u>      </u>    | Production Pits <u>      </u>     | Special Purpose Pits <u>      </u> | Multi-Well Pits <u>      </u> | Temporary Large Volume Above Ground Tanks <u>1</u> |
| Pump Jacks <u>      </u>       | Separators <u>      </u>          | Injection Pumps <u>      </u>      | Cavity Pumps <u>      </u>    |  |
| Gas or Diesel Motors <u>2</u>  | Electric Motors <u>      </u>     | Electric Generators <u>      </u>  | Fuel Tanks <u>      </u>      | Gas Compressors <u>      </u>                      |
| Dehydrator Units <u>      </u> | Vapor Recovery Unit <u>      </u> | VOC Combustor <u>      </u>        | Flare <u>1</u>                | LACT Unit <u>      </u>                            |
|                                |                                   |                                    |                               | Pigging Station <u>      </u>                      |

## OTHER FACILITIES

Other Facility Type

Number

|                   |   |
|-------------------|---|
| Meter & Separator | 1 |
|-------------------|---|

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

2" fusion bonded Schedule 40 steel flowlines will be installed.  
There is an existing gas sales pipeline in place.

## CONSTRUCTION

Date planned to commence construction: 03/01/2014 Size of disturbed area during construction in acres: 4.60  
Estimated date that interim reclamation will begin: 09/01/2014 Size of location after interim reclamation in acres: 2.40  
Estimated post-construction ground elevation: 5019

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

The drill cuttings will be disposed of offsite and land farmed.

Beneficial reuse or land application plan submitted?       

Reuse Facility ID:        or Document Number:       

Centralized E&P Waste Management Facility ID, if applicable:       

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Lyle C. Sharp

Phone:

Address: 9378 Star Hill Cir.

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Lone Tree State: CO Zip: 80124

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ is committed to an oil and Gas Lease

☒ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation 06/30/2013

## CURRENT AND FUTURE LAND USE

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

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

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 600 Feet  
Building Unit: 596 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 239 Feet  
Above Ground Utility: 200 Feet  
Railroad: 1825 Feet  
Property Line: 190 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.  
- 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, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☒ Buffer Zone  
☐ Exception Zone  
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.  
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.  
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 11/13/2013

## SOIL

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 be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> 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: NIA Nunn loam, 0-1 percent slopes

NRCS Map Unit Name: \_\_\_\_\_

NRCS Map Unit Name: \_\_\_\_\_

## 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): \_\_\_\_\_

## WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 522 Feet

water well: 326 Feet

Estimated depth to ground water at Oil and Gas Location 25 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to groundwater was determined for Water Well Permit 1922-R which is located in Sec. 23 T1S R67W.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No 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: \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments

The Sharp 24-3-9HC will be on this well pad as well.

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

Signed: \_\_\_\_\_ Date: 12/16/2013 Email: [agross@upstreampm.com](mailto:agross@upstreampm.com)

Print Name: Andrea Gross Title: Permit 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:  Director of COGCC Date: 2/8/2014

### **Conditions Of Approval**

**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.**

| <b><u>COA Type</u></b> | <b><u>Description</u></b>  |
|------------------------|--|
|                        | Once in operation, the TLVT shall be inspected daily and any deficiencies repaired as soon as practicable.   |
|                        | Should a failure of TLVT integrity occur, operator shall notify COGCC upon discovery, report the incident to COGCC on a Form 22-Accident Report within 10 days, and shall conduct a root cause analysis and provide it to the COGCC on a Form 4-Sundry Notice within 30 days of the failure.   |
|                        | COGCC Rules 604.a. and 605.a.(2,3,5,6,7, and 8), as applicable to tank setbacks at the time of installation shall apply to the siting of TLVTs.  |
|                        | Access to the TLVT shall be limited to operational personnel.  |
|                        | Site preparation and TLVT installation oversight shall be provided by a Professional Engineer or their designated representatives. Construction and installation of the tank structure, liner and sub-grade shall meet or exceed the manufacturer specifications.  |
|                        | Signs shall be posted on the TLVT to indicate contents are freshwater and that no E&P waste fluids are allowed. Location and additional signage shall conform to Rule 210.   |
|                        | All TLVT liner seams shall be welded at the liner manufacturers facility; field welded liners shall not be used. Liners shall not be reused.   |
|                        | Operator shall develop a contingency plan for any TLVT leak or catastrophic failure of the tank integrity and resulting loss of fluid. The plan should include a notification process to the COGCC and local emergency authority (municipal, county or both) for any failure and resulting loss of fluid.  |
|                        | Operator shall be onsite and inspect for leaks during the initial filling of the TLVT. If leaks are observed, filling shall cease and the leaks be repaired and the integrity of the tank evaluated.   |
|                        | TLVTs shall be operated with a minimum of 1 foot freeboard.  |
|                        | TLVTs shall be constructed and operated in accordance with a design certified and sealed by a Colorado Licensed Professional Engineer.   |
|                        | Operators employing TLVTs on their Oil & Gas Locations shall develop and comply with a written standard operating procedure.   |
|                        | TLVTs may only be utilized for the storage of freshwater. E&P wastes, including produced water, treated E&P wastes, and flowback from hydraulic fracturing operations, are not allowed.  |
|                        | Operator will submit, via a Form 4 Sundry Notice, information detailing the manufacturer of the Temporary Large Volume Tank (TLVT), the size and volume of the TLVT, and the anticipated timeframe the TLVT will be on the oil and gas location. This Form 4 Sundry Notice shall be submitted prior to the TLVT being brought onto the oil and gas location. |

### **Best Management Practices**

| No | BMP/COA Type                           | Description   |
|----|--|---|
| 1  | Planning                               | Guy Line Anchors: Per the SUA, Ward will remove all guy line anchors for drilling and completions within 30 days upon termination of oil and gas operations by Ward.  |
| 2  | Planning                               | Development from existing well pads: Development from existing well pads was not an option for this well. However, this well pad will be considered for future well locations.  |
| 3  | Planning                               | Site Specific Measures: Ward will maintain a Stormwater Management Plan with site specific measurements to assess erosion control.  |
| 4  | Planning                               | Multiwell Pads: In order to reduce surface disturbance, Ward is permitting this 2A for five (5) wells.  |
| 5  | Traffic control                        | Traffic Plan: A traffic plan will be done if required by Adams County.  |
| 6  | Traffic control                        | Access Roads: Ward will utilize Highway and County roads as well as the agreed upon access road to the surface location per the SUA. Any required county permits will be obtained prior to use.   |
| 7  | General Housekeeping                   | Loadlines: All loadlines shall be bullplugged or capped.  |
| 8  | General Housekeeping                   | Removal of Surface Trash: Per the SUA, Ward agrees that all trash, refuse pipe, equipment, liquids, chemicals of other materials that are not necessary for the continued operations of the wells will be removed and disposed of no later than 30 days after completion. No such items will be burned or buried on location.   |
| 9  | General Housekeeping                   | Well Site Cleared: Per the SUA, Ward agrees that all trash, refuse pipe, equipment, liquids, chemicals of other materials that are not necessary for the continued operations of the wells will be removed and disposed of no later than 30 days after completion. No such items will be burned or buried on location.  |
| 10 | Material Handling and Spill Prevention | Leak Detection Plan: To ensure protection for the surface during fracturing treatment, the location will be specifically constructed to contain any releases or spills. Secondary containment from any chemical spills or leaks will surround any trucks that carry, mix, or add chemicals to the flow stream as well as connections that could possibly leak fluid. Should any spill or release occur, every reasonable step will be taken to quickly remediate the area disturbed.  |
| 11 | Material Handling and Spill Prevention | Control of Fire Hazards: Ward and its contractor's employ best management practices during the drilling and production of its wells and facilities. They will comply with appropriate COGCC and any county rules concerning fire and safety. Ward will ensure that any flammable material will remain no less than 25 feet from the wellhead (s), tanks and separator(s).   |
| 12 | Dust control                           | Operator will comply with Rule 805.c and take all practicable measures to control fugitive dust caused by the operation, including but not limited to wetting the soil with fresh water via a truck with a spreader bar if deemed necessary.  |
| 13 | Construction                           | Berm Construction: A containment berm will be constructed around the oil and water storage tanks. The berm will be inspected regularly and maintained in good condition.  |
| 14 | Construction                           | Fencing: Per the SUA, during drilling operations the well sites and any pits shall be fenced off required by the Owner.   |
| 15 | Construction                           | Visual Mitigation: Pursuant to Rule 804, the tank battery shall be painted in uniform, non-contrasting, non-reflective color tones with the colors matched to but slightly darker than the surrounding landscape. Additionally, because the location is within the Rule 604.a.(2) setback due to its proximity to the dealership to the south and east, the battery facilities will be fenced with a 6' chain-link fence with lath, the color for which shall be sufficiently similar to the tank color. This fence shall serve to restrict access to the site by unauthorized persons and as visual mitigation of the facility components. |
| 16 | Noise mitigation                       | Noise: Ward had an ambient sound study conducted for this location. Per the results, no sound mitigation will be necessary as it is anticipated that the noise will fall below levels for Light Industry.   |
| 17 | Drilling/Completion Operations         | Closed Loop System: Closed Loop System will be used for drilling and fluid management. No reserve pit will be used.   |
| 18 | Drilling/Completion Operations         | Green Completions: Ward will comply with COGCC Rule 805b.(3)A and utilize Green Completion Methods.   |

|    |                                |   |
|----|--------------------------------|---|
| 19 | Drilling/Completion Operations | BOPE Testing: Upon initial rig-up and once every 30 days during drilling operations, pressure testing of the casing string and each component of the BOPE will be performed to 70% of working pressure or 70% of the internal yield of the casing, whichever is less.   |
| 20 | Drilling/Completion Operations | BOPE for well servicing operations: Adequate blowout prevention equipment will be used on any servicing operations associated with this well. Backup staving valves shall be required on well servicing operations during reverse circulation. Valves will be pressure tested before each well servicing operation using both low-pressure and high-pressure fluid. |
| 21 | Drilling/Completion Operations | BOPE: Ward will utilize drilling rigs with a minimum of a double ram and annular preventer.   |
| 22 | Drilling/Completion Operations | Drill Stem Tests: Drill Stem Tests are not anticipated for this location.   |
| 23 | Drilling/Completion Operations | Tank specifications: Tanks shall be constructed and maintained in accordance with the National Fire Protection Association Code 30 (2008 version). All tanks will be visually inspected once a day for issues. Recorded inspections will be conducted once a month pursuant to 40 CFR §112.   |
| 24 | Drilling/Completion Operations | Pit Level Indicators: Pit Level Indicators will not be needed as no pits will be used on location.  |
| 25 | Final Reclamation              | Identification of Plugged and Abandoned Wells: Pursuant to Rule 319.a.(5)., once the well has been plugged and abandoned, Ward will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.  |

Total: 25 comment(s)

### **Attachment Check List**

| <b><u>Att Doc Num</u></b> | <b><u>Name</u></b>        |
|---------------------------|---------------------------|
| 1668079                   | FACILITY LAYOUT DRAWING   |
| 1668080                   | RULE 306.E. CERTIFICATION |
| 1668092                   | CORRESPONDENCE            |
| 2157454                   | WASTE MANAGEMENT PLAN     |
| 400524831                 | FORM 2A SUBMITTED         |
| 400527757                 | CONST. LAYOUT DRAWINGS    |
| 400527763                 | HYDROLOGY MAP             |
| 400527770                 | LOCATION DRAWING          |
| 400527772                 | LOCATION PICTURES         |
| 400527774                 | NRCS MAP UNIT DESC        |
| 400527795                 | ACCESS ROAD MAP           |
| 400528075                 | MULTI-WELL PLAN           |
| 400528300                 | 30 DAY NOTICE LETTER      |

Total Attach: 13 Files

## General Comments

| <u>User Group</u> | <u>Comment</u>  | <u>Comment Date</u>       |
|-------------------|---|---------------------------|
| Permit            | LGD comments pertain to county permits required.<br>No public comments.<br>Final Review--passed.  | 2/5/2014<br>12:09:54 PM   |
| OGLA              | IN PROCESS - Operator agreed to COA for submitting the large volume tank info via a Form 4 Sundry. OGLA review complete and task passed.  | 2/5/2014<br>10:46:56 AM   |
| OGLA              | Operator indicated they would provide the additional requested info on the temporary large volume tank prior to it being onsite. I replied asking to add a COA stating that info would be submitted via a Form 4 Sundry prior to the tank being brought onto the location. Operator provided all other requested info and agreed to changes.  | 2/5/2014 9:41:52<br>AM    |
| OGLA              | Operator provided a Facility Layout Drawing, Access Road Map, evidence that pre-app notice was received by Building Unit owners, & Rule 306.e. certification. Requested additional info on the temporary large volume tank, change in distance to nearest downgradient surface water feature, operators intentions to protect the nearby irrigation ditch, clarification on Planning BMP, why no noise mitigation, and provide visual and dust mitigation BMPs. Due by 3/1/14.  | 1/30/2014<br>9:25:51 AM   |
| OGLA              | ON HOLD - Operator to provide missing Facility Layout Drawing, Access Road Map, & evidence that Building Unit owners Received their pre-application notice. Due by 2/28/14.   | 1/28/2014<br>1:43:50 PM   |
| Permit            | Oper. submitted WMP.  | 1/15/2014<br>3:56:13 PM   |
| LGD               | These facilities will be accessed by existing access roads. Any additional access point required for these facilities will be approved by the Adams County Transportation Dept. An Oil and Gas Drilling Rig Move Permit will be required to move the Drilling Facilities both into and out of this location. When the site is placed into production, an On-Site Oil and Gas Facilities Production Permit will be required . Please contact Mr. Mark Russell at 720-523-6821 for information regarding these permits. | 1/3/2014 8:22:06<br>AM    |
| Permit            | Req'd Waste Mgmt. Plan.   | 12/23/2013<br>1:48:39 PM  |
| Permit            | Passed completeness.  | 12/17/2013<br>11:23:36 AM |
| Permit            | Returned to draft:<br>1. Missing attached letter certifying notification of building unit owners in buffer zone.<br>2. Water well sampling should be for Rule 318A.<br>3. Missing Multiwell Plan in Attachments.  | 12/17/2013<br>8:03:50 AM  |

Total: 10 comment(s)