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

Oil and Gas Location Assessment

Document Number: 400685467
()
Date Received: 01/13/2015

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 422990

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: **422990**
Expiration Date: **03/20/2018**

☒ 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: 77330
Name: SG INTERESTS I LTD
Address: 100 WAUGH DR SUITE 400
City: HOUSTON State: TX Zip: 77007

Contact Information

Name: Catherine Dickert
Phone: (970) 385-0696
Fax: (970) 385-0636
email: cdickert@sginterests.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20030098 ☐ Gas Facility Surety ID:
☐ Waste Management Surety ID:

LOCATION IDENTIFICATION

Name: HL 11-89-19 Number: 1
County: GUNNISON

QuarterQuarter: SENW Section: 19 Township: 11S Range: 89W Meridian: 6 Ground Elevation: 7119

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: 1704 feet FNL from North or South section line
2095 feet FWL from East or West section line

Latitude: 39.088280 Longitude: -107.379530

PDOP Reading: 0.2 Date of Measurement: 01/08/2009

Instrument Operator's Name: David G. Nicewicz

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	2	Oil Tanks*		Condensate Tanks*	1	Water Tanks*	4	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	2	Separators*	2	Injection Pumps*		Cavity Pumps*		Gas Compressors*	0
Gas or Diesel Motors*		Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*		Flare*	2	Pigging Station*	

OTHER FACILITIES*

Other Facility Type	Number
Water Transfer Pump	1

*Those facilities indicated by an asterisk (*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

Two buried 2-4-inch water pipelines and two buried 3-6-inch gas pipelines will be installed on the pad and tied into existing gathering pipelines off the well pad location. Temporary poly pipeline may be used on the surface at times. These temporary poly pipelines would likely be located on the pad and along the access road.

CONSTRUCTION

Date planned to commence construction: 07/13/2015 Size of disturbed area during construction in acres: 1.40

Estimated date that interim reclamation will begin: 08/13/2015 Size of location after interim reclamation in acres: 0.90

Estimated post-construction ground elevation: 7115

DRILLING PROGRAM

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

Is H_2S 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: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Jacobs Family Partnership Phone: 970-527-3982

Address: PO Box 1385 Fax:

Address: Email:

City: Paonia State: CO Zip: 81428

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

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):	existing well pad
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

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	1306 Feet	1222 Feet
Building Unit:	1358 Feet	1405 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	735 Feet	757 Feet
Above Ground Utility:	115 Feet	144 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	351 Feet	325 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.
-For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

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: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILTIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*

☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

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 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: 29. Cryoborolls, very stony

NRCS Map Unit Name: 40. Fughes Stony Loam, 3 to 30 percent slopes

NRCS Map Unit Name: 37. Fughes Loam, 5 to 15 percent slopes

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: 10/22/2008

List individual species: Timothy, Orchard Grass, Kentucky Bluegrass, Canada Thistle, Red Clover, Smooth Brome

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): Irrigated Pasture land

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 95 Feet

water well: 329 Feet

Estimated depth to ground water at Oil and Gas Location 12 Feet

Basis for depth to groundwater and sensitive area determination:

SEO Permit #119253 Well Construction and Test Report indicates water depth at 12'. This water well is approximately 329' south of the location. Adjacent well permit #263246 indicates water at a depth of 50'. This well is approximately 1329' north west of the location.

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 zone: No

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 609

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 location is being amended to include an additional well, the HL 11-89-19 #2. Please reference attached multi well plat. We will apply the BMPs as included on the previous 2A, Doc #2592760 (as well as those attached as conditions to this approved amendment).

Total new disturbance on the HL pad will be 0.213 acre. HL pad area components:
Existing level pad: 1.082459 acres
Level pad extension only: 0.124398 acres
Total existing level pad + extension: 1.206857 acres
Extension fill slope: 0.088666 acres

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 01/13/2015 Email: cdickert@sginterests.com

Print Name: Catherine Dickert Title: Env & Permiting Manager

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: 3/21/2015

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.

COA Type	Description
	Revised COA to reflect appropriate Rule reference: Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material (per Rule 605.a.(4)). Berms or other containment devices shall be constructed in compliance with Rule 605.a.(4) around crude oil, condensate, and produced water storage tanks. Due to shallow groundwater and proximity to domestic water well, COGCC stronly encourages operator to utilize an impermeable synthetic liner mechanically attached to the berms beneath the tanks in this tank battery. However, since this was not previously discussed with the Operator, it is not considered a requirement.
	Operator reports that original 2A states and requires that the overhead power line at 115' will be taken down during the drilling and completion operations and will be restrung upon completion. Added form 2 doc number to related forms tab.
	Revised COA 25 - If the wells are to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.

	Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network. Operator must implement best management practices (secondary containment and spill response equipment) to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located. Operator must routinely inspect the entire length of the surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface poly pipeline routes for leaks during active transfer of fluids. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. Prior to operation, pipelines will be air and hydro tested for integrity. When in operation, pump stations will be manned continuously to ensure immediate response to pressure changes or pump issues. Qualified personnel, interconnected via 2-way radio, manning each booster pump will carefully synchronize pump turn-on and shut-down according to written and practiced procedure. The entire line will be monitored, where feasible, during pumping and flowback operations. For stream or intermittent stream crossings, operator will ensure appropriate containment by installing over-sized pipe “sleeves” which extend the length of the crossing and beyond to a distance deemed adequate to capture and/or divert any possible release of fluids and prevent infusion into the stream water. Operator will design their infrastructure and utilize pipeline materials to exceed required pressures and flow rates by a minimum of 30%. The DR 9 poly pipeline used in this project is rated to support pressure surges up to 500 psi, continual surges of 375 psi, and a maximum operating pressure of 250 psi. Pumps used in this project will operate at pressures 20-30 psi below the maximum operating pressure of the poly pipeline at all times. Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.
	The location is in an area of moderate run off/run-on potential; therefore the addition to the original pad site shall be constructed to prevent any stormwater run-on and/or stormwater runoff. Standard stormwater BMPs must be implemented at this location, prior, during, and after reconstruction activities, to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff.
	Notify the COGCC 48 hours prior to start of pad reconstruction/regarding, rig mobilization, spud, start of hydraulic stimulation operations, start of flowback operations (if different than start of hydraulic stimulation operations), and pipeline testing using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Best Management Practices

No	BMP/COA Type	Description

Attachment Check List

Att Doc Num	Name
2107292	CONSTRUCTION LAYOUT DRAWINGS
2107293	LOCATION DRAWING
2107294	CORRESPONDENCE
400685467	FORM 2A SUBMITTED
400746558	MULTI-WELL PLAN

Total Attach: 5 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review complete.	3/20/2015 11:35:07 AM
OGLA	PREVIOUS FORM 2A#2592760 COAs for OGCC ID#422990: GENERAL SITE COAs: The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, the drill cuttings must also meet the applicable standards of table 910-1. No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut. The drilling (reserve) pit must be fenced and netted. The operator must maintain the fencing and netting until the pit is closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels. Due to the potential presence of seeps/springs in the area, the nearby hillside must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval. The surface soils and materials are fine-grained and highly unconsolidated; therefore appropriate BMPs need to be in place during all drilling and well completion operations. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff. Notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to start of fracing operations. Based on the COGCC/CDOW/Surface Owner/Operator onsite conducted on March 15, 2011; the overhead line located 115 feet from the well location will be taken down by the local electric company and will be placed on the surface of the ground inside conduit for the duration and drilling and completion operations at this location. Upon completion, this overhead utility line will be restrung by the electric company. Operator will provide all applicable documentation between all parties involved prior to lowering this power line. The operator will also notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to lowering the power line. SENSITIVE AREA (CLOSE WATER WELL AND SHALLOW GROUNDWATER) COAs: Location is in a sensitive area because of proximity to a domestic water well and shallow groundwater; therefore either a lined drilling pit or closed loop system must be implemented. Location is in a sensitive area because of because of proximity to a domestic water well and shallow groundwater; therefore any pits constructed to hold fluids (i.e., production pit, frac pit, reserve pit) must be lined. SENSITIVE AREA (CLOSE SURFACE WATER) COAs: Location is in a sensitive area because of proximity to surface water; therefore, operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes,	2/4/2015 11:20:07 AM

	site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition. Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed temporary surface pipelines or buried pipelines.	
OGLA	Initiated/Completed OGLA Form 2A review on 02-04-15 by Dave Kubeczko; previously submitted Form 2A#2592778 (approved on 04-29-11) COAs for OGCC Facility ID#422990 will apply - fluid containment, spill/release BMPs, flowback to tanks only, cuttings management, cuttings low moisture content, hillside monitoring, lined pits or closed loop, tank berming, overhead powerline mitigation; requested updated Location Drawing and Construction Layout Drawings and acknowledgement of notification, construction stormwater BMPs, and pipeline testing COAs from operator on 02-04-15; received attachments and acknowledgement of COAs from operator on 02-18-15; waived by CPW on 02-26-15 with no comment and operator previously submitted BMPs acceptable (as was stated by CPW on the previously approved Form 2A for this location); passed OGLA Form 2A review on 03-13-15 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks only, cuttings management, cuttings low moisture content, hillside monitoring, lined pits or closed loop, tank berming, overhead powerline mitigation notification, construction stormwater BMPs, and pipeline testing COAs.	2/4/2015 11:20:04 AM
Permit	Corrected contact information of operator per opr. Removed surface bond as per opr. Ready to pass pending OGLA approval.	1/26/2015 3:45:03 PM
Permit	Passed completeness.	1/16/2015 12:33:29 PM

Total: 5 comment(s)