

FORM  
2A

Rev  
04/01

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE	ET	OE	ES
----	----	----	----

Document Number:  
400227346

Oil and Gas Location Assessment

New Location       Amend Existing Location      Location#: 335116

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:  
**335116**  
Expiration Date:  
**02/23/2015**

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: 96850  
Name: WILLIAMS PRODUCTION RMT COMPANY LLC  
Address: 1001 17TH STREET - SUITE #1200  
City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Howard Harris  
Phone: (303) 606-4086  
Fax: (303) 629-8268  
email: Howard.Harris@Williams.com

4. Location Identification:

Name: AP Number: 21-20-695  
County: GARFIELD  
Quarter: NENW Section: 20 Township: 6S Range: 95W Meridian: 6 Ground Elevation: 6909

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: 65 feet FNL, from North or South section line, and 2495 feet FWL, from East or West section line.  
Latitude: 39.517469 Longitude: -108.022942 PDOP Reading: 3.6 Date of Measurement: 04/28/2010  
Instrument Operator's Name: Robert Kay

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"/>	Wells: <input type="text" value="23"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="text" value="6"/>	Water Tanks: <input type="text" value="2"/>	Separators: <input type="text" value="23"/>	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"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="text" value="1"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: \_\_\_\_\_

6. Construction:

Date planned to commence construction: 02/01/2012 Size of disturbed area during construction in acres: 5.89  
Estimated date that interim reclamation will begin: 08/01/2013 Size of location after interim reclamation in acres: 1.00  
Estimated post-construction ground elevation: 6909 Will a closed loop system be used for drilling fluids: Yes   
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: Re-Use, Evap & Backfill

### 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 \_\_\_\_\_

### 8. Reclamation Financial Assurance:

Well Surety ID: 20030107  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: 11596, public road: 15542, above ground utilit: 11596  
, railroad: 24878, property line: 546

### 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): Existing WEll Pad  
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 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: 52. Parachute Loam, 25 to 65 percent slopes

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: 05/26/2011  
List individual species: Oak, Sage, Wheatgrass, Buffalograss

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: 77, water well: 11825, depth to ground water: 130  
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:**

This location assessment is for an additional 19 wells to be drilled on the existing pad. Minerals and surface are owned in fee. The AP 421-20-695 well is the location reference point from which point all measurements were made. Reference photos will be provided at a later date. A closed mud system will be used.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 01/31/2012 Email: Howard.Harris@Williams.com  
Print Name: Howard Harris Title: Sr. Regulatory Specialist

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: David S. Nashin Director of COGCC Date: 2/24/2012

**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.**

**SITE SPECIFIC COAs:**

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, and maintained in good condition.

Due to the steep slopes to the west and east, this location is in an area of moderate to high run off/run on potential; therefore appropriate BMPs need to be in place both during and after well pad construction, as well as during all drilling and well completion operations. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff.

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.

The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, the drill cuttings must also meet the applicable standards of table 910-1.

**Attachment Check List**

Att Doc Num	Name
2034157	CORRESPONDENCE
400227346	FORM 2A SUBMITTED
400233328	ACCESS ROAD MAP
400233330	CONST. LAYOUT DRAWINGS
400233331	HYDROLOGY MAP
400233334	LOCATION PICTURES
400233335	LOCATION DRAWING
400233336	MULTI-WELL PLAN
400233337	NRCS MAP UNIT DESC
400233338	OTHER
400233339	REFERENCE AREA MAP
400233340	SENSITIVE AREA DATA
400247549	SURFACE AGRMT/SURETY

Total Attach: 13 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	DOW & LGD passed; public comments waived. Final Comprehensive Review Status--passed	2/23/2012 9:51:15 AM
OGLA	Initiated/Completed OGLA Form 2A review on 02-16-12 by Dave Kubeczko; placed fluid containment/spill release BMPs, runoff/sediment control, moisture content cuttings, and flowback to tanks COAs on 02-16-12; no CPW; passed OGLA Form 2A review on 02-22-12 by Dave Kubeczko; fluid containment/spill release BMPs, runoff/sediment control, moisture content cuttings, and flowback to tanks COAs.	2/16/2012 3:43:01 PM
LGD	Passed	2/16/2012 10:59:36 AM
Permit	Operator corrected lat long and surface and minerals information. This form has passed completeness.	2/1/2012 9:20:35 AM
Permit	Returned to draft. Lat long do not match SHL. Missing surface and minerals information.	2/1/2012 6:21:42 AM

Total: 5 comment(s)

**BMP**

Type	Comment
Planning	<p>PLANNING BMP's</p> <ul style="list-style-type: none"> <li>• Share/consolidate corridors for pipeline ROWs to the maximum extent possible.</li> <li>• Maximize the utility of surface facilities by developing multiple wells from a single pad (directional drilling), and by co-locating multipurpose facilities (for example, well pads and compressors) to avoid unnecessary habitat fragmentation and disturbance of additional geographic areas.</li> <li>• Minimize newly planned activities and operations within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river.</li> <li>• Locate roads outside of drainages where possible and outside of riparian habitat.</li> <li>• Avoid constructing any road segment in the channel of an intermittent or perennial stream</li> <li>• Avoid new surface disturbance and placing new facilities in key wildlife habitats in consultation with CDOW.</li> <li>• Minimize the number, length, and footprint of oil and gas development roads</li> <li>• Use existing roads where possible</li> <li>• Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors</li> <li>• Combine and share roads to minimize habitat fragmentation</li> <li>• Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development</li> <li>• Place roads to avoid obstructions to migratory routes for wildlife, and to avoid displacement of wildlife from public to private lands.</li> <li>• Design roads with visual and auditory buffers or screens (e.g., topographic barriers, vegetation, and distance).</li> <li>• Accelerate development under a "clustered-development concept" on a site-specific basis where Williams has a 100% mineral interest or control of mineral development</li> <li>• Maximize the use of directional drilling to minimize habitat loss/fragmentation</li> <li>• Maximize use of long-term centralized tank batteries to minimize traffic</li> <li>• Maximize use of remote completion/frac operations to minimize traffic</li> <li>• Maximize use of remote telemetry for well monitoring to minimize traffic</li> <li>• Phase and concentrate development activities, so that large areas of undisturbed habitat for wildlife remain.</li> <li>• Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development boundaries during all phases of construction, drilling, and production.</li> <li>• Minimize the duration of development and avoid repeated or chronic disturbance of developed areas. Complete all anticipated drilling within a phased, concentrated, development area during a single, uninterrupted time period.</li> <li>• Restrict oil and gas activities as practical during critical seasonal periods</li> </ul>
Construction	<p>CONSTRUCTION BMP's</p> <ul style="list-style-type: none"> <li>• Close and reclaim roads not necessary for development, including removing all bridges and culverts and Re-contouring/reclaiming all stream crossings.</li> <li>• Design road crossings of streams to allow fish passage at all flows and to minimize the generation of sediment.</li> <li>• Design road crossings of streams at right angles to all riparian corridors and streams to minimize the area of disturbance to the extent possible.</li> </ul>

Drilling/Completion Operations	<p>DRILLING/COMPLETIONS BMP's</p> <ul style="list-style-type: none"> <li>• Use centralized hydraulic fracturing operations.</li> <li>• Install and maintain adequate measures to exclude all types of wildlife (e.g., big game, birds, and small rodents) from all fluid pits (e.g., fencing, netting, and other appropriate exclusion measures).</li> <li>• Conduct well completions with drilling operations to limit the number of rig moves and traffic.</li> </ul>
Wildlife	<p>PRODUCTION/RECLAMATION</p> <ul style="list-style-type: none"> <li>• Restore both form and function of impacted wetlands and riparian areas and mitigate erosion.</li> <li>• Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements</li> <li>• Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife</li> <li>• Williams will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas.</li> <li>• Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.</li> <li>• Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.</li> <li>• Avoid dust suppression activities within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river where possible.</li> <li>• Bore pipelines that cross perennial streams</li> </ul>
Site Specific	<p>SENSITIVE AREA BMP's</p> <p>Because this location is in a Sensitive Area (See attached SAD), Williams will employ the following BMPs to support protection of surface and ground water:</p> <ul style="list-style-type: none"> <li>• Williams will ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations.</li> <li>• Williams will implement best management practices to contain any unintentional release of fluids.</li> <li>• Either a lined drilling pit or closed loop system will be implemented.</li> </ul>

Total: 5 comment(s)