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

Oil and Gas Location Assessment

Document Number: 400279746

Date Received: 05/10/2012

☒ 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: **429969**

Expiration Date: **08/17/2015**

☒ 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: 10335

Name: AXIA ENERGY LLC

Address: 1430 LARIMER STREET #400

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Lisa Smith

Phone: (303) 857-9999

Fax: (303) 450-9200

email: lspermitco@aol.com

4. Location Identification:

Name: Bulldog Number: 1-22H-791

County: MOFFAT

QuarterQuarter: LOT 11 Section: 1 Township: 7N Range: 91W Meridian: 6 Ground Elevation: 6535

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: 2207 feet FNL , from North or South section line, and 2666 feet FEL , from East or West section line.

Latitude: 40.594928 Longitude: -107.553075 PDOP Reading: 1.5 Date of Measurement: 02/06/2012

Instrument Operator's Name: Bart Hunting

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

Special Purpose Pits:		Drilling Pits:	2	Wells:	1	Production Pits:		Dehydrator Units:	
Condensate Tanks:		Water Tanks:	3	Separators:	1	Electric Motors:		Multi-Well Pits:	
Gas or Diesel Motors:		Cavity Pumps:		LACT Unit:		Pump Jacks:		Pigging Station:	
Electric Generators:		Gas Pipeline:	1	Oil Pipeline		Water Pipeline:	1	Flare:	
Gas Compressors:				VOC Combustor:		Oil Tanks:	5	Fuel Tanks:	

Other: _____

6. Construction:

Date planned to commence construction: 04/01/2013 Size of disturbed area during construction in acres: 11.13

Estimated date that interim reclamation will begin: 06/01/2014 Size of location after interim reclamation in acres: 1.38

Estimated post-construction ground elevation: 6528 Will a closed loop system be used for drilling fluids: Yes [X]

Will salt sections be encountered during drilling: Yes [ ] No [X] Is H2S anticipated? Yes [ ] No [X]

Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes [X] No [ ]

Mud disposal: Offsite [X] Onsite [ ] Method: Land Farming [ ] Land Spreading [ ] Disposal Facility [X]

Other:

7. Surface Owner:

Name: Brad Smith Phone: 970-824-2631

Address: 578 Barclay Street Fax:

Address: Email:

City: Craig State: CO Zip: 81625 Date of Rule 306 surface owner consultation: 05/10/2012

Surface Owner: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner: [X] Fee [ ] State [ ] Federal [ ] Indian

The surface owner is: [X] the mineral owner [X] committed to an oil and gas lease [X] is the executer of the oil and gas lease [ ] the applicant

The right to construct the location is granted by: [X] oil and gas lease [ ] Surface Use Agreement [ ] Right of Way [ ] applicant is owner

Surface damage assurance if no agreement is in place: [ ] $2000 [ ] $5000 [ ] Blanket Surety ID

8. Reclamation Financial Assurance:

[X] Well Surety ID: 20100083 [ ] Gas Facility Surety ID: [ ] Waste Mgnt. Surety ID:

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes [ ] No [X]

Distance, in feet, to nearest building: 3176 , public road: 406 , above ground utilit: 2453

, railroad: 5280 , property line: 2207

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

Crop Land: [ ] Irrigated [ ] Dry land [ ] Improved Pasture [ ] Hay Meadow [ ] CRP

Non-Crop Land: [X] 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: [X] Rangeland [ ] Timber [ ] Recreational [ ] Other (describe):

Subdivided: [ ] Industrial [ ] Commercial [ ] Residential

12. Soils:

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

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

NRCS Map Unit Name: 77: Forelle Loam: 3-12%

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: 02/06/2012

List individual species:

Check all plant communities that exist in the disturbed area.

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

14. Water Resources:

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

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

Distance (in feet) to nearest surface water: 750 , water well: 3016 , depth to ground water: 22

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:

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

Signed: Date: 05/10/2012 Email: lspermitco@aol.com

Print Name: Lisa Smith Title: Authorized Agent

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

COGCC Approved: Matthew Lee **Director of COGCC** Date: 8/18/2012

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.

FORM 15 PIT PERMIT COAs:

Notify 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 construction of the well pad, start of construction of the pit (if different), pit liner installation, and start of fracing operations (via Form 42).

The completions pit must be double-lined. The pit will also require a leak detection system (Rule 904.e).

Delivery and vacuum truck hoses will not be allowed to be placed directly onto the pit liner. Operator will construct a loading/unloading station located next to the pit, to deliver fluids to or remove fluids from the pit by truck. The loading/unloading station shall be designed and utilized to prevent hoses from being dropped into the pits and dragged over the liner, which could lead to liner damage. The loading/unloading station will be the only permitted access for manual fluids transfers to or from the pit. Vehicles will not be allowed to approach the pit any closer than the loading/unloading station. Each station will have a catch basin in case a leak occurs while operations personnel are connecting or disconnecting hoses. Signs clearly marking the truck loading/unloading station shall be provided and maintained by the operator.

Operator must submit as-built drawings (plan view and cross-sections) of the completion pit within 14 calendar days of construction.

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface pipelines or configuration of the permanent pipeline network.

After installation of the uppermost liner and prior to operating the pit, the synthetic liner(s) shall be tested by filling the pit with at least 70 percent of operating capacity of water, measured from the base of the pit (not to exceed the 2-foot freeboard requirement). The operator shall monitor the pit for leaks for a period of 72 hours prior to draining the pit and commencing operations. The leak detection system must also be monitored during the entire test. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) 48 hours prior to start of the hydrotest. Hydrotest monitoring results must be maintained by the operator for the life of the pit and provided to COGCC prior to using the pit.

In lieu of conducting an initial hydrostatic test of the pit, the operator can monitor fluid levels in the pit continuously using a minimum of two pressure transducers located at the upgradient and downgradient ends of the pit (based on the original topographic profile). These pressure transducers should be linked to the operator's SCADA system such that they can be remotely monitored. In addition, the pit liner will be marked at the two foot freeboard depth line so that operations personnel (as well as COGCC inspectors) can easily verify that the required fluid free board is being maintained. The electronically collected water level measurement data shall be used to confirm changes in pit inflow and outflow during operations based on estimates from truck and/or pipeline delivery or removal activities. Any abnormalities that are noticed during operations will be reported to the operator's field supervisor immediately so that any necessary follow-up can be scheduled.

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 pit 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.

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.

For pits containing fluids other than freshwater only; the pit must be fenced. If the pit is not drained, or closure has not begun within 30 days after last use for well completion, the pit must be netted. The operator must maintain the fencing and netting until the pit is closed.

Submit additional disposal facilities (wells, pits, etc.), if necessary (i.e., if original disposal option changes), for pit liquid contents to COGCC via a Form 4 Sundry prior to disposal.

Pits used exclusively for drilling shall be closed in accordance with the 1000-Series Rules. Any pit(s) used for purposes other than drilling shall be closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels; with an approved Site Investigation and Remediation Workplan, Form 27.

At the time of pit closure, operator must submit disposal information for solids, if necessary, via a Form 4 Sundry Notice to the COGCC Location Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us). The disposal method will need to be approved prior to operator starting pit closure.

At the time of pit closure, operator must submit disposal information via a Form 4 Sundry Notice to Dave Kubeczko (Dave Kubeczko; email dave.kubeczko@state.co.us). The disposal method will need to be approved prior to operator starting pit closure.

SITE SPECIFIC COAs:

A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A); or, if a drilling pit is constructed, it must be lined. All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept in the lined drilling pit, or placed either in containers or on a lined/bermed portion of the well pad; prior to offsite disposal. 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.

Operator must ensure 110 percent secondary containment for any volume of fluids (excluding freshwater) 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.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via buried or temporary surface pipelines.

The moisture content of any freshwater generated 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, if the freshwater generated drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1.

A form 15 Earthen Pit Permit must be submitted and approved prior to construction/use of the completions pit.

Any pit constructed to hold oil based muds or salt based fluids and/or cuttings must be lined.

Notify 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 construction of the well pad, start of construction of the pit (if different), pit liner installation, and start of fracing operations (via Form 42).

Attachment Check List

Att Doc Num	Name
2034433	CORRESPONDENCE
2034434	CORRESPONDENCE
2034489	CORRESPONDENCE
2034490	PROPOSED BMPs
400279746	FORM 2A SUBMITTED
400281715	ACCESS ROAD MAP
400281717	LOCATION DRAWING
400281720	HYDROLOGY MAP
400281721	LOCATION PICTURES
400281723	LOCATION DRAWING
400281725	REFERENCE AREA MAP
400281726	REFERENCE AREA PICTURES
400281727	NRCS MAP UNIT DESC

Total Attach: 13 Files

General Comments

User Group	Comment	Comment Date
Permit	No LGD or public comments. Final Review--passed.	8/16/2012 7:46:52 AM
OGLA	Initiated/Completed OGLA Form 2A review on 06-08-12 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, moisture content/containment cuttings, lined pit/closed loop, no pit in fill, Form 15, pit fencing/netting, and flowback to tanks COAs from operator on 06-08-12; received acknowledgement of COAs from operator on 06-08-12; received email from operator on 06-25-12 extending CPW consultation (subsequently adding 5 days for OGLA, permitting, and Final reviews) another 40 days to 07-30-12; waived by CPW on 07-30-12; operator agreed to BMPs on 08-15-12; passed OGLA Form 2A review on 08-15-12 by Dave Kubeczko; fluid containment, spill/release BMPs, moisture content/containment cuttings, lined pit/closed loop, no pit in fill, Form 15, pit fencing/netting, and flowback to tanks COAs.	6/8/2012 1:59:38 PM
Permit	Operator corrected lot number and surface and minerals information. This form has passed completeness.	5/11/2012 9:37:56 AM
Permit	Returned to draft. Invalid lot and missing surface and minerals information,	5/11/2012 7:27:49 AM

Total: 4 comment(s)

BMP

Type	Comment
Wildlife	1. Conduct oil and gas development activities outside the time period from December 1 through April 15 to minimize disturbance to Elk in their winter concentration area. 2. Drilling and operations activities during the Dec 1 through April 15 time period may be possible if agreement is reached with CPW of an appropriate offsite mitigation project or phased development approach. 3. Restrict post-development well site visitations to between the hours of 10:00 a.m. and 3:00 p.m. and reduce well site visitations between December 1 and April 15 in elk winter range. 4. Establish company guidelines (policies) to minimize wildlife mortality from vehicle collisions on roads (post speed limits on private roads, conduct safety training, etc). 5. Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife if applicable on private roads. 6. Fence and net pits to exclude wildlife, with wildlife appropriate fencing and netting materials. 7. Construct 4:1 escape ramps in completion pits with a chain link fence or other appropriate covering for traction. Escape ramp should extend from the edge of the pit to below the surface of the water. Escape ramps should be installed on each side of the completion pit (4 ramps per pit), and be 4 to 5 feet in width. CPW can provide more specific examples or specifications if requested by the operator. 8. Muffle sound from compressors, pump jacks or other motors necessary to run operations at the site. (If mufflers are used, point upward to dissipate sound and vibration.) 9. Close and immediately reclaim all roads that are redundant, not used regularly, or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation. 10. Reclaim site (interim and final) to match existing vegetation.

Total: 1 comment(s)