

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:

401052441

Date Received:

06/23/2016

Oil and Gas Location Assessment

☐ New Location ☒ Refile ☐ Amend Existing Location Location#: 433879

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:

433879

Expiration Date:

11/26/2019

☐ 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: Tracy Arnett
Phone: (970) 3850696
Fax: (970) 3850636
email: tarnett@sginterests.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: Buck Creek 12-89-5 Number: 1
County: GUNNISON
QuarterQuarter: SWNE Section: 5 Township: 12S Range: 89W Meridian: 6 Ground Elevation: 6891
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: 1159 feet FNL from North or South section line
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

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>1</u>	Oil Tanks*	<u> </u>	Condensate Tanks*	<u>1</u>	Water Tanks*	<u>4</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>	Modular Large Volume Tanks	<u> </u>
Pump Jacks	<u>1</u>	Separators*	<u>1</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </u>
Gas or Diesel Motors*	<u> </u>	Electric Motors	<u> </u>	Electric Generators*	<u> </u>	Fuel Tanks*	<u> </u>	LACT Unit*	<u> </u>
Dehydrator Units*	<u> </u>	Vapor Recovery Unit*	<u> </u>	VOC Combustor*	<u> </u>	Flare*	<u>1</u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type

Number

Water Transfer

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:

One (1) 2-4 inch water pipeline and one (1) 3-6 inch gas pipeline will be installed on the pad for the well on location and tied into existing pipelines off the well pad location. Temporary 12" to 24" poly pipeline may be used on the surface at times to bring completion water to location from the McIntyre pits 3 & 4 and/or the McIntyre Tanks 1 & 2. Flowback will return only to the pits via this temporary pipeline system. These temporary poly pipelines would likely be located on the pad and along the access road. Subsurface flowline for the wellhead to separator and from separator to condensate and water tanks will be 2" steel.

CONSTRUCTION

Date planned to commence construction: 05/15/2017

Size of disturbed area during construction in acres: 3.12

Estimated date that interim reclamation will begin: 09/30/2017

Size of location after interim reclamation in acres: 1.83

Estimated post-construction ground elevation: 6892

DRILLING PROGRAM

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

Is H₂S 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: Bear Ranch LLC

Phone: _____

Address: CO State Hwy 133

Fax: _____

Address: 1601 Forum PL STE 307

Email: _____

City: West Palm Beach State: FL Zip: 33401

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: Blanket Surface Surety ID: 20030099

Date of Rule 306 surface owner consultation 10/09/2013

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

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

	From WELL	From PRODUCTION FACILITY
Building:	1567 Feet	1411 Feet
Building Unit:	1567 Feet	1411 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	607 Feet	620 Feet
Above Ground Utility:	472 Feet	447 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	522 Feet	534 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

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: _____

- 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.
- Large UMA Facility - as defined in 100-Series Rules.

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES 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 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: 30. Curecanti loam, 3 to 15% 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: Gambel oak, serviceberry, mountain brome grass, elk sedge, wheatgrass, needlegrass, snowberry

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

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 214 Feet

water well: 1055 Feet

Estimated depth to ground water at Oil and Gas Location 50 Feet

Basis for depth to groundwater and sensitive area determination:

There is no riparian vegetation at the location. Soil type in this area is not a wetland soil type. The closest water well (permit #65417) is approximately 1055' north west and has a depth of 50' per SEO.

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: _____

Is the Location within a Floodplain? ☒ No ☐ Yes Floodplain Data Sources Reviewed (check all that apply)

☒ Federal (FEMA)

☐ State

☐ County

☐ Local

☐ Other

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 a Building Unit) and is in an Urban Mitigation Area
- ☐ 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 previously approved Form 2A for this location is document #400383181. No changes have been made to the location of this well pad and there have been no changes to the surrounding land use. Distances to cultural features have been corrected to reflect current data and may differ some from the approved Form 2 for this well. The size of the disturbed area has been corrected. The anticipated construction start date has been updated. Updated Hydrology Map, Location Map, Location Photos and Construction Layout Drawing attachments have been uploaded to reflect updated attachment guidance documents from 2014. Please note, the location name is Buck Creek 12-89-5 1, but the well name on the location is Medved 12-89-5 1. BMPS have been updated to reflect current practices.

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

Signed: _____ Date: 06/23/2016 Email: tarnett@sginterests.com

Print Name: Tracy Arnett Title: Regulatory Permitting

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: 11/27/2016

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

	In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to construct a new location, Notice of Intent to spud surface casing, and Notice of Intent to commence hydraulic fracturing operations) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment; b. Notice of Spud; and c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to pipeline testing (flowlines from wellheads to separators to tanks; and/or any temporary surface lines used for hydraulic stimulation and/or flowback operations) using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.
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Operator must ensure secondary containment for any volume of fluids contained at the oil and gas location during 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 fluid containment/control as well as stormwater management for the control of run-on and run-off) sufficiently protective of nearby surface water and drainages leading to nearby surface water. Any berm constructed at the oil and gas location will be stabilized, inspected at regular intervals; at least every 14 days and after precipitation events (weather and access permitting) throughout drilling, completions, and production; and maintained in good condition.

The design/build of any perimeter berm or fluid management structures shall be sized, constructed, and compacted sufficiently to contain and/or manage potential fluid releases during operations in a manner that prevents or controls potential fluid release, sedimentation, and scouring on adjacent lands and drainages. Such design/build of perimeter berms or fluid management structures may include, but are not limited to the following: on location berms; diversion ditches; down gradient baffles intended to slow and control water flow and sediment; enhanced vegetation; or other design features necessary to achieve the goal of protecting adjacent lands and drainages from potential fluid releases, sedimentation, and scouring.

The location is in an area of moderate to very high run-on/run-off potential; therefore standard stormwater BMPs must be implemented; prior to, during, and after construction, as well as during operations; at this location to insure compliance with CDPHE and COGCC requirements and to prevent erosion from stormwater run-on and /or stormwater run-off events.

The access road will be constructed and maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

Well pad and access road immediately adjacent to the well pad will be gravel or rock surfaced.

Strategically apply fugitive dust control measures, including encouraging established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Berms or other containment devices shall be constructed to be sufficiently impervious (preferably corrugated steel with poly liner or equivalent protection) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

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.

	<p>There is the potential for shallow groundwater; therefore, a closed loop system must be implemented.</p> <p>The moisture content of water/bentonite based mud (WBM) generated drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method.</p> <p>Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline storage vessel, or other open top containment located on the well pad; or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. 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. No additional downgradient berming is required if operator constructs a sufficiently sized perimeter berm.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>
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The following conditions of approval (COAs) will apply to the Form 2A Permit for any temporary surface (COAs 1, 2, 3, 4, and 5) or buried permanent (COAs 1 and 2) flowlines and/or offsite pipelines (poly or steel) are used during operations at this well pad location or nearby pipeline routes:

Operator shall pressure test pipelines (flowlines from wellheads to separators to tanks; pipelines from onsite separators to offsite storage tanks, and any temporary surface lines used for hydraulic stimulation and/or flowback operations) 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, and tested annually, unless agreed to by both parties that the flowlines can be managed under an approved COGCC variance.

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. Operator will provide COGCC with a plan view drawing of the proposed temporary surface poly pipeline route via a Form 4 Sundry Notice.

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. Prior to operation, pipelines will be air and/or 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. Operator will endeavor to minimize surface disturbance during pipeline monitoring. The operator shall maintain records of inspections, findings, and repairs.

Operator must utilize appropriate secondary containment for any volume of fluids that may be released before pump shut down from the surface pipeline at all stream, intermittent stream, ditch, and drainage crossings. 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. Any catchment basins constructed, if necessary, would be sized to contain this volume of fluid as described in the permit approval documents for the McIntyre Flowback Pits.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>Impacts to wildlife habitat, agriculture, water resources, recreation, visual resources, and grazing were considered when siting the access road, well pad, pipeline, and other facilities associated with construction of this project. In addition, SGI involved the private landowner in siting the proposed project. Stormwater, vegetation, soil, and visual impacts were considered when planning orientation, and cut and fill slopes. SGI plans for well pads, facilities, roads and pipelines to be near existing infrastructure, where possible, and to minimize the number, size and distribution of project as practicable. SGI adequately sizes pipelines, well pads, and facilities to accommodate both current and future drilling plans, and expected gas production. The pipeline right-of-way (ROW) and access road is minimized as much as practicable while also maintaining safe construction and use conditions. Implement pre-disturbance wildlife and vegetation surveys when necessary; appropriate mitigation measures will be implemented as applicable. Involve local stakeholders and landowners, as necessary, with the planning process to reduce land-use conflicts. Project will be constructed and operated in compliance with the terms and stipulations applied to permits by the Colorado Department of Public Health and Environment (CDPHE) - Colorado Air Quality Control Division, Colorado Water Quality Control Division, Colorado Oil and Gas Conservation Commission (COGCC) and the Bureau of Land Management.</p>
2	General Housekeeping	<p>The well pad location, access road, pipeline, and any associated facilities will be kept orderly and as clean as practicable. Garbage and trash will be stored in a trash container and periodically emptied at an approved disposal facility.</p> <p>A portable latrine will be provided during drilling and completion operations; wastes will be pumped and hauled to an approved sanitation facility. SGI maintains an active stormwater permit through the Colorado Division of Public Health and Safety (CDPHE), and an active Spill Prevention, Control and Countermeasure (SPCC) plan. Cuttings will be stored in lined containers. Additional pits may be constructed for the potential of overflow cuttings. Constructed drilling pit(s) used for cuttings will be lined with an impervious liner. Fluids contained at the well site during drilling and completion operations will have secondary containment.</p>
3	Wildlife	<p>In the event a proposed project is located in designed Colorado Parks and Wildlife (CPW) Sensitive Wildlife Habitat (SWH), or Restricted Surface Occupancy Areas (RSO), SGI will construct and operate in compliance with COGCC Rule 1203, General Operating Requirements in SWH and RSO, unless the Director has granted a waiver. SGI will continue educating employees on wildlife protection practices, including driving safe speeds and to be alert to wildlife and livestock on roadways. When necessary, and when agreed upon by the surface owner, fence livestock and wildlife out of active construction sites and newly reclaimed areas until reclamation standards have been met and plants are capable of sustaining grazing and trampling. Specific timing restrictions for crucial elk and deer winter range will be implemented from December 1 through April 30 (COC64166) will be implemented.</p>
4	Storm Water/Erosion Control	<p>As part of the requirements to maintain the CDPHE field-wide stormwater permit, SGI will maintain a site-specific stormwater plan for this site. The SGI Master Stormwater Management Plan and the Site Specific Data Sheet (SSDS) identifies all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the facility, and describes the stormwater BMPs implemented to reduce the pollutants in stormwater discharges. Upon achieving final stabilization per CDPHE requirements and site closure, stormwater will be maintained per COGCC post-stormwater program rules.</p>

5	Material Handling and Spill Prevention	<p>Drill cuttings from the containers and pit(s), as well as the pit liner 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. If applicable, soil testing under a removed liner area will be conducted prior to backfilling the pit area according to the COGCC 900-series rules. Material Safety Data Sheets (MSDS) for all chemicals and hazardous material that are used during drilling, completion, and producing will be maintained as per 29 CFR 1920.1200(g). Any petroleum product or other spills that is reportable under any regulatory agency will be cleaned up immediately and the material will be hauled to an approved facility. SGI and their contractors 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 fuels distributors and will be stored in facilities specifically designed for that purpose. Drilling fluids will be disposed of at a permitted commercial disposal facility.</p>
6	Construction	<p>Roads will be maintained by surfacing, crowing, and/or maintaining ditches to prevent runoff from damaging water quality. Outlet protection will be installed at culvert outlets to prevent scouring. Rock check dams will be installed and maintained where appropriate to slow flowing water and prevent erosion and sedimentation. Water or other dust suppressant will be applied 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. Where applicable, schedule stream/river crossings at low water periods to minimize disturbance. Implement and maintain erosion and sedimentation control devices as described in the SSDS or MSWMP. Reduce the ROW width as much as practicable, and use equipment matting when crossing wetlands and streams. Complete waterbody and wetland crossings within 24 hours, if practicable. Use trench breakers when needed to prevent water from flowing from waterbodies into pipeline trenches. Implement other conditions of approval, as defined in the Army Corps of Engineers permit, if applicable. Construct water bars along pipeline ROW to prevent erosion on hillsides. Install trench breakers around the pipe to prevent water from flowing along the buried pipe causing trench subsidence. Crown pipeline trenches to allow for soil compaction over time and prevent subsidence. Construct fences and netting that are appropriately sized and reinforced to function in the environmental conditions and for the species of the region. Salvage and store topsoil from the surface of all construction areas for use during interim and final reclamation. Protect soil and spoil piles during storage with sediment barriers, if needed. Use temporary seeding on stock-piled soils. Educate employees and contractors about weed issues. When working in water (wetlands, ponds, etc.), SGI will make sure equipment that comes in contact with water, such as water tanks, water trucks, etc. is clean and free of aquatic nuisance species. Cleaning will be accomplished by following the protocol described in COGCC Rule 1204.a.2. SGI will require contractors to follow the same protocol when bringing in equipment to work in water.</p>
7	Drilling/Completion Operations	<p>Maintain wildlife fencing and netting as needed. 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 contractors and field 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 required. Use centralized frac'ing facilities where water is stored for reuse between operations. Connect water storage facilities to well sites with buried or temporary pipelines to reduce truck traffic where practicable. Use recycled flowback fluid where possible in additional frac'ing operations by storing it in a centralized tank or pit facility. Use produced water as much as practicable in frac'ing operations to reduce use of fresh water. Whenever a cuttings pit is left open prior to reclamation, it will be fenced and covered with netting or tarps to prevent wildlife and birds from entering the pit. If it 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 and will exclude wildlife and birds.</p>

8	Interim Reclamation	Gate access roads, where necessary, to minimize and control access and reduce disturbance. Control fugitive dust that could result from production and reclamation activities. Avoid direct discharge of pipeline hydrostatic test water to any lake, wetland, or natural stream or river. Use appropriate erosion and sedimentation devices as specified in the hydrostatic discharge permit/plan. Locate, design, and paint aboveground facilities to minimize the impact to visual resources. Control listed Colorado and County noxious weeds. Use locally adapted seed in reclamation efforts whenever available and approved by the landowner. Prepare the seedbed appropriately prior to seeding an area. Replace rocks on surface at density of surrounding areas, where applicable. When practicable, seed at times of the year when germination and success is highest. Conduct stormwater inspections and document regrowth of vegetation on disturbed areas. Sample and test surface water and drinking water from select sites (as required by state and local requirements) for comparison to baseline water quality conditions.
9	Final Reclamation	Whenever practicable, complete final reclamation activities so that seeding occurs during the first optimal season following plugging and abandonment of wells and closure of facilities. Remediate spills on disturbed areas prior to reclamation. Remove and properly dispose of degraded or unneeded silt fencing and erosion control materials in a timely fashion. Remove unneeded fencing (and cattle guards) on project sites. Replace degraded or hazardous fencing as needed. Remove and properly dispose of pit contents at an approved disposal facility. Dispose of or recycle pit liners at approved facilities. 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.

Total: 9 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2108012	CORRESPONDENCE
401052441	FORM 2A SUBMITTED
401070000	LOCATION PICTURES
401070810	LOCATION DRAWING
401070811	HYDROLOGY MAP
401073497	CONST. LAYOUT DRAWINGS

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	11/23/2016
OGLA	Initiated/Completed OGLA Form 2A review on 10-26-16 by Dave Kubeczko; requested acknowledgement of notification, fluid containment and spill/release BMPs, construction stormwater BMPs, sediment and dust control access road, Highway 133 visual mitigation, closed loop system only, flowback to tanks, tank berming, cuttings management, odor control, and flowline and surface frac pipeline testing COAs from operator on 10-26-16; received concurrence of COAs from operator on 11-08-16; corrected the Date planned to commence construction from 08/15/2016 to 05/15/2017; and Estimated date that interim reclamation will begin from 09/30/2016 to 09/30/2017; location does not fall within sensitive wildlife habitat (SWH) area, nor restricted surface occupancy (RSO) area, therefore, no CPW consultation required; passed OGLA Form 2A review on 11-22-16 by Dave Kubeczko; notification, fluid containment and spill/release BMPs, construction stormwater BMPs, sediment and dust control access road, Highway 133 visual mitigation, closed loop system only, flowback to tanks, tank berming, cuttings management, odor control, and flowline and surface frac pipeline testing COAs.	10/26/2016
Permit	Location is within Bull Mountain Exploratory Unit COC 067120X.	08/08/2016
Permit	Passed completeness.	07/11/2016
Permit	Returned to draft: -- missing existing Location ID# -- attached Construction Layout Drawing missing required cross-sectional view -- existing Location Pictures in well file not in compliance -- attachments need Location Name added to title	06/28/2016

Total: 5 comment(s)