# Caerus Piceance, LLC

# SURFACE USE PLAN OF OPERATIONS

## ELU J14-496 Pad – Fee Surface/Federal Minerals NESW, Sec. 14, T4S, R96W Expanded Liberty Unit COC-69926X Federal Lease No.: COC-57684

**SEPTEMBER 2019**

## Proposed Action

Caerus Piceance, LLC is proposing to drill 29 Federal wells located on Fee surface/Federal minerals. APDs for the following wells located in the table below are being submitted.

| | |
|---|---|
| **ELU J14-496 Well Pad - 29 Wells:** | **11B-14-496, 11C-14, 11D-14, 12A-14, 12B-14, 12C-14, 12D-14, 13A-14, 13B-14, 13C-14, 13D-14, 14A-14, 14B-14, 14C-14, 14D-14, 15A-14, 15B-14, 15C-14, 15D-14, 21B-14, 21C-14, 21D-14, 22A-14, 22B-14, 22C-14, 22D-14, 23A-14, 23B-14, and 23C-14** |

Green highlights indicate Fed well/**bold indicates wells submitted**.

### 1. Existing Roads

Refer to "Topo Map" (Sheet A and B) of the attached APD(s). The access road (2-track) is built but will need upgrades.

Access roads and surface disturbing activities will conform to standards outlined in the 2007 version of BLM and USFS "Surface Operating Standards for Oil and Gas Exploration and Development – The Gold Book."

All equipment and vehicles will be confined to the access road, pad and areas specified in the APD. The Operator will be responsible for continuous inspection and maintenance of the access road. The Operator will conform to a schedule of preventive maintenance, which at a minimum, provides for the following corrective measures on a biannual basis. (Problem areas will be corrected as needed.)

- Road surface grading.
- Relief ditch, culvert cleaning and cattle guard cleaning.
- Erosion control measures for cut and fill slopes and all other disturbed areas.
- Road closures in periods of excessive soil moisture to prevent rutting caused by vehicular traffic.

- Road and slope stabilization measures as required. The road shall be maintained to the standards required for the construction of the road until final abandonment and rehabilitation takes place.

**2. New or Reconstructed Access Roads**

An existing access road will be used – refer to "Topo Map" (Sheet A and B). Upgrade and new road construction is necessary.

The pad is located on private surface will be new construction. An existing 2-track will need upgraded and new construction of additional sections of the access road will be required. This 2-track was previously constructed on private surface. See the ELU J14-496 Road Design Plat. In the future, if any gravel is required it will come from Elam Construction Inc. and Una gravel pit located on 318 County Road 300 Parachute, Colorado 81635, NW ¼ of Sec. 34, T6S-R96W.

Driving Directions to ELU J14-496 Pad are as-follows:

PROCEED IN A NORTHWESTERLY, THEN NORTHERLY DIRECTION FROM PARACHUTE, COLORADO ALONG COUNTY ROAD 215 APPROXIMATELY 10.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY, THEN NORTHERLY DIRECTION APPROXIMATELY 3.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY, THEN NORTHEASTERLY, THEN SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 2.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY, THEN NORTHWESTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 3.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN NORTHERLY DIRECTION APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND THE PROPOSED ACCESS ROAD FOR ELU A24 496 PAD TO THE NORTHWEST; FOLLOW ROAD FLAGS IN A NORTHWESTERLY DIRECTION APPROXIMATELY 2,167' TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE WEST; FOLLOW ROAD FLAGS IN A WESTERLY THEN NORTHERLY, THEN SOUTHWESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 5,475' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM PARACHUTE, COLORADO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 22.9 MILES.

Please refer to Section 1 (Existing Roads) for maintenance plans and conformance standards.

**3. Location of Existing Wells**

See "Topo Map C – "One-Mile Radius" plat.

| WELL NUMBER | OPERATOR | QTR/QTR | SECTION | TOWNSHIP | RANGE |
|---|---|---|---|---|---|
| FED 23D-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 24A-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |

| | | | | | |
|---|---|---|---|---|---|
| FED 24B-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 24C-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 24D-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 25A-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 25B-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 25C-14-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 13D-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 14A-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 14B-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 14C-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 14D-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 15A-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 15B-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 15C-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 15D-13-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 21A-23-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 21B-23-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 11A-24-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 11B-24-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 11C-24-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 11D-24-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |
| FED 12A-24-496 | Caerus Piceance LLC | NWNW | 24 | 4S | 96W |

Geospatial data has been electronically sent concurrently to WRFO.

**4. Location of Existing and/or Proposed Production Facilities**

At each drill location, surface disturbance will be kept to a minimum. Each drill pad will be leveled using cut and fill construction techniques as noted in the attached survey.

Should drilling result in established commercial production the following will be shown:

1. Proposed location and attendant lines, by flagging, if off well pad.
2. Dimensions of facilities.
3. Construction methods and materials.
4. Protective measures and devices to protect livestock and wildlife.
5. All buried pipelines will be buried to a minimum depth of 3 feet, except at road crossing where they will be buried to a depth of 4 feet. The maximum right-of-way for the pipeline route will be 75 feet wide and will be minimized at 50 feet when possible. The right-of-way will be minimized by utilizing existing roads and existing rights-of-way when possible and when fewer pipes will be installed in the same trench when surrounding topography is flatter and does not require significant side cuts.
6. Pipeline location warning signs shall be installed within 90 days after construction is completed.
7. Caerus shall condition pipeline right-of-way in a manner to preclude vehicular travel upon said rights-of-way, except for access to pipeline drips and valves.
8. During the drilling, completing and production of the wells on this pad Caerus will be needing to install pipes in one right-of-way:

    - Buried 4’ for lift gas and rig fuel
    - Buried 12” for 3-phase gathering that connects to the A24 12” and will deliver 3-phase flow to the J25 Central Delivery Point

- Buried 6” frac line for the remote frac operations
- Surface 12” for 3-phase flowback

Water will be pumped from the Divide Road Water Treatment Facility to Wolf Ranch for frac operations using existing buried infrastructure.

A new pipeline ROW route will run from the proposed J14-496 well pad to the existing A24-496 pad where pipeline infrastructure exists. The temporary surface flowback line will run from Wolf Ranch CS to the J14-496 pad and will carry 3-phase flowback from the pad, to Wolf Ranch CS where separation and cooling will occur. *See Topo Map “D”.* (In short, there will be 4 pipelines ran from WR to the A24 pad (3 buried and 1 surface FLOWBACK 12” that will bring 3-phase flowback from the pad, to WR where bulk separation will occur). We will merely extend these 4 lines, from the A24 to the J14, and operate both pads the same.)

Caerus intents to bury these pipelines with the exception of the up to 12-inch steel surface flowback line. This surface line will be removed once completion and flowback operations have been completed. All disturbances will be reclaimed according to BLM and surface owner requirements.

The area used to contain the proposed production facilities will be built using native materials. If these materials are not acceptable, arrangements will be made to acquire appropriate materials from private sources.

9. A dike will be constructed completely around any production facilities which contain fluids (i.e. production tanks, produced water tanks, etc.) These dikes will be constructed of compacted subsoil, be impervious, hold 110% of the capacity of the largest tank, and be independent of the back cut.
10. All tank containments will be lined with a minimum 24 mil impermeable liner.
11. All permanent (onsite for six months or longer) above-the-ground constructed or installed, including pumping units, will be painted a covert green as determined by BLM. All production facilities will be painted within six months of installation. Facilities that are required to comply with Occupation Health and Safety Act Rules and Regulations will be excluded from this painting requirement.
12. If different production facilities are required, a sundry notice will be submitted.
13. Run off and sediment Best Management Practices will be implemented and maintained according to the Calamity Ridge Storm Water Management Plan.
14. Caerus Oil & Gas (USA) Inc. shall protect all survey monuments, witness corners, reference monuments and bearing trees in the affected areas against disturbance during construction, operation, maintenance and termination of the facilities authorized herein.

Caerus shall immediately notify the authorized officer in the event that any corners, monuments or markers are disturbed or are anticipated to be disturbed. If any monuments, corner or accessories are destroyed, obliterated or damaged during construction, operation or maintenance, Caerus shall secure the services of a Registered Land Surveyor to restore the disturbed monuments, corner or accessories, at the same location, using surveying procedures found in the Manual of surveying Instructions for the Survey of the public Lands of the United States, latest edition. Caerus shall ensure that the Registered Land Surveyor properly records the survey in compliance with the Colorado Revised Statues 38-53-101 through 38-53-112 (1973) and shall send a copy to the authorized officer.

During drilling and subsequent operations, all equipment and vehicles will be confined to the access road right-of-way and any additional areas as specified in the approved Application for Permit to Drill.

Reclamation of disturbed areas no longer needed for drilling/completion operation will be accomplished by grading, leveling and seeding as recommended by the Bureau of Land Management.

Caerus will be responsible for road maintenance from the beginning to completion of operations.

See Figure 5 for proposed location of Production Facilities.

The production facility may consist of 1-300 bbl blow down tank, 5- 3-Phase meter buildings, 7 gas lift skids, 7 chemical pumps, up to 10 300-gallon chemical tanks and up to 4 power generating solar skids.

Refer to “Construction Layout” (Figure 1 and 2) of the attached plat package as well as “Interim Reclamation-Production Schematic” (Figure 5) attached towards the back of the APD packages.

**5. Location and Types of Water Supply**

Water to be used for drilling and completing of these wells will be delivered to the location via pipeline. Water delivery for Drilling will be diverted from Caerus surface at the West Fork of Parachute Creek which is the Alternate Point of Diversion (Lat/Long – 39 37’ 49.51”N 108 11’ 42.57”W). This water will be pumped through existing pipeline infrastructure delivered directly to the J14 pad through the gas lift line as described above in Section 4. Water delivery for Completions will be initiated from Divide Road via existing buried pipeline infrastructure to the existing Wolf Ranch CS location where remote fracturing operations will reside. From the Wolf Ranch water is pumped to the wells via the buried remote frac line as described above in Section 4.

The water source may be from (1) recycled flow back water (frac water from completion operations), production water gathered from producing wells, or some combination thereof resulting from ongoing operations in the Piceance Basin that may be treated for reuse, or (2) fresh water from available water rights in the Piceance Basin.

The water provider is Caerus. Caerus maintains numerous water rights in Piceance Basin/or its tributaries. Fresh water for Drilling will come from our Industrial Rights in West Fork Alternate Point of Diversion (Lat/Long – 39 37’ 49.51”N 108 11’ 42.57”W).

The estimated amount of water used for construction, drilling and dust abatement is 14,000bbls fresh water per well. This is based on estimated use of 1,000 bbl water/day for dust control. Completions will use ~234,000 bbls of water per well. It is Caerus’ intent to exhaust all reasonable volumes of produced/flowback waters for Completions operations before utilizing a fresh water source. In the event that fresh water is needed for Completions, the diversions of water will occur at the Una Bridge Alternate Point of Diversion (Lat/Long - 39 23’ 37.57”N 108 6’ 8.60”W). This site is covered by Caerus’ industrial water rights and in the event of an “on-call” period by a senior water right, Caerus’ augmentation plan with the Co River District will allow diversions to occur as required necessary for operations. Water at this site will be pumped by temporary electric pumping equipment into a 12” buried pipeline through existing buried infrastructure delivered directly to the frac location.
Access route is as follows: Please see “Driving Directions” for directions to pad (Section 2).

**6. Source of Construction Materials**

All necessary materials for earthwork construction are on this location. Caerus will not be borrowing materials from any other location. Pad and access road construction will be balanced cut/fill earthwork quantities; there will be no import earthwork material. Surface gravel aggregates and/or pit lining material will be imported from Una/Parachute Gravel Pit, a permitted commercial gravel pit near Rifle, CO.

Una/Parachute Gravel Pit, 318 CR 300, Parachute, CO 81635. Their gravel pit is in the NW ¼ of Section
34, T6S-R96W; also, Latham-Burkett gravel pit located in the SW ¼ of Section 27, T8S-R97W.

**7. Methods for Handling Waste Disposal**

Drill cuttings generated during drilling of the proposed well will be managed on the pad surface in a cutting's management area. The area will be sufficiently bermed to provide run-on protection and run-off controls. The moisture content will be as low as practicable to prevent accumulations of liquids greater than a de minimis amount. This will be accomplished through solids control equipment consisting of shale shakers, centrifuges, and a flocculating unit to separate drill cuttings solids from liquid (water). Any liquid removed the solids will be reused as part of the drilling process. Both surface interval and production interval drill cuttings will be segregated and sampled for the pertinent suite of COGCC Table 910-1 analytes, such that the different cuttings can be managed appropriately (if necessary). Those cuttings analytically demonstrating conformance with applicable COGCC Table 910-1 standards will be beneficially reused as part of the pad reclamation efforts. Cuttings analytically above COGCC Table 910-1 standards will be remediated on-site to below pertinent thresholds and then beneficially reused as part of the pad reclamation. The cuttings management area will be reclaimed in accordance with the 900 and 1000 COGCC Rules. Any excess drill cuttings that cannot be remediated on-site or beneficially reused will be transported to Divide Road Water Treatment Facility, at which point water will then be injected or reused in completion operations.

All produced fluids (liquid hydrocarbons) produced during completion operations will be gathered in flow back tanks at the existing well pad. Produced water will be confined to flow back tanks for a period not to exceed ninety days after initial production. The produced water will then be recycled and used on future completion operations.

After flow back operations have been completed all gas will be gathered at the Wolf Ranch Compressor Station and discharged to third party gathering. Condensate and water from the wellbores will flow through the on-site 3-Phase measurement skid into the pipeline and separated at the existing J25 Central Delivery Point. At this location 3-Phase separation and measurement will occur and be allocated back to each individual well based on its 3-Phase meter production.

Western Colorado Waste Inc., P.O. Box 26, Mack, CO 81525 provides roll-off dumpsters and portable toilets. The location will have 1-2 40-yard closed top container that will be emptied weekly. There will be 1-2 portable toilets that will be serviced weekly. All trash and porta potty liquids will be disposed of at Garfield County Landfill, 0075 CR 246, Rifle, CO 81650; (970) 625-2516.

Stallion Oilfield Services, 240 Cactus Rose Lane, Rifle, CO 81650 provides housing, water and sewer services. All housing units have full bathrooms. All grey water is treated and stored in 2000-gallon waste water storage tanks. This water is picked up every four days and disposed of at the City of Rifle Water Treatment System. All water hauling of potable and non-drinking water is under the State of Colorado PWSID Permit # CO00223729 which allows Stallion to operate as a potable water delivery operator. Water is purchased from the Town of Parachute, CO at Red Point LLC, 808 CR 215, Parachute, CO 81635. The following equipment will be on location:
3 - Climate Controlled 3000-gallon potable water tanks
5 - 2000-gallon waste water storage tanks
2 - 40-yard closed top roll-off dumpsters
2 - Portable Toilets

**8. Ancillary Facilities**

For completions, the ELU J14-496 pad will be completed via remote frac from the already constructed remote Frac Pad located in T4S, R96W, Section 27. This ancillary pad is on private surface owned by Caerus Piceance LLC.

The ELU J14-496 pad will be drilled in two pods, 15 wells and 14 wells each and simultaneous drilling and completion operations will be performed on this pad. The plan is to drill the northernmost pod of wells first. Once drilled, the rig will move to the southern pod, allowing completion operations to move

onto the first pod. Because of the simultaneous operations, several ancillary facilities will need to be utilized. Wolf Ranch Compressor Station will serve as a remote frac pad for the ELU J14-496. Water will be delivered from Divide Road Water Treatment facility (T4S, R96W, Sec 26) to the Wolf Ranch Compressor Station (T4S, R96W, Sec 24) through a series of existing, buried, water delivery pipelines. For completions, all pumping equipment will be staged on the Wolf Ranch Compressor Station. Wells will be completed using a newly installed, buried, up to 8", high-pressure remote frac line and fluids will be pumped from Wolf Ranch Compressor Station to the ELU J14 496 pad. See the ELU J14-496 Pipeline Right-of-Way Plat.

During flowback, wells will flow through the buried 3" flowlines and 3-phase metering skids, into the surface 12" flowback line, and will deliver gas and water to the flowback separators at Wolf Ranch Compressor Station. This line will be constructed on the surface, will be up to 12", and will be picked up when flowback operations are completed. At this point, fluid and gas will be separated and water will be dumped through coolers to lower the temperature, into frac tanks for completion reuse or fluids will be pumped to Divide Road WTF for processing. Gas from the ELU J14 496 will flow through the flowback equipment and discharged to the J25 Central Delivery Point (CDP) (T4S, R96W, Sec 25) where gas and condensate metering occurs.

After all drilling, completion, and flowback operations have been completed, wells will then flow into the Story Gulch 3-phase gathering system. The ELU J14-496 wells will flow from the wellhead, through the 3" flowlines to the 3-phase measurement skids. Gas, water, and condensate will then commingle in the pipeline where they will flow to the J25 CDP for three phase separation and gas, water and condensate measurement and allocation.

**9. Wellsite Layout**

See "Well Location Plat" attached to each APDs for the Well Location.
See Figure 1 and Figure 2 of the attached APDs for the Construction Layout.
See Figure 3 and 3A of the attached APDs for the Drill Rig Layout.
See Figure 4 of the attached APDs for the Surface Disturbance Area.
See Figure 5 of the attached APDs for the Interim Reclamation-Production Schematic.
See Figure 6 and 6A for the Multi-Well Diagram.
See Figure 7 for the Location Drawing.
See Topo Map – A Topo
See Topo Map – B (Access Road)
See Topo Map – C (One-Mile Radius)
See Topo Map – D (Pipeline Map)
See Topo Map – W (Hydrology Map)
ELU J14-496 Road Design Right-of-Way Plat
ELU J14-496 Pipeline Right-of-Way Plat Plat

**10. Plans for Surface Reclamation**

<u>Interim Reclamation</u>

Reclamation will occur per COGCCs required COAs.

Also, unless otherwise directed by the landowner or a jurisdictional authority, rocks, cut vegetation, and other surface material temporarily stockpiled during construction are redistributed as backfill on the project area and blended into the natural landscape. The segregated topsoil is then spread evenly across the reclaimed areas. Due to the amount of soil moved around the site during reclamation, perimeter sediment controls such as wattles or diversion ditches will need to be implemented if not present already.

Once all topsoil has been distributed across the site, the location is then seeded by drill seeding methods or broadcast seeding. The recommended seed mix for revegetation on the ELU J14-496 surface will be provided by the BLM WRFO. This seed mix formula can be found in the submitted APDs. All reclaimed areas except areas needed for production will be seeded. All areas needed for production will be graveled. The Pad boundary will be fenced per surface owner request.

Re-vegetation is accomplished as soon as practical following the preparation of a site for final stabilization. Seeding will be done when seasonal or weather conditions are most favorable. Whenever possible, seeding is timed to take advantage of moisture, such as early spring or late fall.

On terrain where drill seeding is appropriate, seed may be planted using a drill equipped with a depth regulator to ensure proper depth of planting. Drilling will be used where topography and soil conditions allow operation of equipment to meet the seeding requirements of the species being planted while steeper areas are broadcast seeded. Steeper areas will be assessed in order to determine if additional BMPs are needed to stabilize the soil until vegetation develops.

If necessary in areas of concentrated surface flow, turf reinforcement mats and erosion control blankets will be employed to help facilitate vegetative growth.

Final Reclamation

Unless otherwise directed by the landowner or a jurisdictional authority, the following standards will apply to final reclamation.

**A. Re-contouring:** Unless an agreement is made with the landowner to keep the road and/or pad in place, the disturbed areas surrounding the well location, including the access road will be recontoured to blend as nearly possible with the natural topography. Final grading of back-filled and cut slopes will be done to prevent erosion and encourage establishment of vegetation. Existing drainages will be re-established.

**B. Re-vegetation:** The long-term objective is to establish a self-perpetuating plant community that is compatible with and capable of supporting the identified land use. Noxious weeds will be treated in accordance with applicable COGCC rules.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The marker will be constructed after contouring. The top of the marker will be closed or capped and the following minimum information will be permanently placed on the marker with a plate, cap or beaded-on with a welding torch: “Fed" or "Fee", as applicable; "well number, location by quarter, quarter section, township and range"; and "lease number".

**Surface Ownership:**

**Caerus Piceance, LLC**
1001 17th Street, Suite 1600
Denver, CO 80202
(303) 565-4600 – Main Office Phone

Refer to “Topo Map” (Sheet A and B) and “Location Drawing” (Figure 7) detailed pad information including existing access.

The well pad and all production facilities are located on private surface owned by Caerus Piceance LLC.

**11. Other Information**

Through the annual site visits, noxious and invasive weeds will be identified, inventoried and treated by licensed contracted herbicide applicators.

Caerus Piceance LLC will monitor, control and reduce the spread of noxious and invasive weed species within Caerus disturbances as determine in the Colorado Noxious Weed Act and rules pertaining to the administration and enforcement of the Colorado Noxious Weed Act."

Success will be achieved when minimal noxious weeds exist and native vegetation dominates the area reclaimed during interim reclamation activities which will be evaluated during annual site visits.

Environmental Considerations

| RESOURCE / ENVIRONMENTAL ISSUE | POTENTIAL IMPACTS | | COMMENTS |
|---|---|---|---|
| | YES | NO | |
| **AIR QUALITY** | | X | All equipment and infrastructure complies with COGCC and CDPHE air quality regulations for an APEN or permitting. |
| **CHEMICAL MANAGEMENT** | | X | All chemical management complies with COGCC, CDPHE and SARA Title III reporting requirements, including MSDS sheets for all chemicals used in Caerus Piceance, LLC operations. |
| **CULTURAL OR PALEO RESOURCES PRESENT** | TBD | TBD | BLM WRFO requires paleo monitor on location during pad construction. |
| **GROUNDWATER** | | X | Drilling plans comply with COGCC ground water protection regulations. |
| **MINERALS - FEDERAL** | | X | 29 APDs submitted herein comply with 43 CFR 3160, et. al. and associated Onshore Orders and guidance. |
| **MINERALS- STATE AND COUNTY** | | X | APDs have been submitted to the COGCC for State Approval in accordance with COGCC Title 34 regulations. Any SUP or other county requirements will be complied with. |
| **NEPA** | | X | The proposed actions may qualify for categorical exclusion which will be determined by WRFO. |
| **NOISE** | | X | Noise thresholds as established by the COGCC will be complied with in accordance with State Title 34 regulations. |
| **NOXIOUS WEEDS** | TBD | TBD | This location will be added to the noxious weed management plan |
| **RECLAMATION** | | X | The ELU J14-496 Pad is on private surface owned by Caerus Piceance LLC. |
| **SPILLS** | TBD | TBD | All spills will be managed in accordance with Federal (NRC, BLM, et. al.), state (COGCC, CDPHE, CDOT) requirements, including notification, reporting, response and remediation actions. The appropriate level of notification will depend upon the waste classification as an E&P, or non-E&P waste, as defined by EPA regulations. |

| | | | |
|---|---|---|---|
| **VISUAL RESOURCES** | | X | The area is in a Class II area and the surface location is located entirely on private surface. |
| **WASTE** | | X | All E&P wastes, including drilling cuttings, produced water; frac water, etc. will be managed in accordance with Federal (BLM) and COGCC regulations. Non-E&P wastes will be managed in accordance with EPA and CDPHE regulations. |
| **WATER – 404 LOCATIONS** | | X | N/A - Pad already constructed and not in a jurisdictional area. |
| **WATER – GENERAL / NPDES / WATER RIGHTS** | | X | Any NPDES discharge permits (if needed) and water rights obligations will be complied with under state COGCC, CDPHE and SEO regulations. |
| **WATER - SPCC** | | X | All SPCC locations with comply with 40 CFR 112. |
| **WATER-STORMWATER** | | X | Stormwater is addressed under a field-wide Stormwater Management Plan (CDPHE Certification #COR037689). |
| **WILDLIFE-NON-GAME AND TE&S (INCLUDES RAPTORS)** | | X | November 2017 - Caerus Piceance LLC (Caerus) formally requested and received authorization from Colorado Parks and Wildlife (CPW) to transfer the Encana USA Inc. Wildlife Mitigation Plan Agreement (WMPA) to Caerus' existing WMPA. Caerus is currently adhering to all aspects of both WMPAs through Caerus' current best management practices. |
| **Raptors** | TBD | TBD | Raptor survey attached to APD permit applications. |

| Project Surface Disturbance (Acres) | | | | | | |
|---|---|---|---|---|---|---|
| | **Private** | | **BLM-USDA FS** | | **Totals** | |
| ***New Disturbance*** | ***Total*** | ***Long-Term*** | ***Total*** | ***Long-Term*** | ***Total*** | ***Total Long-Term*** |
| ELU J14-496 Pad | 9.083 | 2.031 | 0 | 0 | 9.083 | 2.031 |
| ELU J14-496 Access Road | 7.541 | 3.771 | 0 | 0 | 7.541 | 3.771 |
| ELU J14-496 Pipeline R-O-W | 5.794 | 1.738 | 0 | 0 | 5.794 | 1.738 |
| **Subtotal** | **22.418** | **7.54** | **0** | **0** | **22.418** | **7.54** |
| ***Existing Disturbance*** | ***Total*** | ***Long-Term*** | ***Total*** | ***Long-Term*** | ***Total*** | ***Total Long-Term*** |
| ELU J14-496 Pad | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| ELU J14-496 Access Road | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| **Subtotal** | **0.00** | **0.00** | **0** | **0** | **0.00** | 0.00 |
| ***Re-Disturbance*** | ***Total*** | ***Long-Term*** | ***Total*** | ***Long-Term*** | ***Total*** | ***Total Long-Term*** |
| ELU J14-496 Pad | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 |
| Pipeline | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 |
| **Subtotal** | **0.00** | **0.00** | **0** | **0** | **0.00** | **0.00** |
| **TOTAL DISTURBANCE** | **22.418** | 7.54 | **0.00** | **0** | **22.418** | 7.54 |

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Name: Reed Haddock, Sr. Regulatory Specialist
Caerus Oil and Gas LLC
1001 17th Street, Suite 1600
Denver, CO 80202
(720) 880-6369
rhaddock@caerusoilandgas.com

Field Representative:

Name: Steve Schmitz, Vice President of Drilling
Caerus Oil and Gas LLC
1001 17th Street, Suite 1600
Denver, CO 80202
(303) 330-5461
sschmitz@caerusoilandgas.com