

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:

400713204

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Date Received:

12/10/2014

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:

**440776**

Expiration Date:

**02/03/2018**

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: 10261  
 Name: BAYSWATER EXPLORATION AND PRODUCTION LLC  
 Address: 730 17TH ST STE 610  
 City: DENVER    State: CO    Zip: 80202

Contact Information

Name: Jeff Annable  
 Phone: (303) 928-7128  
 Fax: (303) 218-5678  
 email: regulatory@petro-fs.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20080034     Gas Facility Surety ID: \_\_\_\_\_
- Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Arellano    Number: 10-L Facility  
 County: WELD  
 Quarter: NESE    Section: 10    Township: 5N    Range: 65W    Meridian: 6    Ground Elevation: 4617

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: 1431 feet FSL from North or South section line  
492 feet FEL from East or West section line

Latitude: 40.410518    Longitude: -104.641788

PDOP Reading: 1.2    Date of Measurement: 06/25/2014

Instrument Operator's Name: Alan Hnizdo

## 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 #** \_\_\_\_\_

Production Facilities Location serves Well(s) \_\_\_\_\_

400713103

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells _____	Oil Tanks* 16 _____	Condensate Tanks* _____	Water Tanks* 4 _____	Buried Produced Water Vaults* _____
Drilling Pits _____	Production Pits* _____	Special Purpose Pits _____	Multi-Well Pits* _____	Modular Large Volume Tanks _____
Pump Jacks _____	Separators* 10 _____	Injection Pumps* _____	Cavity Pumps* _____	Gas Compressors* 3 _____
Gas or Diesel Motors* _____	Electric Motors _____	Electric Generators* _____	Fuel Tanks* _____	LACT Unit* _____
Dehydrator Units* _____	Vapor Recovery Unit* _____	VOC Combustor* _____	Flare* _____	Pigging Station* _____

## OTHER FACILITIES\*

### Other Facility Type

### Number

Vapor Recovery Tower	5
Meter House	1
Emmission Control Device	5

\*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:

2" steel flowlines from wellheads to separators carrying oil, gas and water.  
2" steel gas supply line from Gas Compressors to wellheads.

Facility Layout attached.

## CONSTRUCTION

Date planned to commence construction: 02/01/2015 Size of disturbed area during construction in acres: 0.65

Estimated date that interim reclamation will begin: 02/01/2015 Size of location after interim reclamation in acres: 0.65

Estimated post-construction ground elevation: 4617

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: \_\_\_\_\_

Is H<sub>2</sub>S anticipated? \_\_\_\_\_

Will salt sections be encountered during drilling: \_\_\_\_\_

Will salt based mud (>15,000 ppm Cl) be used? \_\_\_\_\_

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: \_\_\_\_\_ Drilling Fluids Disposal Method: \_\_\_\_\_

Cutting Disposal: \_\_\_\_\_ Cuttings Disposal Method: \_\_\_\_\_

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: Bobby Arellano

Phone: \_\_\_\_\_

Address: 2460 E 16th St

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Greeley State: CO Zip: 80631

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 \_\_\_\_\_

## 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:	_____ Feet	312 Feet
Building Unit:	_____ Feet	505 Feet
High Occupancy Building Unit:	_____ Feet	4090 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	594 Feet
Above Ground Utility:	_____ Feet	643 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	9 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: 09/08/2014  
 Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 11/21/2014

**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.

Bayswater Exploration & Production LLC designed the Arellano 10-L Facility to be a safe distance from neighboring houses and buildings and located efficiently for regular maintenance and access. Bayswater agreed upon an oil and gas operations area per the landowner/ operator Surface Use Agreement pertaining to the horizontal wells. And where possible, consolidation of existing facilities has been attempted to keep the disturbed area to a minimum. Bayswater feels this Facility's location is the best option given the property boundaries, utility easements and current COGCC setbacks. No other locations were available on the operator's leasehold that were feasible to drill the proposed wellbore spacing units and it is where the surface owners wanted it. Surface owner of the wellheads is actually different from the surface owner of the where the facilities are located, and the two of them mutually agreed on the location of each. Also see Siting Rationale attachments.

**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: 3 -Aquolls and Aquents - gravelly substratum  
 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: \_\_\_\_\_

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: 207 Feet

water well: 374 Feet

Estimated depth to ground water at Oil and Gas Location 7 Feet

Basis for depth to groundwater and sensitive area determination:

Distance to nearest downgradient water feature is a Ditch.

Nearest water well is CDWR Permit # 18539.

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: \_\_\_\_\_

**GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING**

Water well sampling required per Rule N/A

**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 Letter to Director for COGCC Rule 303b.(3)J.iii. Building Unit Owner Pre-Application Notification receipts, attached as Correspondance. Letter to Director for COGCC Rule 303b.(3)K Local Government Pre-Application Notification receipt, attached as Correspondance.

There will be no interim reclamation on this facility only pad as they will not use additional acreage that would need to be reclaimed. Therefore the interim reclamation date is the same as the commence construction date.

Facility Layout attached.

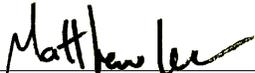
Forrest V Straight Trust is no longer the Owner of one of the Building Units that was noticed, so a notice was sent to the new owner Ramon Loma which was received on 11/15/14. A waiver of the 30-Day notice requirement from Ramon Loma is attached as OTHER.

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

Signed: \_\_\_\_\_ Date: 12/10/2014 Email: regulatory@petro-fs.com

Print Name: Jeff Annable Title: Regulatory Technician

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: 2/4/2015

### 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
	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.

### Best Management Practices

No	BMP/COA Type	Description
1	Planning	A meeting with the surface owner will determine the fencing plan. Operator will continue to be in close communication with Surface Owner with respect to livestock consideration and drilling rig move in date. Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and recorded inspections are conducted once a month.
2	Community Outreach and Notification	Site Specific: Operator is holding an Open House and providing an information phone number for the property owners in this neighborhood.
3	Traffic control	Access Roads: The access road will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times. Traffic will be routed to minimize local interruption. Access from the northeast was chosen as it is the least populated area of the surrounding neighborhood. The Access Road will have additional shrub and tree screening implemented in conjunction with the project.

4	General Housekeeping	<p>Visual Impacts: Equipment, regardless of construction date, which are observable from any public highway shall be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to, but slightly darker than, the surrounding landscape.</p> <p>Maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately. Operator shall keep the Surface Use Area as well as any roads or other areas used by Operator safe and in good order, including control of noxious weeds litter and debris.</p>
5	Storm Water/Erosion Control	<p>Use water bars, and other measures to prevent erosion and non-source pollution. Implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Co-locate gas and water gathering lines whenever feasible, and mitigate any erosion problems that arise due to the construction of any pipeline(s). Operator will make use of additional culverts along the access road.</p>
6	Material Handling and Spill Prevention	<p>Leak Detention Plan: Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR 112.</p> <p>Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.</p> <p>Operator shall comply with state and federal laws, rules and regulations governing the presence of any petroleum products, toxic or hazardous chemicals or wastes on the Subject lands.</p>
7	Dust control	<p>Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high- wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers, or automation of wells to reduce truck traffic may also be required if technologically feasible and economically reasonable to minimize fugitive dust emissions.</p>
8	Construction	<p>Berm Construction- Tanks berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition.</p> <p>Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed as required for Production Facilities within 500 feet of a downgradient surface water feature. All berms will be visually checked periodically to ensure proper working condition.</p> <p>All equipment will be anchored to the extent necessary to resist flotation, collapse, lateral movement, or subsidence.</p>
9	Construction	<p>Lighting: Lights on location will be installed to ensure safety around the site. Lights will have on/off capability. All lighting will be diverted downward and inward, and shielded so as to avoid glare on public roads and Building Units.</p>
10	Noise mitigation	<p>Operator has forecasted sound model to design appropriately sized walls that will be installed around compressors to dampen noise. The sound model is developed with the production facilities' noise signature.</p>
11	Emissions mitigation	<p>Green Completions - Emission Control System: Test separators and associated flow lines and sand traps shall be installed to accommodate green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for at least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flowback within a 10 mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustions where non-combustible gases are present.</p>

12	Odor mitigation	Equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Surface facilities are being designed with vapor recovery equipment. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII.
13	Interim Reclamation	Operator shall be responsible for segregating the topsoil, backfilling, repacking, reseeding, and recontouring the surface of any disturbed area so as not to interfere with Owner's operations and shall reclaim such area to be returned to pre-existing conditions as best as possible with control of all noxious weeds.
14	Final Reclamation	Within 90 days subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site. The Operator shall restore the surface of the Land affected by such terminated operations as near as possible to the previous state that existed prior to operations.

Total: 14 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1733747	306.e CERTIFICATION LETTER
1733748	CORRESPONDENCE
2477489	ACCESS ROAD MAP
2477494	LOCATION DRAWING
2477495	FACILITY LAYOUT DRAWING
2477522	CORRESPONDENCE
2477523	CORRESPONDENCE
2477525	SITING RATIONALE
2477526	SITING RATIONALE
2477527	SITING RATIONALE
2477528	OPEN HOUSE MEETING SUMMARY
2477529	SOUND WALL DRAWING
2477530	OPERATOR CORRESPONDENCE
400713204	FORM 2A SUBMITTED
400730959	LOCATION PICTURES
400730961	HYDROLOGY MAP
400730967	NRCS MAP UNIT DESC
400731138	CORRESPONDENCE
400731204	CORRESPONDENCE
400749069	OTHER
400754451	SURFACE AGRMT/SURETY

Total Attach: 21 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	2/3/2015 8:38:45 AM
OGLA	Operator has provided a summary of their Open House meeting (see Attachment). Operator has also revised the BMPs and provided additional Siting Rationale information (see Attachments). Operator provided a drawing showing where the sound walls will be placed. OGLA task passed.	2/2/2015 11:29:15 AM
OGLA	Attached 306.e. meeting certification letter provided by operator. Attached email from Operator's consultant with description of Operator's interaction with the Building Unit owners that requested consultation and Building Unit owner concerns. J. Noto also discussed on phone with Ann Stephens of PFS. Public meeting will still be held on 1/27/15.	1/21/2015 10:21:42 AM
OGLA	Operator has indicated there have been several requests for consultation and they will hold a public meeting on 1/27/15 in Greeley. OGLA review will wait to hear the outcome of this meeting.	1/8/2015 4:01:39 PM
OGLA	IN PROCESS - Operator provided a revised Location Drawing, Access Road Map, & Facility Layout Drawing that shows this proposed production facility has been increased slightly to comply with COGCC safety setback requirements. Operator has indicated that no new additional Building Unit owners fell within the 1,000 foot Buffer Zone from increasing the size of the location. The distance from the nearest Production Facility to the nearest Property Line is measured from a separator. OGLA review complete. Waiting on Public Comment period.	1/7/2015 3:02:36 PM
OGLA	Operator provided additional information on the nearest Building. It is a livestock stable. Further review of this location indicates the production facilities may be too close to each other and not meet our Rule 605 safety setback requirements. John Noto and I spoke with Jeff Annable about this and the ramifications of having to increase the size of the disturbed area. They will confer with the Operator and get back to us.	12/23/2014 2:51:40 PM
OGLA	ON HOLD - Requested additional information concerning the nearest Building. It appears it may be a Building Unit.	12/22/2014 11:01:01 AM
Permit	Passed completeness.	12/18/2014 2:06:23 PM
OGLA	Passed Buffer Zone completeness review	12/18/2014 11:31:50 AM
OGLA	Buffer zone completeness check. Surface Use Agreement not attached return to Draft. Verify that compressors, separators, and tanks comply with Rule 605 setback distances during technical review.	12/17/2014 1:18:05 PM
Permit	Located within buffer zone; sent to OGLA for further review.	12/11/2014 7:22:09 AM

Total: 11 comment(s)