

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:

400383181

Date Received:

06/06/2013

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:

433879

Expiration Date:

08/14/2016

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: 77330

Name: SG INTERESTS I LTD

Address: 1485 FLORIDA RD #C202

City: DURANGO State: CO Zip: 81301

3. Contact Information

Name: Catherine Dickert

Phone: (970) 2096464

Fax: (970) 2520636

email: cdickert@sginterests.com

4. Location Identification:

Name: Buck Creek 12-89-5 Number: 1

County: GUNNISON

Quarter: SWNE Section: 5 Township: 12S Range: 89W Meridian: 6 Ground Elevation: 6891

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: 1159 feet FNL, from North or South section line, and 2181 feet FEL, from East or West section line.

Latitude: 39.046110 Longitude: -107.357940 PDOP Reading: 1.0 Date of Measurement: 11/01/2012

Instrument Operator's Name: David Nicewicz

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" value="1"/>	Wells: <input type="checkbox" value="1"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox" value="1"/>	Water Tanks: <input type="checkbox" value="4"/>	Separators: <input type="checkbox" value="1"/>	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" value="1"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox" value="1"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox" value="1"/>	Flare: <input type="checkbox" value="1"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: water transfer

6. Construction:

Date planned to commence construction: 08/01/2013 Size of disturbed area during construction in acres: 2.40
Estimated date that interim reclamation will begin: 09/15/2013 Size of location after interim reclamation in acres: 1.80
Estimated post-construction ground elevation: 6892 Will a closed loop system be used for drilling fluids: Yes No
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: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: _____
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 20030099

8. Reclamation Financial Assurance:

Well Surety ID: 20030098 Gas Facility Surety ID: _____ Waste Mgnt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes No
Distance, in feet, to nearest building: 1520, public road: 615, above ground utility: 336,
railroad: 48150, property line: 485

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 be 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: Curecanti loam, 3 to 15 percent slopes, MUS 30

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: Gambel oak (20%) serviceberry (10%) mountain brome grass (10%) elk sedge (10) wheatgrass (10) needlegrass (10%) snowberry (5%)

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): planted pasture mix

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: 135, water well: 1050, depth to ground water: 50

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 Suppl 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:

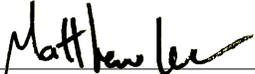
There are no existing improvements within 400' of the planned well pad. At time of Form 2A submittal, on site consultation and other communication has occurred between SG Interests and Bear Ranch representatives. Rule 306 consultation will occur pursuant to COGCC rules.

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

Signed: _____ Date: 06/06/2013 Email: cdickert@sginterests.com

Print Name: Catherine Dickert Title: Env & Permit 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:  Director of COGCC Date: 8/15/2013

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.

<u>COA Type</u>	<u>Description</u>
	<p>GROUNDWATER BASELINE SAMPLING COA:</p> <p>Operator shall comply with Rule 609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING.</p>
	<p>PIPELINE COAs:</p> <p>Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located.</p> <p>Operator must routinely inspect the entire length of the surface pipeline to ensure integrity.</p> <p>Operator must ensure 110 percent secondary containment for any potential volume of fluids that may be released from the surface pipeline at all stream, intermittent stream, ditch, and drainage crossings.</p> <p>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.</p>
	<p>GENERAL SITE COAs:</p> <p>Notify the COGCC 48 hours prior to start of pad/access road construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p> <p>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, 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.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface or buried pipelines. Additional containment shall be required where temporary pumps and other necessary equipment or chemicals are located.</p> <p>There is the potential for shallow groundwater; therefore either a lined drilling pit or closed loop system must be implemented.</p> <p>The access road and well pad will be constructed as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.</p> <p>Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>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</p>

stormwater runoff.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permitted has been submitted/approved) 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 with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

The moisture content of any drill cuttings in a cuttings trench, area, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.

Because of proximity of the well pad to nearby scenic Highway 133, operator shall utilize visual mitigation techniques such as berms, fences, vegetation, and other measures to lessen the visual impact for motorists along the highway. Any permit requirements from the state agencies regulating the scenic by-ways will need to be received prior to any construction activities. Copies of any permits shall be sent via a Form 4 Sundry to COGCC.

Because of proximity of the well pad to nearby scenic Highway 133, operator shall utilize berms, fences, vegetation, and other measures (low profile tanks painted to match surrounding area) to lessen the visual impact for motorists along the highway. Any permit requirements from the state agencies regulating the scenic by-ways will need to be received prior to any construction activities. Copies of any permits shall be sent via a Form 4 Sundry to COGCC.

Berms or other containment devices shall be constructed to be sufficiently impervious to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2106714	CORRESPONDENCE
400383181	FORM 2A SUBMITTED
400383207	CONST. LAYOUT DRAWINGS
400383209	NRCS MAP UNIT DESC
400393258	HYDROLOGY MAP
400393259	ACCESS ROAD MAP
400393357	SENSITIVE AREA MAP
400393457	SENSITIVE AREA DATA
400429421	LOCATION PICTURES
400430336	LOCATION DRAWING
400430337	OTHER

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comments. Final Review--passed.	8/13/2013 1:43:39 PM
Permit	Oper. confirmed surface owner is not mineral owner. Changed right to construct to bond.	7/18/2013 1:42:19 PM
OGLA	Initiated/Completed OGLA Form 2A review on 06-27-13 by Dave Kubeczko; requested acknowledgement of notification, fluid containment, spill/release BMPs, cuttings moisture content, access road sediment control, baseline GW sampling, tank berming, flowback to tanks, dust control, and pipeline COAs from operator on 06-27-13; received acknowledgement of COAs from operator on 08-12-13; onsite conducted by COGCC/SG Interests on 06-25-13; no LGD comments; no CPW; passed OGLA Form 2A review on 08-12-13 by Dave Kubeczko; notification, fluid containment, spill/release BMPs, cuttings moisture content, access road sediment control, baseline GW sampling, tank berming, flowback to tanks, dust control, and pipeline COAs.	6/27/2013 6:07:42 AM
LGD	No comment	6/18/2013 1:27:48 PM
Permit	Mineral owner owned the surface rights at the time the oil and gas lease was signed. Surface was subsequently sold to another party. This form has passed completeness.	6/10/2013 10:25:27 AM
Permit	Returned to draft. Surface owner is mineral owner box not checked. Requested operator add NCRS Map Unit Description number in Cultural and Soil.	6/10/2013 9:55:23 AM

Total: 6 comment(s)

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Site Specific	Drilling pits will be lined with an impervious liner. Fluids contained at a well site during drilling and completion operations will have secondary containment according to SG Interests' integrated spill plan.
2	Planning	Conduct wildlife and vegetation surveys to determine the presence of any Threatened, Endangered, or sensitive species or their habitat in the project vicinity. Take appropriate protection measures as indicated by the results of these surveys. When siting access roads, pads, pipelines, and facilities consider impacts to wildlife habitat, agriculture, water resources, recreation, and visual resources. Consider visual impact of cut and fill slopes. Minimize the number, size and distribution of well pads as practicable. Locate pads and facilities near existing roads and pipelines where possible. SG Interests will attempt to minimize its total surface disturbance from roads, pipelines, well pads, and construction related activities within state and federal guidelines.
3	General Housekeeping	The location and access roads will be kept orderly and as clean as practicable at all times. All garbage and trash will be put in a trash container. The container will be periodically emptied at an approved disposal site. A portable latrine will be provided for human wastes, and wastes will be pumped from portable toilets and hauled to an approved sanitation facility. Sewage will not be buried on location.
4	Wildlife	Areas designated as Sensitive Wildlife Habitat will be constructed and operated in compliance with the requirements of the COGCC Rule 1203, General Operating Requirements in Sensitive Wildlife Habitat and Restricted Surface Occupancy Areas unless the Director has granted a waiver from one of these requirements. Enforce policies that protect wildlife such as prohibiting firearms and dogs from all project-related areas and by educating employees on wildlife protection practices. When necessary, fence livestock and wildlife out of newly reclaimed areas until reclamation standards have been met and plants are capable of sustaining grazing and trampling. Dispose of trash appropriately. Instruct employees not to feed wildlife or otherwise attract them to project sites. Instruct employees and contractors to drive at safe speeds and to be alert to wildlife and livestock on roadways whenever driving for a project-related reason.

5	Storm Water/Erosion Control	A stormwater management plan has been developed for this well site. Stormwater management practices will be utilized as appropriate and will be identified in the stormwater management plan.
6	Material Handling and Spill Prevention	<p>Cuttings and pit liners will be disposed of at a permitted disposal facility. Pit liners will be removed following removal of the dry cuttings. They will be disposed of at a solid waste disposal facility. Soil testing under the removed liner area will be conducted prior to backfilling the pit area according to the Colorado Oil & Gas Conservation Commission's 900 series rules.</p> <p>Material Safety Data Sheets (MSDS) for all chemicals and hazardous materials that are used during drilling, completion, and production will be maintained as per 29 CFR 1910.1200(g). Any petroleum product or other spills will be cleaned up immediately and the material will be hauled to an approved facility. The operator will prevent gasoline, diesel fuel, oil, grease, or any other petroleum products and drilling fluids from migrating off the location or from entering any live stream or riparian area. A spill kit will be available on site during drilling and completion operations. Fuels and lubricants will be transported by fuel distributors and will be stored in facilities specifically designed for that purpose.</p> <p>Drilling fluids will be disposed of at a permitted commercial disposal facility.</p> <p>Free water may be hauled to an approved disposal facility to facilitate drying of pits. If fluids must be removed from drilling pits, vacuum trucks will remove these fluids so that the pit liner will not be damaged with heavy equipment. These fluids will likely be trucked and disposed of at a commercial disposal facility.</p> <p>Pits will be lined with an impervious liner. This liner will have a minimum thickness of twenty-four (24) mils. The liner will cover the bottom and interior sides of the pit with the edges secured with at least a twelve (12) inch deep anchor trench around the pit perimeter. The anchor trench will be designed to secure and prevent slippage or damage to the liner materials. The area under the pit over which the liner is laid will be free of rocks and other objects that could puncture the liner. A minimum of two feet of free board will be maintained between the maximum fluid level and the top of the pits. The pits will be designed to exclude all surface runoff and will be constructed in the cut portion of the well pad. Back slopes will be 2:1 or less. The lined reserve pit or cuttings pit will be fenced on three sides with woven wire during drilling operations and the fourth side fenced immediately after the rig has been moved off location. Fencing will be 6' to 8' in height to prevent deer and elk as well as other wildlife from entering the pit. After the rig has been moved off location, bird netting will be placed over the pit to prevent birds from entering the pit area. The pit will remain fenced until it has dried enough to be backfilled.</p>
7	Construction	Schedule construction (pipelines and roads) in streams and rivers at low water periods to minimize disturbance to this habitat. Appropriately maintain roads by surfacing, crowning, and maintaining ditches to prevent runoff from damaging water quality. Apply water or other dust suppressant to roads and other work sites as needed to control fugitive dust. Limit speeds on access roads and work sites to prevent road damage and dust problems. Install energy dissipation structures at culvert outfalls to prevent soil erosion. Install and maintain check dams or other structures in road ditches to slow flowing water and prevent scouring and sedimentation.
8	Drilling/Completion Operations	Maintain wildlife fencing and netting as needed. Whenever a pit is left open prior to reclamation, it will be fenced and covered with netting to prevent wildlife and birds from entering the pit. If it is necessary to postpone pit closure due to winter conditions, excess water will be removed from the pit and solids in the pit will be fenced and tarped in order to exclude wildlife and birds. Limit days and hours of operations where practical to minimize disturbance resulting from activity and traffic. Promptly report spills to agencies as required. Store emergency spill response equipment at centralized locations so that it is readily available in the event of a spill. Instruct all employees on the aspects of the spill prevention and response plan relevant to their position at the start of their employment. Limit vehicle and equipment parking to designated parking areas. Screen water suction hoses to exclude fish and other aquatic life when necessary. Reduce noise by using effective sound dampening devices and/or techniques as needed. Use centralized fracturing facilities where water is stored for reuse between operations. Connect water storage facilities to well sites with temporary pipelines to reduce truck traffic. Use produced water as much as possible in fracturing operations to reduce use of fresh water.

9	Interim Reclamation	Pits will be reclaimed to a natural condition that blends with the rest of the reclaimed pad area in a manner that protects soil stability and provides for protection from spills, leaks, and contamination, as described above. Pits will be reclaimed to a natural condition that blends with the rest of the reclaimed pad area in a manner that protects soil stability and provides for protection from spills, leaks, and contamination, as described above.
10	Final Reclamation	Control fugitive dust that could result from reclamation activities. Control noxious weeds by following project specific weed management plans. Use locally adapted seed in reclamation efforts whenever available and approved by the surface owner. Prepare the seedbed appropriately prior to seeding an area. Replace rocks on surface at density of surrounding areas. Seed at times of the year when germination and success is highest. Conduct stormwater inspections and document re-growth of vegetation on disturbed areas. Correct problems as they are noted. Remediate spills on disturbed areas prior to reclamation. Whenever possible, complete final reclamation activities so that seeding occurs during the first optimal season following plugging and abandonment of wells and closure of facilities. Remove and properly dispose of degraded or unneeded silt fencing and other erosion control materials in a timely fashion. Remove unneeded fencing (e.g., cattle guards, perimeter fencing, etc.) on project sites. Apply weed free mulch and crimp or otherwise treat the mulch so that it remains in place thus preserving seeds and retaining moisture to enhance seed germination and seedling survival. Control weeds in areas surrounding reclamation areas when possible to prevent recolonization of recently reclaimed areas by weed species. When necessary, fence livestock and wildlife out of newly reclaimed areas until reclamation standards have been met and plants are capable of sustaining grazing and trampling. Monitor reclamation efforts as needed and make corrections when necessary. Keep records of inspections for state inspectors to review when requested.

Total: 10 comment(s)