FORM 2A Rev

08/13

New Location

State of Colorado Oil and Gas Conservation Commission

STATE OF COLORADO

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109

Oil and Gas Location Assessment

Amend Existing Location Location#:

Refile

-	
D	OIL& GAS

Document Number: 400522813

Date Received:

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to prior to any ground disturbance activity associated with oil and gas operations. Approva Assessment will allow for the construction of the below specified Location; however, it duse rules applied by the local land use authority. Please see the COGCC website at htt accompanying information pertinent this Oil and Gas Location Assessment.	al of this Oil an oes not supers	d Gas Location ede any land	Location ID: Expiration Date:
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	Contact	Information	
Operator Number: 19160	Name:	Justin Carlile	
Name: CONOCO PHILLIPS COMPANY	Phone:	(281) 647-1857	
Address: P O BOX 2197	Fax:	(281) 647-1935	
City: HOUSTON State: TX Zip: 77252-2197	email:	justin.carlile@co	nocophillips.com
RECLAMATION FINANCIAL ASSURANCE Plugging and Abandonment Bond Surety ID: Ga Waste Management Surety ID:	as Facility Su	rety ID:	
LOCATION IDENTIFICATION			
Name: State Harvard Num	ber: 1H		
County: ARAPAHOE			
QuarterQuarter: NWNE Section: 12 Township: 5S Range:	65W M	eridian: 6	Ground Elevation: 5864
Define a single point as a location reference for the facility location. When the location.	ocation is to b	e used as a well	site then the point shall be
Footage at surface: 820 feet FNL from North or South section line			
2480 feet FEL from East or West section line			
Latitude: 39.636111 Longitude: -104.612800			
PDOP Reading: 1.4 Date of Measurement: 09/09/2013			
Instrument Operator's Name: Loren Shanks			

RELATED REMOTE LOCA	TIONS					
(Enter as many Related Locati	ions as necessary. Ent	ter the Form 2A docum	ent#	only if there is n	o esta	ablished COGCC Location ID#)
This proposed Oil and Gas	s Location is:	LOCATION ID #	FOF	M 2A DOC #		
FACILITIES						
Indicate the number of each ty	pe of oil and gas facili	ty planned on location				
Wells 2	Oil Tanks	6 Condensate Tanks		Water Tanks	2	Buried Produced Water Vaults
Drilling Pits	Production Pits	Special Purpose Pits		Multi-Well Pits		Temporary Large Volume
Pump Jacks2	Separators	2 Injection Pumps _		Cavity Pumps		Above Ground Tanks ——
Gas or Diesel Motors	Electric Motors	Electric Generators		Fuel Tanks		Gas Compressors1
Dehydrator Units 2 V	apor Recovery Unit	2 VOC Combustor	1	Flare	1	LACT Unit 2
						Pigging Station
OTHER FACILITIES						
Other Facility Type				Number		
Per Rule 303.b.(3)C, description	on of all oil, gas, and/o	r water pipelines:	•			
						<u> </u>
CONSTRUCTION						
Date planned to commence	e construction: _03/0	01/2014 Size	e of d	sturbed area o	lurin	g construction in acres: 7.04
Estimated date that interim	reclamation will beg	jin: <u>03/01/2015</u> Si	ze of	location after in	nterir	m reclamation in acres: 5.00
Estimated post-construction	n ground elevation:_	5862				
DRILLING PROGRAM						
Will a closed loop system b	e used for drilling flu	ıids: Yes				
Is H ₂ S anticipated? No		· · · · · · · · · · · · · · · · · · ·				
Will salt sections be encour	ntered during drilling	: No				
Will salt based mud (>15,00	00 ppm CI) be used?	 ? No				
Will oil based drilling fluids	be used? Yes					
DRILLING WASTE MANAG	GEMENT PROGRAM	VI				
Drilling Fluids Disposal:	OFFSITE	Drilling Fluids	Dispo	sal Method: F	Recvo	cle/reuse
Cutting Disposal:	OFFSITE	_	-	_		nercial Disposal
Other Disposal Description		3.		_		
Drilling cuttings will be take		oort company and dispo	osed o	of at a certified d	ispos	al facility.
Beneficial reuse or land ap	plication plan submit	tted?				
Reuse Facility ID:	-	nent Number:				
Centralized E&P Waste Ma	nagement Facility II	D, if applicable:				
CUDEACE O MINERAL C.O.	DIGUT TO CONST	DUCT				
SURFACE & MINERALS &						
Name: Colorad	o State Land Board	Phone:	303	-866-3454		

Address:	1127 Sherman S	Street Suite 300	Fax:			
Address:			Email:			
City: Denver	State:	CO Zip: 8020	3			
Surface Owner:	Surface Owner: Fee State Federal Indian					
Check all that ap	oly. The Surface (Owner: 区 is the n	nineral owner			
		is comr	mitted to an oil and Gas	Lease		
		ŭ	ned the Oil and Gas Le	ease		
		is the a	applicant			
The Mineral Owner	r beneath this Oil	and Gas Location i	s: Fee X State	Federal I	ndian	
The Minerals bene	eath this Oil and O	Sas Location will be	developed from or prod	duced to this Oil and Ga	s Location: Yes	
The right to constr	uct this Oil and G	as Location is grant	ted by: oil and gas lease	e		
Surface damage a	ssurance if no ag	reement is in place:	:	Surface Surety ID:		
Date of Rule 306	surface owner cor	nsultation				
CURRENT AND F	UTURE LAND US	SE				
Current Land Use						
Crop Land:	Irrigated	Dry land	Improved Pasture	•	☐ CRP	
Non-Crop Land:	Rangeland Rangeland	Timber	Recreational	Other (describe):		
Subdivided:	Industrial	Commercial	Residential			
Future Land Use	Check all that app	oly):				
Crop Land:	☐ Irrigated	Dry land	Improved Pasture	Hay Meadow	☐ CRP	
Non-Crop Land:	⊠ Rangeland	Timber	Recreational	Other (describe):		
Subdivided:	Industrial	Commercial	Residential			

CULTURAL DISTANCE INFORMA	TION		INSTRUCTIONS:
Distance to nearest:			- All measurements shall be provided from center of nearest Well or edge of nearest Production
Building:	2562	Feet	Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
Building Unit:	5280	Feet	- Enter 5280 for distance greater than 1 mile.
High Occupancy Building Unit:	4584	Feet	- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance
Designated Outside Activity Area:	5280	Feet	for both.
Public Road:	813	Feet	- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in
Above Ground Utility:	498	Feet	100-Series Rules.
Railroad:	5280	Feet	
Property Line:	820	Feet	
DESIGNATED SETBACK LOCATI	ON INFORM	ATION	- Buffer Zone - as described in Rule 604.a.(2),
Check all that apply. This location is	s within a	■ Buffer Zone	within 1,000' of a Building Unit Exception Zone - as described in Rule 604.a.(1),
chock an inat apply. The location is	, w.a.m. a.	Exception Zone	within 500' of a Building Unit.
		Urban Mitigation Area	- Urban Mitigation Area - as defined in 100-Series Rules.
Pre-application Notifications (require	ed if location	is within 1,000 feet of a building unit):	
		ea Notification to Local Government:	
Date of Rule 305.a.(2) E	Buffer Zone N	lotification to Building Unit Owners:	
SOIL			
segregating topsoil. The required information can b	e obtained f	report listing the soil typical vertical profession of the NRCS web site at http://soildaund at http://colorado.gov/cogcc. Instru	
NRCS Map Unit Name: Bress	sor-Truckton	sandy loams 3 to 5 percent	
NRCS Map Unit Name:	- Tradition	reality learner of to a percent	
NRCS Map Unit Name:			-
PLANT COMMUNITY:			
	ny portion of	the disturbed area of the location's cu	rrent land use is on non-crop land
			Tronk land doe to on hon drop land.
Are noxious weeds present:	Yes	No 🗵	
	NRCS or,	field observation	Date of observation:
List individual species:			
Check all plant communities tha			
Disturbed Grassland (Cactu		. ,	
		/heatgrass, Buffalograss, Fescue, Oat	grass, Brome)
Shrub Land (Mahogany, Oa	•	• • • • • • • • • • • • • • • • • • • •	a ma a riale)
· · · ·		spen, Maple, Poplar, Russian Olive, T	amarisk)
Mountain Riparian (Cottonw		• •	A)
, ,		ine, Lodgepole Pine, Juniper, Pinyon,	Aspen)
Wetlands Aquatic (Bullrush,	, Sedge, Ca	ιταιι, Arrownead)	
Alpine (above timberline)			
Other (describe):			

WATER RESOURCES
Is this a sensitive area: ⊠ No ☐ Yes
Distance to nearest
downgradient surface water feature: 1294 Feet
water well:1365_ Feet
Estimated depth to ground water at Oil and Gas Location1881_ Feet
Basis for depth to groundwater and sensitive area determination:
Wate depth based off of the Fox Hills Aquifer
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 Nozone:
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 609
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 state Signed:	ements made in this form Date:	n are, to the best of my knowledge, true, correct and complete. Email: justin.carlile@conocophillips.com
Print Name: Justin Carlile		Regulatory Specialist
Based on the information provious and is hereby approved. COGCC Approved:	ded herein, this Application	for Permit-to-Drill complies with COGCC Rules and applicable orders Director of COGCC Date:
constitute representation	ulations and conditions ns, stipulations and co	litions Of Approval s of approval stated in this Form 2A for this location shall nditions of approval for any and all subsequent operations on Sundry Notice, Form 4 or an Amended Form 2A.
COA Type	Description	
	Best Mar	nagement Practices
No BMP/COA Type 1 Drilling/Completion	Description MEMORANDUM O	OF UNDERSTANDING
Operations	This Memorandum of, 2013, by with an address of ("Operator"), with a	of Understanding ("MOU") is made and entered into this day y and between Arapahoe County, a Colorado County ("County") 5334 S. Prince St., Littleton, Colorado 80120 and n address of . The Operator and the County may be ally as a "Party" or collectively as the "Parties."
	within unincorporat MOU, has the right	owner or lessee of oil and gas leasehold and/or mineral interests ed parts of the County, and, as of the time of the execution of this and intent to further develop its oil and gas leasehold and/or ithin said portion of the County.
	will develop and op unincorporated por production of oil an protect the environ predictable and exp approvals and pern defined here as inc stations, pits/ponds (VRUs), and assoc as well as salt water more than one of the	ent of this MOU is to provide the conditions under which Operator berate future oil and gas facilities or newly expanded facilities in the tions of the County, in order to foster the efficient and economic d gas resources, to protect human health, safety and welfare and to ment and wildlife resources, while at the same time providing for a peditious administrative process for obtaining County land use mits for oil and gas facilities. The terms "facility" or "facilities" are eluding oil and gas wellsites, flowlines, tank batteries, compressor is, below-grade tanks, dehydration units, vapor recovery units in its interest or pipelines and gathering systems, other than flowlines, are disposal wells and injection wells are excluded. Locations with the above mentioned types of equipment will also be considered to less indicated otherwise, the definitions of terms used in the MOU as in the Colorado Oil and Gas Conservation Commission's les.
	NOW, THEREFOR	E, the Parties agree as follows:
	recognize that purs 60-101, et seq. ("A oil and gas resource statewide rules and supplement and ad any of the provisior regulations, the stri	pplement Commission Rules and Regulations. The Parties suant to the Colorado Oil and Gas Conservation Act, C.R.S. §§ 34-act"), the Commission regulates the development and production of these in Colorado, and the Act authorizes the Commission to adopt diregulations. The provisions of this MOU are intended to lid to the Commission's rules and regulations. To the extent that has of this MOU are in conflict with the Act or COGCC rules and acter standards shall govern.
	2. Operator's	Pit Practices within the County. The Operator will comply, at a

minimum, with the following pit practices, after the date of this MOU:

- a. Preferred Option: It is the intent of the County that operators utilize closed-loop or modified closed-loop systems for drilling and completion operations in order to minimize or eliminate the need for earthen pits; however, notwithstanding the foregoing, where appropriate, and subject to prior County approval, the County generally supports: 1) the use of unlined drilling pits when bentonite or a similar clay additive is used during the drilling process, and 2) the use of lined single- or multi-well water storage pits in order to minimize the transport of water and promote recycling, subject to the requirements set forth in this subsection. Permitted modified closed-loop systems include oil and gas wells where air or fresh water is used to drill through the surface casing interval, defined as fifty (50) feet below the depth of the deepest aquifer, and a closed loop system is used for the remainder of the drilling and/or completion or recompletion procedures. Multi-well pits are defined as lined, engineered pits, constructed over an engineered base, with construction or liner specifications meeting or exceeding Commission pit lining rules, that will serve the functions of drilling, completion, and/or flowback pits for more than one well.
- b. Water Storage Pits to Contain Fresh Water or Brine Water: Water stored in pits approved by the County and allowed under Commission Rules, must meet the definition of fresh water or brine water, except for water stored in pits listed in 2c below. Fresh water is defined as containing total dissolved solids (TDS) less than or equal to 5,000 milligrams/liter (mg/l). Brine water is defined as water produced from an oil and/or gas well with TDS of greater than 5,000 mg/l. The Operator is required to remove all free and visible oil within 24 hours of discovery. Upon closure of the pit, the Operator will ensure the protection of the public health and environment by following all Commission pit closure rules, including collecting analytical data to ensure compliance with state standards. As long as the pit is open and containing fluid, a representative water sample shall be taken every six months from the surface of the pit fluids, the first sample to be taken within 6 months of the pit becoming operational. Water quality data will also include an analysis of Sodium Adsorption Ratio (SAR). The County will review water quality data provided by the Operator every six (6) months. TDS, pH, and specific conductance can be measured with a field meter. TEPH (total extractable petroleum hydrocarbons), BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes), and SAR will be analyzed by an accredited laboratory. If the presence of TEPH and/or BTEX is indicated after County review and/or inspection, other water quality analyses may be required by the County.
- c. Additional Pits that Require County Review and Approval: Skimming, settling, percolation, evaporation, and any type of netted pits are generally discouraged by the County; however such pits may be approved on a case-by-case basis through the Use by Special Review ("USR") process. A copy of the Pit Plan submitted to the Commission will be provided to the County at the same time as the plans are submitted to the Commission. Construction of these pits will be preceded by collection of "baseline" soil samples from the center of the planned pit at 6 and 18 inches depth. Soil samples will be analyzed for pH, Sodium Adsorption Ratio (SAR), and Electrical Conductivity (EC). The Operator shall stake and photograph from the center of the planned pit (toward north, south, east, and west directions) for inclusion in the County's copy of the Pit Plan. Upon closure of these pits, pH, SAR, EC, BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes), and TEPH (total extractable petroleum hydrocarbons) analyses may be required if there is evidence of leaks or spills in the immediate area of the pits.
- d. Pits That Do Not Require County Approval: Flare, Emergency, Plugging, and Workover pits will not require county review or approval prior to construction (unless within 1/4 mile of a residence as set forth below); however, the County will be copied on the notification(s) sent to the Commission and any pit plans, remediation plans, or analytical results submitted to the Commission.
- e. Pit Setbacks: All pit construction within ¼ mile of a residence or water well is generally discouraged by the County and may have additional County requirements, such as fencing. Such pits will be reviewed on a case-by-case basis by the County.
 - f. Multi-Well Pits: In additi

Total: 1 comment(s)

Attachment Check List

Att Doc Num	<u>Name</u>
400526910	LOCATION PICTURES
400526911	LOCATION DRAWING
400526912	HYDROLOGY MAP
400526913	ACCESS ROAD MAP
400526914	REFERENCE AREA MAP
400526915	REFERENCE AREA PICTURES
400526916	CONST. LAYOUT DRAWINGS
400526919	NRCS MAP UNIT DESC
400526920	MULTI-WELL PLAN

Total Attach: 9 Files

General Comments

User Group	Comment	Comment Date

Total: 0 comment(s)

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