

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:

400795491

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Date Received:

11/04/2015

Oil and Gas Location Assessment

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

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**444691**

Expiration Date:

**02/04/2019**

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: 10464  
Name: CATAMOUNT ENERGY PARTNERS LLC  
Address: 1801 BROADWAY #1000  
City: DENVER State: CO Zip: 80202

Contact Information

Name: Nolan Redmond  
Phone: (720) 484-2344  
Fax: (720) 484-2363  
email: nredmond@catamountep.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130096     Gas Facility Surety ID: \_\_\_\_\_  
 Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Morales 34-6-6U Number: 1

County: LA PLATA

Quarter: LOT 2 Section: 6 Township: 34N Range: 6W Meridian: N Ground Elevation: 6952

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: 7 feet FNL from North or South section line

1804 feet FEL from East or West section line

Latitude: 37.214430 Longitude: -107.538680

PDOP Reading: 2.2 Date of Measurement: 12/04/2014

Instrument Operator's Name: Kenny Rea



## 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?         

Reuse Facility ID:          or Document Number:         

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Marcia Merry Morales

Phone:         

Address: 5182 CR 523

Fax:         

Address:         

Email:         

City: Bayfield State: CO Zip: 81122

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: Surface Use Agreement

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

Date of Rule 306 surface owner consultation 10/27/2015

## 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.

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	1002 Feet	1050 Feet
Building Unit:	1002 Feet	1050 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	610 Feet	600 Feet
Above Ground Utility:	628 Feet	625 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	574 Feet	569 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 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 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: 36A - Nunn Loam, 0 to 4 Percent Slopes

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

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

**PLANT COMMUNITY:**

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes  No

Plant species from:  NRCS or,  field observation Date of observation: \_\_\_\_\_

List individual species: Sagebrush, Rabbit Brush

Check all plant communities that exist in the disturbed area.

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

**WATER RESOURCES**

Is this a sensitive area:  No  Yes

Distance to nearest

downgradient surface water feature: 173 Feet

water well: 842 Feet

Estimated depth to ground water at Oil and Gas Location 18 Feet

Basis for depth to groundwater and sensitive area determination:

Average of 2 closest water wells to the south.

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: No

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 608

**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**

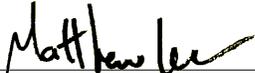
Comments

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

Signed: \_\_\_\_\_ Date: 11/04/2015 Email: nredmond@catamountep.com

Print Name: Nolan Redmond Title: Geo/Eng Tech

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

COGCC Approved:  Director of COGCC Date: 2/5/2016

**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.**

<b>COA Type</b>	<b>Description</b>
	<p>In addition to the notifications required by COGCC listed in 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 rig mobilization and 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.</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at the well site during drilling and completion operations (as listed in the Operator BMP/COA Section of the Form 2A); 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. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals as required by CDPHE (at least every 14 days and after precipitation events), and maintained in good condition. The design/build of any perimeter berm shall be sized, constructed, and compacted sufficiently to contain fluids during drilling operations, as well as all fluids contained in temporary frac tanks during completion operations.</p> <p>The access road will be constructed and maintained 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 to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner or equivalent) to contain any spilled or released material around permanent produced water storage tanks.</p>
	<p>The moisture content of any cuttings in a cuttings trench or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>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.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p> <p>Because of proximity of the well pad to nearby Crowbar Creek and other surface water drainages to the west and north, operator will grade the well pad surface to slope towards the south.</p>
	<p>Operator shall pressure test pipelines (flowlines from wellhead to separator to 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. All permanent flowlines from wellhead to separator and from the separator to the tanks will also be pressure tested annually.</p>

**Best Management Practices**

No	BMP/COA Type	Description
1	Wildlife	<p>BMP 1 - In order to avoid impacts to wintering big game, operator will not conduct surface disturbing activities, construction activities, drilling, or completion activities from December 1-April 15 annually for the life of the well (this does not include pipeline construction).</p> <p>BMP 2 - Operator will utilize the wildlife friendly seed mix described in Attachment 1 (provided to COGCC, landowner, and operator) in all interim reclamation. Operator will submit seed tags to the COGCC SW reclamation specialist within two months of seeding activities.</p> <p>BMP 4 - The operator indicates that they intend to use a closed loop drilling system. If this type of system is unavailable, then the reserve pits will be fenced and netted to exclude birds, bats, and other wildlife as pits are a significant risk of mortality to wildlife.</p> <p>BMP 5 - Secondary containment catchment basins for any vessels holding hazardous materials will be screened to exclude birds, bats, and other wildlife.</p> <p>BMP 6 - Exhaust vent stacks on production equipment will be screened to exclude birds, bats, and other wildlife. CPW has evaluated the proposed oil and gas location.</p>
2	Material Handling and Spill Prevention	<p>Produced Water Containment - Produced water will be temporarily stored in above ground steel tanks until transported to commercial disposal facilities. The on-site storage tanks will consist of two 400 barrel tanks situated inside industrial grade polyethylene walls, 3 feet in height. The inside of the containment walls and all footage contained within the walls will be lined with a 40 mil polyethylene liner. At a minimum, the containment capability of the polyethylene walls will exceed 500 barrels (125% of the largest tank). All tanks will comply with Colorado Oil &amp; Gas Commission rules and regulations regarding manufacture and labeling.</p> <p>Tank Level Monitoring - The amount of water in the tanks will be monitored continuously by Catamount's SCADA system which includes continuous, real-time tank level data recording and feed. Radar in each tank will provide real-time liquid levels for each tank. Should either tank's water level approach a programmed maximum height a "High Level" alarm/notification will be sent to appropriate Catamount personnel who will then have the ability to remotely shut-down all operations. If levels continue to rise prior to a manual, remote shut down, the system will automatically activate a high level float switch shutting in the well and shutting off production.</p>
3	Construction	<p>Construction/Interim Reclamation BMP: Prior to the start of drilling and completion operations a tertiary berm will be constructed around the wellpad to provide secondary containment to prevent spills, releases, and pollution. The wellpad will be graded to slope to the south into a sediment trap lined with cobbles on the south side of the pad inside the perimeter of the berm. Collection trenches around the inside of the berm will direct runoff to the sediment trap, which will be gated and have a cobble outfall. Upon interim reclamation the pad will be pulled back from the western and southern boundaries and the berm to the north will be left in place. Two collection ditches along the western and eastern edges of the pad will be constructed and graded to direct flow into an oversized rock filled sediment basin on the southern side of the pad. The basin will be surrounded by straw waddles and/or silt fencing.</p>
4	Drilling/Completion Operations	<p>Drilling mud or brine will be contained in above ground steel tanks. Drill cuttings and solids that have been separated from the drilling fluid by the shale shakers, mud cleaner or centrifuge will be captured in above ground portable steel cuttings bins and hauled to a 3rd party disposal site that is permitted as required by applicable State and Federal rules and regulations. Excess drilling fluid will be stored in above ground portable steel tanks and will be transferred to the active circulating system as needed. At the completion of drilling activity remaining drilling fluid will be used on another well or disposed of as allowed by Local, State and Federal law.</p> <p>The well pad will have a secondary containment berm to prevent spills, releases, and pollution. The berm will be capable of containing 110% of the fluids stored on location.</p>
5	Drilling/Completion Operations	<p>A closed loop system will be used during drilling operations so a pit will be unnecessary.</p>

6	Final Reclamation	Equipment will be painted with dull, non reflective paint slightly darker than the surrounding landscape. Noxious weeds will be controlled onsite by herbicide application based on recommendations from the La Plata County weed control technician and will be applied by a professional.
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Total: 6 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107757	CPW RECOMMENDED SEED MIX
2107758	CPW, SURFACE OWNER, AND OPERATOR CORRESPONDENCE
2107759	CORRESPONDENCE
400795491	FORM 2A SUBMITTED
400925746	ACCESS ROAD MAP
400925747	CONST. LAYOUT DRAWINGS
400925749	LOCATION PICTURES
400925750	WELL LOCATION PLAT
400925754	LOCATION DRAWING
400928861	HYDROLOGY MAP
400928863	CONST. LAYOUT DRAWINGS
400928866	REFERENCE AREA PICTURES
400928894	REFERENCE AREA MAP
400928931	NRCS MAP UNIT DESC
400932086	SURFACE AGRMT/SURETY

Total Attach: 15 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	2/3/2016 11:24:17 AM
OGLA	Initiated/Completed OGLA Form 2A review on 01-26-16 by Dave Kubeczko; requested acknowledgement of notification, fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, tank berming, odor control, pad grading, sediment control access road, dust control, and pipeline testing COAs from operator on 01-26-16; received acknowledgement of COGCC COAs from operator on 01-26-16; conducted a COGCC, CPW, operator, pipeline contractor, and surface owner onsite consultation on 12-11-15; operator's additional BMPs have been placed on the Operator BMP/COA tab; passed by CPW on 12-16-15 with recommendation of timing limitation from December 1 to April 15 (except for pipeline construction), seed mix, closed loop or resevre pit fencing/netting, secondary containment screening, and exhaust screens BMPs being acceptable to surface owner and operator; passed OGLA Form 2A review on 02-01-16 by Dave Kubeczko; notification, fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, tank berming, odor control, pad grading, sediment control access road, dust control, and pipeline testing COAs.	1/26/2016 1:10:22 PM

DOW	<p>CPW recommends that the following landowner-approved measures be added as BMPs or COAs to avoid and minimize impacts to wildlife from the proposed development:</p> <p>In order to avoid impacts to wintering big game, operator will not conduct surface disturbing activities, construction activities, drilling, or non-emergency workover activities from December 1-April 30 annually for the life of the well (this does not include pipeline construction for the portion of the pipeline that would impact the irrigation canal).</p> <p>Operator will utilize the wildlife friendly seed mix described in Attachment 1 (provided to COGCC, landowner, and operator) in all interim reclamation. Operator will submit seed tags to the COGCC SW reclamation specialist within two months of seeding activities.</p> <p>Reptiles and amphibians are particularly sensitive to changes in water quality. The operator should collect water samples in Crowbar Creek to monitor water quality before, during and after life of facility to document and detect any changes from the well pad location. Water analysis should be submitted to the COGCC. In addition, in order to control erosion, sedimentation, and storm water runoff in a manner that does not allow stormwater to leave the pad and enter surface waters or wetlands, the operator should berm the perimeter of the entire pad and install impermeable barriers for secondary containment in immediate proximity of tanks or other vessels containing petroleum products or chemicals at this location to ensure source control and prevent site degradation.</p> <p>The operator indicates that they intend to use a closed loop drilling system. If this type of system is unavailable, then the reserve pits will be fenced and netted to exclude birds, bats, and other wildlife as pits are a significant risk of mortality to wildlife.</p> <p>Secondary containment catchment basins for any vessels holding hazardous materials will be screened to exclude birds, bats, and other wildlife.</p> <p>Exhaust vent stacks on production equipment will be screened to exclude birds, bats, and other wildlife.</p>	12/16/2015 11:13:59 AM
Permit	Per operator, the distance to the above ground utility should be 628'.	12/4/2015 11:43:47 AM
Permit	<p>1) Salt based mud marked as "YES" on 2A but not on Form 2s. Confirm</p> <p>2) Distances from well to nearest above ground utility and property line do not match with Form 2.</p> <p>3) Rule 317.p BMP removed, as it is not applicable to the Form 2A.</p>	11/25/2015 3:09:11 PM
LGD	The proposed well will require a land use permit with the La Plata County Planning Department.	11/6/2015 12:48:34 PM
Permit	Passed completeness.	11/6/2015 11:28:36 AM
Permit	<p>Returned to draft.</p> <p>SUA does not conform to guidance. Must be signed by both surface owners and operator.</p>	11/5/2015 3:12:22 PM

Total: 8 comment(s)